

Preliminary Interconnection  
System Impact Study for  
Generation Interconnection  
Requests  
(PISIS-2013-001)

August 2013

Generator Interconnection

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## Revision History

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Date	Author	Change Description
08/30/2013	SPP	Report Issued (PISIS-2013-001)

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## Executive Summary

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Generation Interconnection customers have requested a Preliminary Interconnection System Impact Study (PISIS) under the Generation Interconnection Procedures (GIP) in the Southwest Power Pool Open Access Transmission Tariff (OATT). The Interconnection Customers' requests have been clustered together for the following System Impact Cluster Study window which closed March 31, 2013. The customers will be referred to in this study as the PISIS-2013-001 Interconnection Customers. This System Impact Study analyzes the interconnecting of multiple generation interconnection requests associated with new generation totaling approximately 353.0 MW of new generation which would be located within the transmission system of Southwestern Public Service (SPS). The various generation interconnection requests have differing proposed in-service dates<sup>1</sup>. The generation interconnection requests included in this System Impact Cluster Study are listed in Appendix A by their queue number, amount, requested interconnection service, area, requested interconnection point, proposed interconnection point, and the requested in-service date.

Power flow analysis has indicated that for the power flow cases studied, 353.0 MW of nameplate generation may be interconnected with transmission system reinforcements within the SPP transmission system. Dynamic stability and power factor analysis has determined the need for reactive compensation in accordance with FERC Order #661A for wind farm interconnection requests and those requirements are listed for each interconnection request within the contents of this report. Dynamic stability analysis has determined that the transmission system will remain stable with the assigned Network Upgrades and necessary reactive compensation requirements.

In no way does this study guarantee operation for all periods of time. This interconnection study identifies and assigns transmission reinforcements for Energy Resource (ER) interconnection injection constraints (defined as a 20% distribution factor impact) and Network Resource (NR) constraints if requested by the Customer. This interconnection study does not assign transmission reinforcements for all potential transmission constraints. It should be noted that although this study analyzed many of the most probable contingencies, it is not an all-inclusive list and cannot account for every operational situation. Because of this, it is likely that the Customer(s) may be required to reduce their generation output to 0 MW, also known as curtailment, under certain system conditions to allow system operators to maintain the reliability of the transmission network.

The total estimated minimum cost for interconnecting the PISIS-2013-001 interconnection customers is estimated at \$70,200,000.00. These costs are shown in Appendices E and F. Interconnection Service to PISIS-2013-001 interconnection customers is also contingent upon higher queued customers paying for certain required network upgrades. **The in-service date for the**

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<sup>1</sup> The generation interconnection requests in-service dates will need to be deferred based on the required lead time for the Network Upgrades necessary. The Interconnection Customers that proceed to the Facility Study will be provided a new in-service date based on the Facility Study's time for completion of the Network Upgrades necessary.

**PISIS customers will be deferred until the construction of these network upgrades can be completed.**

These costs do not include the Interconnection Customer Interconnection Facilities as defined by the SPP Open Access Transmission Tariff (OATT). This cost does not include the mitigation of additional network constraints identified in the SPP transmission system and shown in Appendix H.

Network constraints listed in Appendix H are in the local area of the new generation when this generation is injected throughout the SPP footprint for Energy Resource Interconnection Service (ERIS) requests. Certain Interconnection Requests were also studied for Network Resource Interconnection Service (NRIS). Those constraints are also listed in Appendix H. Additional network constraints will have to be verified with a Transmission Service Request (TSR) and associated studies. With a defined source and sink in a TSR, this list of Network Constraints will be refined and expanded to account for all Network Upgrade requirements.

The required interconnection costs listed in Appendix E and F do not include all costs associated with the deliverability of the energy to final customers. These costs are determined by separate studies if the Customer submits a Transmission Service Request through SPP's Open Access Same Time Information System (OASIS) as required by Attachment Z1 of the SPP OATT.

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## Introduction

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Pursuant to the Southwest Power Pool (SPP) Open Access Transmission Tariff (OATT), SPP has conducted this Preliminary Interconnection System Impact Study (PISIS) for certain generation interconnection requests in the SPP Generation Interconnection Queue. These interconnection requests have been clustered together for the following System Impact Study window which closed March 31, 2013. The customers will be referred to in this study as the PISIS-2013-001 Interconnection Customers. This PISIS analyzes the interconnecting of multiple generation interconnection requests associated with new generation totaling 353.0 MW which would be located within the transmission system Southwestern Public Service (SPS). The various generation interconnection requests have differing proposed in-service dates<sup>2</sup>. The generation interconnection requests included in this System Impact Study are listed in Appendix A by their queue number, amount, requested interconnection service, area, requested interconnection point, proposed interconnection point, and the requested in-service date.

The primary objective of this PISIS is to identify the system constraints associated with connecting the generation to the area transmission system. The Impact Study and other subsequent Interconnection Studies are designed to identify required interconnection facilities, Network Upgrades and other Direct Assignment Facilities needed to accept power into the grid at each specific interconnection receipt point.

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<sup>2</sup> The generation interconnection requests in-service dates will need to be deferred based on the required lead time for the Network Upgrades necessary. The Interconnection Customers that proceed to the Facility Study will be provided a new in-service date based on the completion of the Facility Study.

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## Model Development

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### Interconnection Requests Included in the Cluster

SPP has included all interconnection requests that submitted a Preliminary Interconnection System Impact Study Agreement no later than March 31, 2013 and were subsequently accepted by Southwest Power Pool under the terms of the Generator Interconnection Procedures (GIP). The interconnection requests that are included in this study are listed in Appendix A.

### Previously Queued Interconnection Requests

The previous queued requests included in this study are listed in Appendix B. In addition to the Base Case Upgrades, the previous queued requests and associated upgrades were assumed to be in-service and added to the Base Case models. These projects were dispatched as Energy Resources with equal distribution across the SPP footprint. Prior queued projects that requested Network Resource Interconnection Service (NRIS) were dispatched in an additional analysis into the balancing authority of the interconnecting transmission owner.

### Development of Base Cases

#### Power Flow

The 2012 series Transmission Service Request (TSR) Models 2013 spring, 2014 summer and winter peak, and the 2018 summer and winter peak, and 2023 summer peak scenario 0 cases were used for this study. After the cases were developed, each of the control areas' resources were then re-dispatched to account for the new generation requests using current dispatch orders.

#### Dynamic Stability

The 2012 series SPP Model Development Working Group (MDWG) Models 2013 winter, 2014 summer, and 2023 summer peak cases were used as starting points for this study.

### Base Case Upgrades

The following facilities are part of the SPP Transmission Expansion Plan, the Balanced Portfolio or recently approved Priority Projects. These facilities have an approved Notification to Construct (NTC) or are in construction stages and were assumed to be in-service at the time of dispatch and added to the base case models. The PISIS-2013-001 Interconnection Customers have not been assigned acceleration costs for the below listed projects. The PISIS-2013-001 Interconnection Customers Generation Facilities in service dates may need to be delayed until the completion of the following upgrades. If for some reason, construction on these projects is discontinued, additional restudies will be needed to determine the interconnection needs of the PISIS Interconnection Customers.

- **Balanced Portfolio Projects<sup>3</sup>:**
  - Woodward – Border – TUCO 345kV project, scheduled for 5/19/2014 in-service
    - Woodward 345/138kV circuit #2 autotransformer
    - TUCO 345/138kV circuit #2 autotransformer
    - Reactors at Woodward and Border
  - Iatan – Nashua 345kV, scheduled for 6/1/2015 in-service
    - Nashua 345/161kV autotransformer
  - Muskogee – Seminole 345kV, scheduled for 12/31/2013 in-service
- **Priority Projects<sup>4</sup>:**
  - Hitchland – Woodward double circuit 345kV, scheduled for 6/30/2014 in-service
    - Hitchland 345/230kV circuit #2 autotransformer
  - Woodward – Thistle double circuit 345kV, scheduled for 12/31/2014 in-service
  - Spearville – Clark County double circuit 345kV, scheduled for 12/31/2014 in-service
  - Clark County – Thistle double circuit 345kV, scheduled for 12/31/2014 in-service
  - Thistle – Wichita double circuit 345kV, scheduled for 12/31/2014 in-service
  - Thistle 345/138kV autotransformer, scheduled for 12/31/2014 in-service
  - Thistle – Flat Ridge 138kV, scheduled for 12/31/2014 in-service
- Sheldon – SW 7th and Pleasant Hill 115kV circuit #2 rebuild, scheduled for 7/31/2013 in-service<sup>5</sup>
- Hays – South Hays 115kV line rebuild, scheduled for 6/1/2015 in-service<sup>6</sup>
- Arcadia – Redbud 345kV circuit #1 and #2 terminal equipment replacement, scheduled for 11/17/2013 in-service<sup>7</sup>

## Contingent Upgrades

The following facilities do not yet have approval. These facilities have been assigned to higher queued interconnection customers. These facilities have been included in the models for the PISIS-2013-001 study and are assumed to be in service. This list may not be all inclusive. The PISIS-2013-001 Interconnection Customers, at this time, do not have responsibility for these facilities but may later be assigned the cost of these facilities if higher queued customers terminate their Generation Interconnection Agreement or withdraw from the interconnection queue. The PISIS-2013-001 Interconnection Customer Generation Facilities in-service dates may need to be delayed until the completion of the following upgrades.

- Upgrades assigned to ICS-2008-001 Interconnection Customers
  - Amarillo South – Swisher 230kV replace line traps
  - Finney-Holcomb 345kV circuit #2 build
- Upgrades assigned to DISIS-2009-001 Interconnection Customers:
  - Fort Dodge – North Fort Dodge – Spearville 115kV circuit #2 build

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<sup>3</sup> Notification to Construct (NTC) issued June 2009

<sup>4</sup> Notification to Construct (NTC) issued June 2010

<sup>5</sup> SPP Regional Reliability 2012 ITPNT Project Per SPP-NTC-200171

<sup>6</sup> SPP Regional Reliability 2013 ITPNT Project Per SPP-NTC 200210

<sup>7</sup> SPP Regional Reliability 2013 ITPNT Project Per SPP-NTC 200204



- Fort Randall – Madison County – Kelly 230kV circuit #1 rerate (320MVA)
- Spearville 345/115kV autotransformer circuit #1 build
- Upgrades assigned to DISIS-2010-001 Interconnection Customers:
  - Switch 2749 – Wildorado 69kV circuit # 1 rebuild
- Upgrades assigned to DISIS-2010-002 Interconnection Customers:
  - Twin Church – Dixon County 230kV circuit #1 rerate (320MVA)
- Upgrades assigned to DISIS-2011-001 Interconnection Customers:
  - Beaver County – Buckner 345kV circuit #1 build
  - Beaver County 345kV Expansion (Tap & Tie Hitchland – Woodward circuit #2 into Beaver County 345kV)
  - Spearville – Mullergren – Reno double circuit 345kV build
  - Tatonga – Matthewson - Cimarron 345kV circuit #2 build
    - Tatonga terminal equipment upgrade (1792 MVA)
  - Hoskins – Dixon County – Twin Church 230kV circuit #1 conductor clearance increase
  - (NRIS only) Spearville – Mullergren 230kV circuit #1 rebuild
  - (NRIS only) FPL Switch – Woodward - Mooreland 138kV circuit #1 rebuild
  - (NRIS only) Woodward – Woodward EHV 138kV rebuild
  - (NRIS only) Woodward 138/69kV auto replacement
  - (NRIS only) Woodward (OGE) – Woodward (WFEC) 69kV rebuild
- Upgrades assigned to DISIS-2011-002 interconnection Customers:
  - Amoco Wasson – Oxy Tap – Yoakum 230kV circuit #1 replace line traps
  - Harbine – Crete 115kV circuit #1 build
  - Jones – Lubbock South 230kV circuit #2 replace line traps
  - Power System Stabilizers - Install Power System Stabilizers @ Tolk(Units: 1,2) and Jones (Units: 1,2,3,4)
  - Mustang – Yoakum 230kV circuit #1 replace line traps
  - West Brock – SUB 967 – SUB 968 – SUB 969 – SUB 974 69kV circuit #1 replace terminal equipment
  - (NRIS only) Allen – Lubbock South 115kV circuit #1 rebuild
  - (NRIS only) Hydro Carbon Tap - Sub974 69kV circuit #1 rewire CT
  - (NRIS only) Lubbock South 230/115kV Autotransformer build circuit #2
  - (NRIS only) Nebraska City U Syracuse – SUB 970 circuit #1 replace terminal equipment
  - (NRIS only) Benton – Wichita 345kV circuit #1 rerate (1195MVA)
  - (NRIS only) Chisholm – Maize – Evans Energy Center 138kV circuit #1 rebuild
  - (NRIS only) Duncan – Tosco – Comanche Tap 69kV rebuild
  - (NRIS only) Yoakum 230/115kV transformer circuit #1 and #2 replacements
- Upgrades assigned to DISIS-2012-001 interconnection Customers:
  - Holcomb 345/115/13.8kV Transformer circuit #2 build
  - Denver North – Mustang 115kV circuit #1 rebuild
  - Denver South – Mustang 115kV circuit#1 rebuild
- Upgrades assigned to DISIS-2012-002 interconnection Customers:
  - Dixon County – Rasmussen (WAPA) 230kV circuit #1 build
  - Lake Creek – Lone Wolf 69kV circuit #1 reset CT
  - Remington – Fairfax 138kV circuit #1 conductor clearance increase

- TUCO Interchange 345/230/13.2kV Autotransformer circuit #3 build<sup>8</sup>
- Upgrades assigned to DISIS-2013-001 interconnection Customers:
  - Deaf Smith – Plant X 230kV circuit #1 replace terminal equipment
  - Elk City – Gracemont 345kV circuit #1
  - GEN-2013-018 Tap – Hydrocarbon Tap 69kV circuit #1 replace terminal equipment
  - Madison County – North Petersburg 115kV circuit #1
  - Madison County – South Norfolk 230kV circuit #1
  - Madison County 230/115kV transformer circuit 1 addition
  - South Norfolk 345/230kV transformer circuit #1 addition
  - South Norfolk 345/230kV substation
  - Sterling 115/69kV transformer circuit #2 addition
  - Sub 970 – Hydrocarbon Tap – GEN-2013-018 Tap – Sub 974 69kV circuit #1 rerate
  - Sweetwater – Elk City 345kV circuit #1 addition
  - Tolk 345/230kV transformer circuit #2 addition
  - Tolk – Plant X 230kV circuit #3 addition
  - TUCO – Sweetwater 345kV circuit #2 addition
  - Vinita – Vinita Junction 69kV circuit #1 rebuild
  - Vinita Junction 138/69kV transformer circuit #1 replace
  - (NRIS only) Benton – Wichita 345kV circuit #1 rerate (1195MVA)
  - (NRIS only) Catoosa – Terra Nitrogen Tap 138kV circuit #1 rebuild
  - (NRIS only) Hays Plant – Vine 115kV circuit #1 rebuild
  - (NRIS only) Hitchland 230/115kV transformer circuit #2 addition
  - (NRIS only) J6 (AECI) – Explorer Tap 69kV circuit #1 rebuild
  - (NRIS only) Vinita Neo Tap – J6 (AECI) 69kV circuit #1 rebuild
  - (NRIS only) Knoll – North Hays – Vine Street 115kV circuit #1 rebuild
  - (NRIS only) Plant X 230/115kV transformer circuit #2 addition
  - (NRIS only) Terra Nitrogen Tap – Verdigras 138kV circuit #1 rebuild
  - (NRIS only) TUCO – Stanton 115kV circuit #1 rebuild
  - (NRIS only) Vinita – Eastern State Hospital Tap 69kV circuit #1 rebuild

## Potential Upgrades Not in the Base Case

Any potential upgrades that do not have a Notification to Construct (NTC) and not explicitly listed within this report have not been included in the base case. These upgrades include any identified in the SPP Extra-High Voltage (EHV) overlay plan, or any other SPP planning study other than the upgrades listed above in the previous section.

## Regional Groupings

The interconnection requests listed in Appendix A were grouped together in fifteen different regional groups based on geographical and electrical impacts. These groupings are shown in Appendix C.

To determine interconnection impacts, fifteen different generation dispatch scenarios of the spring base case models were developed to accommodate the regional groupings.

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<sup>8</sup> TUCO Interchange 345/230/13.2kV Autotransformer circuit #3 might require a new substation adjacent or close to the existing TUCO Interchange substation.

## **Power Flow**

For each group, the various wind generating plants were modeled at 100% nameplate of maximum generation. The other wind generating plants in each area were modeled at 80% nameplate while the wind generating plants in the other areas were modeled at 20% nameplate of maximum generation. These projects were dispatched as Energy Resources with a load factor by area distribution across the SPP footprint. Certain projects that requested Network Resource Interconnection Service were dispatched in an additional analysis into the balancing authority of the interconnecting transmission owner. This method allowed for the identification of network constraints that were common to the regional groupings that could then in turn have the mitigating upgrade cost allocated throughout the entire cluster. Other sensitivity analyses are also performed with all interconnection requests in each group being dispatched at 100% nameplate.

Peaking units were not dispatched in the 2013 spring model. To study peaking units' impacts, the 2014 summer and winter and 2018 summer and winter, and 2023 summer seasonal models were chosen and peaking units were modeled at 100% of the nameplate rating and wind generating facilities were modeled at 10% of the nameplate rating. Each interconnection request was also modeled separately at 100% nameplate for certain analyses.

## **Dynamic Stability**

For each group, all interconnection requests were studied at 100% nameplate output while the other groups were dispatched at 20% output for wind requests and 100% output for thermal requests.

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## **Identification of Network Constraints**

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The initial set of network constraints were found by using PSS®MUST First Contingency Incremental Transfer Capability (FCITC) analysis on the entire cluster grouping dispatched at the various levels mentioned above. These constraints were then screened to determine if any of the generation interconnection requests had at least a 20% Distribution Factor (DF) upon the constraint. Constraints that measured at least a 20% DF from at least one interconnection request were considered for mitigation. Interconnection Requests that have requested Network Resource Interconnection Service (NRIS) were also studied in the NRIS analysis to determine if any constraint had at least a 3% DF. If so, these constraints were also considered for mitigation.

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## **Determination of Cost Allocated Network Upgrades**

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Cost Allocated Network Upgrades of wind generation interconnection requests were determined using the 2013 spring model. Cost Allocated Network Upgrades of peaking units was determined using the 2018 summer peak model. A PSS®MUST sensitivity analysis was performed to determine the Distribution Factors (DF), a distribution factor with no contingency that each generation

interconnection request had on each new upgrade. The impact each generation interconnection request had on each upgrade project was weighted by the size of each request. Finally the costs due by each request for a particular project were then determined by allocating the portion of each request's impact over the impact of all affecting requests.

For example, assume that there are three Generation Interconnection requests, X, Y, and Z that are responsible for the costs of Upgrade Project '1'. Given that their respective PTDF for the project have been determined, the cost allocation for Generation Interconnection request 'X' for Upgrade Project 1 is found by the following set of steps and formulas:

- Determine an Impact Factor on a given project for all responsible GI requests:

$$\text{Request X Impact Factor on Upgrade Project 1} = \text{PTDF}(\%)(X) * \text{MW}(X) = X1$$

$$\text{Request Y Impact Factor on Upgrade Project 1} = \text{PTDF}(\%)(Y) * \text{MW}(Y) = Y1$$

$$\text{Request Z Impact Factor on Upgrade Project 1} = \text{PTDF}(\%)(Z) * \text{MW}(Z) = Z1$$

- Determine each request's Allocation of Cost for that particular project:

$$\text{Request X's Project 1 Cost Allocation (\$)} = \frac{\text{Network Upgrade Project 1 Cost(\$)} * X1}{X1 + Y1 + Z1}$$

- Repeat previous for each responsible GI request for each Project

The cost allocation of each needed Network Upgrade is determined by the size of each request and its impact on the given project. This allows for the most efficient and reasonable mechanism for sharing the costs of upgrades.

### **Credits for Amounts Advanced for Network Upgrades**

Interconnection Customer shall be entitled to credits in accordance with Attachment Z2 of the SPP Tariff for any Network Upgrades including any tax gross-up or any other tax-related payments associated with the Network Upgrades, and not refunded to the Interconnection Customer.

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## **Required Interconnection Facilities**

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The requirement to interconnect the 353.0 MW of generation into the existing and proposed transmission systems in the affected areas of the SPP transmission footprint consist of the necessary cost allocated shared facilities listed in Appendix F by upgrade. The interconnection requirements for the cluster total an estimated \$70,200,000. Interconnection Facilities specific to each generation interconnection request are listed in Appendix E. A preliminary one-line drawing for each generation interconnection request are listed in Appendix D.

A list of constraints that were identified and used for mitigation are listed in Appendix G. Listed within Appendix G are the ERIS constraints with greater than or equal to a 20% DF, as well as, the NRIS constraints that have a DF of 3% or greater. Other Network Constraints which are not requiring mitigation are shown in Appendix H. With a defined source and sink in a TSR, this list of Network Constraints will be refined and expanded to account for all Network Upgrade requirements. Additional constraints identified by NERC category “C” contingencies are listed in Appendix I.

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## Power Flow Analysis

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### Power Flow Analysis Methodology

The ACCC function of PSS®E was used to simulate single element and special (i.e., breaker-to-breaker, multi-element, etc) contingencies in portions or all of the modeled control areas of SPP, as well as, other control areas external to SPP and the resulting scenarios analyzed. NERC Category “B” and “C” contingencies were evaluated.

### Power Flow Analysis

A power flow analysis was conducted for each Interconnection Customer’s facility using modified versions of the 2013 spring peak, 2014 summer and winter peak, and the 2018 summer and winter peak, 2023 summer peak models. The output of the Interconnection Customer’s facility was offset in each model by a reduction in output of existing online SPP generation. This method allows the request to be studied as an Energy Resource Interconnection Service request (ERIS). Certain requests that are pursuing Network Resource Interconnection Service (NRIS) had an additional analysis conducted for displacing resources in the interconnecting Transmission Owner’s balancing authority.

This analysis was conducted assuming that previous queued requests in the immediate area of these interconnect requests were in-service. The analysis of each Customer’s project indicates that criteria violations will occur on the SPS transmission system under system intact and contingency conditions in the peak seasons.

### Cluster Group 1 (Woodward Area)

In addition to the 5,495.9 MW of previously queued generation in the area, 0.0 MW of new interconnection service was studied. No new constraints were found in this area.

### Cluster Group 2 (Hitchland Area)

In addition to the 3,180.2 MW of previously queued generation in the area, 200.0 MW of new interconnection service was studied. No new constraints were found in this area. There are, however, several prior queued Network Upgrade projects from previous Definitive Interconnection System Impact Studies that will need to be in service to allow for full ER and NR interconnection of the project within the Cluster Group 2 area.

MONITORED ELEMENT	RATE B (MVA)	TC%LOADING (% MVA)	CONTINGENCY
None			

**Cluster Group 3 (Spearville Area)**

In addition to the 5,393.0 MW of previously queued generation in the area, 0.0 MW of new interconnection service was studied. No new constraints were found in this area.

**Cluster Group 4 (NW Kansas Group)**

In addition to the 2,189.3 MW of previously queued generation in the area, 0.0 MW of new interconnection service was studied. No new constraints were found in this area.

**Cluster Group 5 (Amarillo Area)**

In addition to the 1,344.1 MW of previously queued generation in the area, 0.0 MW of new interconnection service was studied. No new constraints were found in this area.

**Cluster Group 6 (South Texas Panhandle/New Mexico)**

In addition to the 3,978.2 MW of previously queued generation in the area, 153.0 MW of new interconnection service was studied. To mitigate interconnection constraints radiating from the GEN-2012-043 POI and address potential voltage collapse for the loss of the GEN-2013-013 Tap – Tolk 345kV, a second circuit of GEN-2013-013 Tap – Tolk 345kV will need to be constructed. Additionally, in order to accept the new transmission line, a significant amount of 345kV work will need to be performed at the Tolk substation. There are also several prior queued Network Upgrade projects from previous Definitive Interconnection System Impact Studies that will need to be in service to allow for full ER and NR interconnection of the project within the Cluster Group 6 area.

MONITORED ELEMENT	RATE B (MVA)	TC%LOADING (% MVA)	CONTINGENCY
Non-Converged for 2013, 2018, & 2023 Summer Peaks			G13_013T 345.00 - TOLK STATION 345KV CKT 1
CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1	557.0	134.6	G13_013T 345.00 - TOLK STATION 345KV CKT 1
EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1	558.0	126.1	G13_013T 345.00 - TOLK STATION 345KV CKT 1
G13_013T 345.00 - TOLK STATION 345KV CKT 1	557.0	126.1	EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1
EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1	478.0	127.0	G13_013T 345.00 - TOLK STATION 345KV CKT 1
LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1	351.0	109.2	G13_013T 345.00 - TOLK STATION 345KV CKT 1
SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351.0	103.8	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1

**Cluster Group 7 (Southwestern Oklahoma)**

In addition to the 2,000.8 MW of previously queued generation in the area, 0.0 MW of new interconnection service was studied. No new constraints were found in this area.

**Cluster Group 8 (South Central Kansas/North Oklahoma)**

In addition to the 3,081.4 MW of previously queued generation in the area, 0.0 MW of new interconnection service was studied. No new constraints were found in this area.

**Cluster Group 9/10 (Nebraska)**

In addition to the 2,478.6 MW of previously queued generation in the area, 0.0 MW of new interconnection service was studied. No new constraints were found in this area.

**Cluster Group 12 (Northwest Arkansas)**

In addition to the 650.0 MW of previously queued generation in the area, 0.0 MW of new interconnection service was studied. No new constraints were found in this area.

**Cluster Group 13 (Northwest Missouri)**

In addition to the 285.8 MW of previously queued generation in the area, 0.0 MW of new interconnection service was studied. No new constraints were found in this area.

**Cluster Group 14 (South Central Oklahoma)**

In addition to the 362.5 MW of previously queued generation in the area, 0.0 MW of new interconnection service was studied. No new constraints were found in this area.

**Curtailment and System Reliability**

In no way does this study guarantee operation for all periods of time. It should be noted that although this study analyzed many of the most probable contingencies, it is not an all-inclusive list and cannot account for every operational situation. Because of this, it is likely that the Customer(s) may be required to reduce their generation output to 0.0 MW, also known as curtailment, under certain system conditions to allow system operators to maintain the reliability of the transmission network.

## Stability Analysis

A stability analysis was conducted for each Interconnection Customer using modified versions of the 2012 series SPP Model Development Working Group (MDWG) Models 2013 winter, 2014 summer peak dynamic stability cases. The MDWG 2013 winter peak case was modified to model the transmission network as of the end of 2014 and was used as the 2014 winter peak model for this study. The stability analysis was conducted with all upgrades in service that were identified in the power flow analysis. For each group, the interconnection requests were studied at 100% nameplate output while the other groups were dispatched at 20% output for wind requests and 100% output for fossil requests. The output of the Interconnection Customer’s facility was offset in each model by a reduction in output of existing online SPP generation. The following synopsis is included for each group. The entire stability study for each group can be found in the Appendices section.

### Cluster Group 1 (Woodward Area)

There was no stability analysis conducted in the Woodward area due to no requests in the area.

### Cluster Group 2 (Hitchland Area)

Stability analysis has determined that with the power factor requirements and all previously assigned and current assigned Network Upgrades in service, the transmission system will remain stable and all interconnection requests in Group 2 will meet FERC Order #661A low voltage ride through (LVRT) requirements.

Power Factor Requirements:

Request	Size (MW)	Generator Model	Point of Interconnection	Power Factor Requirement at POI*	
				Lagging (supplying)	Leading (absorbing)
GEN-2013-001	200.0	GE 1.6MW	Tap Hitchland – Moore County 230kV (SPS)	0.95	0.95

\*As reactive power is required for all projects, the final requirement in the GIA will be the pro-forma 95% lagging to 95% leading at the point of interconnection.

### Cluster Group 3 (Spearville Area)

There was no stability analysis conducted in the Spearville area due to no requests in the area.

### Cluster Group 4/11 (Northwest Kansas Area)

There was no stability analysis conducted in the northwest Kansas area due to no requests in the area.

### Cluster Group 5 (Amarillo Area)

There was no stability analysis conducted in the Amarillo area due to no requests in the area.

### Cluster Group 6 (South Texas Panhandle/New Mexico)

Stability analysis has determined that with the power factor requirements and all previously assigned and current assigned Network Upgrades in service, the transmission system will remain



stable and all interconnection requests in Group 6 will meet FERC Order #661A low voltage ride through (LVRT) requirements.

**Power Factor Requirements:**

Request	Size (MW)	Generator Model	Point of Interconnection	Power Factor Requirement at POI*	
				Lagging (supplying)	Leading (absorbing)
GEN-2012-043	153.0	GE 1.5MW	Tap Eddy – Tolk 345kV (SPS: GEN-2013-013 Tap)	0.95	0.95

\*As reactive power is required for all projects, the final requirement in the GIA will be the pro-forma 95% lagging to 95% leading at the point of interconnection.

**Cluster Group 7 (Southwest Oklahoma Area)**

There was no stability analysis conducted in the southwest Oklahoma area due to no requests in the area.

**Cluster Group 8 (South Central Kansas/North Oklahoma)**

There was no stability analysis conducted in the south central Kansas and north Oklahoma area due to no requests in the area.

**Cluster Group 9/10 (Nebraska)**

There was no stability analysis conducted in the Nebraska area due to no requests in the area.

**Cluster Group 11 (reserved)**

This group has been retired and all prior Group 11 requests have been re-designated as Group 9/10 requests.

**Cluster Group 12 (Northwest Arkansas Area)**

There was no stability analysis conducted in the northwest Arkansas area due to no requests in the area.

**Cluster Group 13 (Northwest Missouri Area)**

There was no stability analysis conducted in the Northwest Missouri area due to no requests in the area.

**Cluster Group 14 (South Central Oklahoma)**

There was no stability analysis conducted in the south central Oklahoma area due to no requests in the area.

**Cluster Group 15 (reserved)**

This group has been retired and all prior Group 15 requests have been re-designated as Group 9/10 requests.

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## Conclusion

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The minimum cost of interconnecting 353.0 MW of new interconnection requests included in this Preliminary Interconnection System Impact Study is estimated at \$70,200,000 for the Allocated Network Upgrades and Transmission Owner Interconnection Facilities are listed in Appendix E and F. These costs do not include the cost of upgrades of other transmission facilities listed in Appendix H which are Network Constraints.

These interconnection costs do not include any cost of Network Upgrades determined to be required by short circuit analysis. These studies will be performed if the Interconnection Customer executes the appropriate Interconnection Facilities Study Agreement and provides the required data along with demonstration of Site Control and the appropriate deposit. At the time of the Interconnection Facilities Study, a better determination of the interconnection facilities may be available.

The required interconnection costs listed in Appendices E, and F, and other upgrades associated with Network Constraints do not include all costs associated with the deliverability of the energy to final customers. These costs are determined by separate studies if the Customer submits a Transmission Service Request (TSR) through SPP's Open Access Same Time Information System (OASIS) as required by Attachment Z1 of the SPP Open Access Transmission Tariff (OATT).

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# Appendices

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**A: Generation Interconnection Requests Considered for Impact Study**

See next page.

## **A: Generation Interconnection Requests Considered for Impact Study**

Request	Amount	Service	Area	Requested Point of Interconnection	Proposed Point of Interconnection	Requested In-Service Date	In Service Date Delayed Until no earlier than*
GEN-2012-043	153.00	ER/NR	SPS	Tap Eddy County - Tolk (GEN-2013-013 Tap)	Tap Eddy County - Tolk 345kV (GEN-2013-013 Tap)	12/01/2015	TBD
GEN-2013-001	200.00	ER/NR	SPS	Tap Moore County - Hitchland 230kV	Tap Moore County - Hitchland 230kV	01/12/2014	TBD
<b>Total:</b>		<b>353.00</b>					

\*Requests that dependent upon Priority Projects or Balanced Portfolio may be delayed until 12/31/2014. Other requests in-service date to be determined after Facility Study.

## **B: Prior Queued Interconnection Requests**

See next page.

## **B: Prior Queued Interconnection Requests**

<b>Request</b>	<b>Amount</b>	<b>Area</b>	<b>Requested/Proposed Point of Interconnection</b>	<b>Status or In-Service Date</b>
ASGI-2010-006	150.00	AECI	Tap Fairfax (AECI) - Shilder (AEPW) 138kV	AECI queue Affected Study
ASGI-2010-010	42.20	SPS	Lovington 115kV	Lea County Affected Study
ASGI-2010-020	30.00	SPS	Tap LE-Tatum - LE-Crossroads 69kV	Lea County Affected Study
ASGI-2010-021	15.00	SPS	Tap LE-Saunders Tap - LE-Anderson 69kV	Lea County Affected Study
ASGI-2011-001	28.80	SPS	Lovington 115kV	On-Line
ASGI-2011-002	10.00	SPS	Herring 115kV	On-Line
ASGI-2011-003	10.00	SPS	Hendricks 115kV	On-Line
ASGI-2011-004	20.00	SPS	Pleasant Hill 69kV	Under Study (DISIS-2011-002)
ASGI-2012-002	18.15	SPS	FE-Clovis Interchange 115kV	Under Study (DISIS-2012-002)
ASGI-2012-006	22.50	SUNCMKEC	Tap Hugoton - Rolla 69kV	Under Study (DISIS-2012-001)
ASGI-2013-001	11.50	SPS	PanTex South 115kV	Facility Study
ASGI-2013-002	18.40	SPS	FE Tucumcari 115kV	Under Study (DISIS-2013-01-1)
ASGI-2013-003	18.40	SPS	FE Clovis 115kV	Under Study (DISIS-2013-01-1)
GEN-2001-014	96.00	WFEC	Ft Supply 138kV	On-Line
GEN-2001-026	74.00	WFEC	Washita 138kV	On-Line
GEN-2001-033	180.00	SPS	San Juan Tap 230kV	On-Line at 120MW
GEN-2001-036	80.00	SPS	Norton 115kV	On-Line
GEN-2001-037	102.00	OKGE	FPL Moreland Tap 138kV	On-Line
GEN-2001-039A	105.00	SUNCMKEC	Tap Greensburg - Ft Dodge (Shooting Star Tap) 115kV	On-Line
GEN-2001-039M	99.00	SUNCMKEC	Central Plains Tap 115kV	On-Line
GEN-2002-004	200.00	WERE	Latham 345kV	On-Line at 150MW
GEN-2002-005	120.00	WFEC	Red Hills Tap 138kV	On-Line
GEN-2002-008	240.00	SPS	Hitchland 345kV	On-Line at 120MW
GEN-2002-009	80.00	SPS	Hansford 115kV	On-Line
GEN-2002-022	240.00	SPS	Bushland 230kV	On-Line
GEN-2002-023N	0.80	NPPD	Harmony 115kV	On-Line
GEN-2002-025A	150.00	SUNCMKEC	Spearville 230kV	On-Line
GEN-2003-004	100.00	WFEC	Washita 138kV	On-Line
GEN-2003-005	100.00	WFEC	Anadarko - Paradise (Blue Canyon) 138kV	On-Line
GEN-2003-006A	200.00	SUNCMKEC	Elm Creek 230kV	On-Line
GEN-2003-019	250.00	MIDW	Smoky Hills Tap 230kV	On-Line
GEN-2003-020	160.00	SPS	Martin 115kV	On-Line
GEN-2003-021N	75.00	NPPD	Ainsworth Wind Tap 115kV	On-Line
GEN-2003-022	120.00	AEPW	Washita 138kV	On-Line
GEN-2004-005N	30.00	NPPD	St Francis 115kV	On Suspension
GEN-2004-014	154.50	SUNCMKEC	Spearville 230kV	On-Line at 100MW
GEN-2004-020	27.00	AEPW	Washita 34.5kV	On-Line
GEN-2004-023	20.60	WFEC	Washita 138kV	On-Line
GEN-2004-023N	75.00	NPPD	Columbus Co 115kV	On-Line
GEN-2005-003	30.60	WFEC	Washita 138kV	On-Line
GEN-2005-008	120.00	OKGE	Woodward 138kV	On-Line
GEN-2005-012	250.00	SUNCMKEC	Spearville 345kV	On-Line at 160MW
GEN-2005-013	201.00	WERE	Tap Latham - Neosho (Caney River) 345kV	On-Line
GEN-2006-002	101.00	AEPW	Sweetwater 230kV	On-Line
GEN-2006-006	205.50	SUNCMKEC	Spearville 345kV	On Schedule for 2015

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2006-010	620.00	AEPW	Turk 138kV	On-Line
GEN-2006-018	170.00	SPS	TUCO Interchange 230kV	On-Line
GEN-2006-020N	42.00	NPPD	Bloomfield 115kV	On-Line
GEN-2006-020S	18.90	SPS	DWS Frisco 115kV	On-Line
GEN-2006-021	101.00	SUNCMKEC	Flat Ridge Tap 138kV	On-Line
GEN-2006-022	150.00	SUNCMKEC	Ninnescah 115kV	On Schedule for 2014
GEN-2006-024S	19.80	WFEC	Buffalo Bear Tap 69kV	On-Line
GEN-2006-026	604.00	SPS	Hobbs 230kV & Hobbs 115kV	On-Line
GEN-2006-031	75.00	MIDW	Knoll 115kV	On-Line
GEN-2006-035	225.00	AEPW	Sweetwater 230kV	On-Line at 132MW
GEN-2006-037N1	75.00	NPPD	Broken Bow 115kV	On Schedule for 2014
GEN-2006-038N005	80.00	NPPD	Broken Bow 115kV	On-Line
GEN-2006-038N019	80.00	NPPD	Petersburg North 115kV	On-Line
GEN-2006-040	108.00	SUNCMKEC	Mingo 115kV	On Suspension
GEN-2006-043	99.00	AEPW	Sweetwater 230kV	On-Line
GEN-2006-044	370.00	SPS	Hitchland 345kV	On-Line at 80MW
GEN-2006-044N	40.50	OPPD	North Petersburg 115kV	On-Line
GEN-2006-046	131.00	OKGE	Dewey 138kV	On-Line
GEN-2006-047	240.00	SPS	Tap Bushland - Deaf Smith (Buffalo) 230kV	On Suspension
GEN-2007-011	135.00	SUNCMKEC	Syracuse 115kV	On Suspension
GEN-2007-011N08	81.00	NPPD	Bloomfield 115kV	On-Line
GEN-2007-021	201.00	OKGE	Tatonga 345kV	On Schedule for 2014
GEN-2007-025	300.00	WERE	Viola 345kV	On-Line
GEN-2007-032	150.00	WFEC	Tap Clinton Junction - Clinton 138kV	On Schedule for 2013
GEN-2007-038	200.00	SUNCMKEC	Spearville 345kV	On Schedule for 2015
GEN-2007-040	200.00	SUNCMKEC	Buckner 345kV	On-Line at 132MW
GEN-2007-043	200.00	OKGE	Minco 345kV	On-Line
GEN-2007-044	300.00	OKGE	Tatonga 345kV	On Schedule for 2014
GEN-2007-046	199.50	SPS	Hitchland 115kV	On Schedule for 2014
GEN-2007-048	400.00	SPS	Tap Amarillo S - Swisher 230kV	On Schedule for 2014
GEN-2007-050	170.00	OKGE	Woodward EHV 138kV	On-Line at 150MW
GEN-2007-052	150.00	WFEC	Anadarko 138kV	On-Line
GEN-2007-057	34.50	SPS	Moore County East 115kV	Withdrawn
GEN-2007-062	765.00	OKGE	Woodward EHV 345kV	On Schedule for 2014
GEN-2008-003	101.00	OKGE	Woodward EHV 138kV	On-Line
GEN-2008-008	60.00	SPS	Graham 69kV	On Suspension
GEN-2008-009	60.00	SPS	San Juan Tap 230kV	On Schedule for 2014
GEN-2008-013	300.00	OKGE	Tap Wichita - Woodring (Hunter) 345kV	On-Line at 235MW
GEN-2008-017	300.00	SUNCMKEC	Setab 345kV	On Schedule for 2015
GEN-2008-018	405.00	SPS	Finney 345kV	On Schedule for 2014
GEN-2008-019	300.00	OKGE	Tatonga 345kV	On Schedule for 2015
GEN-2008-021	42.00	WERE	Wolf Creek 345kV	On-Line
GEN-2008-022	300.00	SPS	Tap Eddy Co - Tolk (Chaves County) 345kV	On Schedule for 2015
GEN-2008-023	150.00	AEPW	Hobart Junction 138kV	On-Line
GEN-2008-025	101.00	SUNCMKEC	Ruleton 115kV	Withdrawn
GEN-2008-029	250.00	OKGE	Woodward EHV 138kV	On Schedule for 2014
GEN-2008-037	101.00	WFEC	Tap Washita - Blue Canyon Wind 138kV	On-Line
GEN-2008-044	197.80	OKGE	Tatonga 345kV	On-Line



Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2008-047	300.00	SPS	Tap Hitchland - Woodward Ckt 1 (Beaver County) 345kV	IA Pending
GEN-2008-051	322.00	SPS	Potter County 345kV	On-Line at 161MW
GEN-2008-071	76.80	OKGE	Newkirk 138kV	On Suspension
GEN-2008-079	98.90	SUNCMKEC	Tap Cudahy - Ft Dodge 115kV	On-Line
GEN-2008-086N02	200.00	NPPD	Tap Ft Randle - Columbus (Madison County) 230kV	On Schedule for 2014
GEN-2008-088	50.60	SPS	Vega 69kV	On Schedule for 2014
GEN-2008-092	201.00	MIDW	Knoll 230kV	IA Pending
GEN-2008-098	100.80	WERE	Tap Lacygne - Wolf Creek (Anderson County) 345kV	On Schedule for 2015
GEN-2008-1190	60.00	OPPD	S1399 161kV	On-Line
GEN-2008-123N	89.70	NPPD	Tap Guide Rock - Pauline 115kV	On Schedule for 2014
GEN-2008-124	200.00	SUNCMKEC	Spearville 345kV	On Schedule for 2016
GEN-2008-124T	42.00	SPS	TC-Keyes Texas County 69kV	On Schedule for 2014
GEN-2008-129	80.00	MIPU	Pleasant Hill 161kV	On-Line
GEN-2009-008	199.50	MIDW	South Hays 230kV	On Schedule for 2015
GEN-2009-016	100.80	AEPW	Falcon Road 138kV	Withdrawn
GEN-2009-020	48.60	MIDW	Tap Nekoma - Bazine 69kV	On Schedule for 2015
GEN-2009-025	60.00	OKGE	Tap Deer Creek - Sinclair Blackwell 69kV	On-Line
GEN-2009-040	73.80	WERE	Marshall 115kV	On Schedule for 2015
GEN-2009-073T	48.00	SPS	TC-Eva Texas County 69kV	Withdrawn
GEN-2010-001	300.00	SPS	Tap Hitchland - Woodward Ckt 1 (Beaver County) 345kV	On Schedule for 2014 (204 MW) and 2015 (96 MW)
GEN-2010-003	100.80	WERE	Tap Lacygne - Wolf Creek (Anderson County) 345kV	On Schedule for 2015
GEN-2010-005	300.00	WERE	Viola 345kV	On-Line at 114MW
GEN-2010-006	205.00	SPS	Jones 230kV	On-Line
GEN-2010-009	165.60	SUNCMKEC	Buckner 345kV	On-Line
GEN-2010-011	30.00	OKGE	Tatonga 345kV	On Line
GEN-2010-014	358.80	SPS	Hitchland 345kV	On Schedule for 2016
GEN-2010-015	200.10	SUNCMKEC	Spearville 345kV	On Schedule for 2015
GEN-2010-020	20.00	SPS	Roswell 69kV	On Suspension
GEN-2010-036	4.60	WERE	6th Street 115kV	On-Line
GEN-2010-040	300.00	OKGE	Cimarron 345kV	On-Line
GEN-2010-041	10.50	OPPD	S 1399 161kV	IA Pending
GEN-2010-044	99.00	NPPD	Harbine 115kV	IA Pending
GEN-2010-045	197.80	SUNCMKEC	Buckner 345kV	IA Pending
GEN-2010-046	56.00	SPS	TUCO Interchange 230kV	On Schedule for 2016
GEN-2010-048	70.00	MIDW	Tap Beach Station - Redline 115kV	IA Pending
GEN-2010-051	200.00	NPPD	Tap Twin Church - Hoskins 230kV	On Schedule for 2014
GEN-2010-055	4.50	AEPW	Wekiwa 138kV	On-Line
GEN-2010-056	151.20	MIPU	Tap Saint Joseph - Cooper 345kV	On Suspension
GEN-2010-057	201.00	MIDW	Rice County 230kV	On-Line
GEN-2010-058	20.00	SPS	Chaves County 115kV	On Suspension
GEN-2010-061	180.00	MIDW	Tap Post Rock - Spearville (GEN-2011-017T) 345kV	Facility Study
GEN-2011-007	250.00	OKGE	Tap Cimarron - Woodring (Matthewson) 345kV	On Schedule for 2014
GEN-2011-008	600.00	SUNCMKEC	Clark County 345kV	IA Pending
GEN-2011-010	100.80	OKGE	Minco 345kV	On-Line
GEN-2011-011	50.00	KACP	Iatan 345kV	On-Line
GEN-2011-012	104.50	SPS	Tap Moore County - Hitchland 345kV	IA Pending
GEN-2011-014	201.00	SPS	Tap Hitchland - Woodward Ckt 1 (Beaver County) 345kV	IA Pending

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2011-016	200.10	SUNCMKEC	Spearville 345kV	IA Pending
GEN-2011-017	299.00	SUNCMKEC	Tap Spearville - PostRock (GEN-2011-017T) 345kV	IA Pending
GEN-2011-018	73.60	NPPD	Steele City 115kV	On Schedule for 2013
GEN-2011-019	299.00	OKGE	Woodward 345kV	IA Pending
GEN-2011-020	299.00	OKGE	Woodward 345kV	IA Pending
GEN-2011-021	299.00	SPS	Beaver County 345kV	IA Pending
GEN-2011-022	299.00	SPS	Hitchland 345kV	IA Pending
GEN-2011-023	299.00	SUNCMKEC	Clark County 345kV	IA Pending
GEN-2011-024	299.00	OKGE	Tatonga 345kV	Withdrawn
GEN-2011-025	82.30	SPS	Tap Floyd County - Crosby County 115kV	On Suspension
GEN-2011-027	120.00	NPPD	Hoskins 230kV	IA Pending
GEN-2011-037	7.00	WFEC	Blue Canyon 5 138kV	On-Line
GEN-2011-040	111.00	OKGE	Tap Ratliff - Pooleville 138kV	On Schedule for 2014
GEN-2011-043	150.00	SUNCMKEC	Thistle 345kV	Facility Study
GEN-2011-044	150.00	SUNCMKEC	Thistle 345kV	Facility Study
GEN-2011-045	205.00	SPS	Jones 230kV	On-Line
GEN-2011-046	27.00	SPS	Lopez 115kV	On Schedule for 2013
GEN-2011-048	175.00	SPS	Mustang 230kV	On Schedule for 2014
GEN-2011-049	250.00	OKGE	Border 345kV	IA Pending
GEN-2011-050	109.80	AEPW	Tap Rush Springs - Marlow 138kV	IA Pending
GEN-2011-051	104.40	OKGE	Tap Woodward - Tatonga 345kV	IA Pending
GEN-2011-054	300.00	OKGE	Cimarron 345kV	On Schedule for 2013 (200 MW) and 2014 (99 MW)
GEN-2011-055	52.80	OPPD	South Sterling 69kV	Facility Study
GEN-2011-056	3.60	NPPD	Jeffrey 115kV	On-Line
GEN-2011-056A	3.60	NPPD	John 1 115kV	On-Line
GEN-2011-056B	4.50	NPPD	John 2 115kV	On-Line
GEN-2011-057	150.40	WERE	Creswell 138kV	On Schedule for 2014
GEN-2012-001	61.20	SPS	Tap Grassland - Borden County 230kV	On-Line
GEN-2012-002	101.20	SUNCMKEC	Tap Pile - Scott City 115kV	IA Pending
GEN-2012-004	41.40	OKGE	Tap Ratliff - Pooleville 138kV	On Schedule for 2014
GEN-2012-005	81.00	NPPD	Tap Fort Randall - Columbus (North of Madison Co) 230kV	Facility Study
GEN-2012-007	120.00	SUNCMKEC	Rubart 115kV	IA Pending
GEN-2012-008	40.00	SPS	Mustang 115kV & Mustang 230kV	Withdrawn
GEN-2012-009	15.00	SPS	Mustang 230kV	Facility Study
GEN-2012-010	15.00	SPS	Mustang 230kV	Facility Study
GEN-2012-011	200.00	SUNCMKEC	Tap Spearville - Post Rock 345kV (North of GEN-2011-017 Tap)	Facility Study
GEN-2012-016	312.00	OKGE	Tap Woodward - Thistle 345kV Dbl CKT	Facility Study
GEN-2012-017	115.00	NPPD	Cooper 345kV	Withdrawn
GEN-2012-018	200.00	NPPD	Tap Hoskins - Twin Church 230kV (GEN-2010-051T)	Facility Study
GEN-2012-020	477.12	SPS	TUCO 230kV	Facility Study
GEN-2012-021	4.80	LES	Terry Bundy Generating Station 115kV	Facility Study
GEN-2012-023	115.00	WERE	Viola 345kV	Facility Study
GEN-2012-024	180.00	SUNCMKEC	Clark County 345kV	Facility Study
GEN-2012-026	100.00	MIDW	Colby 115kV	Facility Study
GEN-2012-027	136.00	AEPW	Shidler 138kV	Facility Study
GEN-2012-028	74.80	WFEC	Gotebo 69kV	Facility Study

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2012-031	200.10	OKGE	Cimarron 345kV (GEN-2010-040 Sub)	Facility Study
GEN-2012-032	300.00	OKGE	Tap Rose Hill - Sooner 345kV	Facility Study
GEN-2012-033	98.82	OKGE	Tap and Tie South 4th - Bunch Creek & Enid Tap - Fairmont (GEN-2012-033T) 138kV	Facility Study
GEN-2012-034	7.00	SPS	Mustang 230kV	Facility Study
GEN-2012-035	7.00	SPS	Mustang 230kV	Facility Study
GEN-2012-036	7.00	SPS	Mustang 230kV	Facility Study
GEN-2012-037	203.00	SPS	TUCO 345kV	Facility Study
GEN-2012-040	76.50	WFEC	Newkirk 138kV	Facility Study
GEN-2012-041	121.50	OKGE	Tap Rose Hill - Sooner 345kV	IA Pending
GEN-2013-002	50.60	LES	Tap Sheldon - Folsom 115kV CKT 1	Facility Study
GEN-2013-003	48.00	OKGE	Tap Woodwad - Thistle 345kV Dbl CKT (GEN-2012-016 Tap)	Facility Study
GEN-2013-003	48.00	OKGE	Tap Woodwad - Thistle 345kV Dbl CKT (GEN-2012-016 Tap)	Facility Study
GEN-2013-004	6.00	NPPD	Tap Fort Randall - Columbus (Madison County)	Facility Study
GEN-2013-005	73.50	NPPD	Madison County (GEN-2008-086N2 Sub)	Facility Study
GEN-2013-006	50.60	NPPD	Tap Fort Randall - Columbus (Madison County)	Facility Study
GEN-2013-007	100.30	OKGE	Tap Prices Falls - Carter 138kV	Facility Study
GEN-2013-008	1.20	NPPD	Steele City 115kV	Facility Study
GEN-2013-009	100.30	AEPW	Tap Alluwe Tap - Vinita Junction 138kV	Facility Study
GEN-2013-010	99.00	SUNCMKEC	Tap Spearville - Post Rock 345kV (GEN-2012-011 Tap)	Facility Study
GEN-2013-011	30.00	AEPW	Turk 138kV	Facility Study
GEN-2013-012	147.00	OKGE	Redbud 345kV	Facility Study
GEN-2013-012	147.00	OKGE	Redbud 345kV	Facility Study
GEN-2013-012	147.00	OKGE	Redbud 345kV	Facility Study
GEN-2013-012	147.00	OKGE	Redbud 345kV	Facility Study
GEN-2013-013	248.40	SPS	Tap Eddy County - Tolk 345kV	Under Study (DISIS-2013-01-1)
GEN-2013-014	25.50	NPPD	Tap Guide Rock - Pauline (GEN-2008-123N Tap) 115kV	Facility Study
GEN-2013-015	125.80	NPPD	Tap Pauline - Hildreth 115kV	Facility Study
GEN-2013-016	203.00	SPS	TUCO 345kV	Under Study (DISIS-2013-01-1)
GEN-2013-017	200.00	SPS	Tap TUCO - OKU 345kV	Under Study (DISIS-2013-01-1)
GEN-2013-018	51.00	OPPD	Tap S974 - Hydrocarbon Tap 69kV	Facility Study
Gray County Wind (Montezuma)	110.00	SUNCMKEC	Gray County Tap 115kV	On-Line
Llano Estacado (White Deer)	80.00	SPS	Llano Wind 115kV	On-Line
NPPD Distributed (Broken Bow)	8.30	NPPD	Broken Bow 115kV	On-Line
NPPD Distributed (Burwell)	3.00	NPPD	Ord 115kV	On-Line
NPPD Distributed (Columbus Hydro)	45.00	NPPD	Columbus 115kV	On-Line
NPPD Distributed (North Platte - Lexington)	54.00	NPPD	Multiple: Jeffrey 115kV, John_1 115kV, John_2 115kV	On-Line
NPPD Distributed (Ord)	10.80	NPPD	Ord 115kV	On-Line
NPPD Distributed (Stuart)	2.10	NPPD	Ainsworth 115kV	On-Line
SPS Distributed (Dumas 19th St)	20.00	SPS	Dumas 19th Street 115kV	On-Line
SPS Distributed (Etter)	20.00	SPS	Etter 115kV	On-Line
SPS Distributed (Hopi)	10.00	SPS	Hopi 115kV	On-Line
SPS Distributed (Jal)	10.00	SPS	S Jal 115kV	On-Line
SPS Distributed (Lea Road)	10.00	SPS	Lea Road 115kV	On-Line
SPS Distributed (Monument)	10.00	SPS	Monument 115kV	On-Line
SPS Distributed (Moore E)	25.00	SPS	Moore East 115kV	On-Line

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
SPS Distributed (Ocotillo)	10.00	SPS	Ocotillo 115kV	On-Line
SPS Distributed (Sherman)	20.00	SPS	Sherman 115kV	On-Line
SPS Distributed (Spearman)	10.00	SPS	Spearman 69kV	On-Line
SPS Distributed (TC-Texas County)	20.00	SPS	Texas County 115kV	On-Line
<b>Total:</b>		<b>30,929.6</b>		

## **C: Study Groupings**

See next page

## C. Study Groups

<b>GROUP 1: WOODWARD AREA</b>			
<b>Request</b>	<b>Capacity</b>	<b>Area</b>	<b>Proposed Point of Interconnection</b>
GEN-2001-014	96.00	WFEC	Ft Supply 138kV
GEN-2001-037	102.00	OKGE	FPL Moreland Tap 138kV
GEN-2005-008	120.00	OKGE	Woodward 138kV
GEN-2006-024S	19.80	WFEC	Buffalo Bear Tap 69kV
GEN-2006-046	131.00	OKGE	Dewey 138kV
GEN-2007-021	201.00	OKGE	Tatonga 345kV
GEN-2007-043	200.00	OKGE	Minco 345kV
GEN-2007-044	300.00	OKGE	Tatonga 345kV
GEN-2007-050	170.00	OKGE	Woodward EHV 138kV
GEN-2007-062	765.00	OKGE	Woodward EHV 345kV
GEN-2008-003	101.00	OKGE	Woodward EHV 138kV
GEN-2008-019	300.00	OKGE	Tatonga 345kV
GEN-2008-029	250.00	OKGE	Woodward EHV 138kV
GEN-2008-044	197.80	OKGE	Tatonga 345kV
GEN-2010-011	30.00	OKGE	Tatonga 345kV
GEN-2010-040	300.00	OKGE	Cimarron 345kV
GEN-2011-007	250.00	OKGE	Tap Cimarron - Woodring (Matthewson) 345kV
GEN-2011-010	100.80	OKGE	Minco 345kV
GEN-2011-019	299.00	OKGE	Woodward 345kV
GEN-2011-020	299.00	OKGE	Woodward 345kV
GEN-2011-024	299.00	OKGE	Tatonga 345kV
GEN-2011-051	104.40	OKGE	Tap Woodward - Tatonga 345kV
GEN-2011-054	300.00	OKGE	Cimarron 345kV
GEN-2012-016	312.00	OKGE	Tap Woodward - Thistle 345kV Dbl CKT
GEN-2012-031	200.10	OKGE	Cimarron 345kV (GEN-2010-040 Sub)
GEN-2013-003	48.00	OKGE	Tap Woodwad - Thistle 345kV Dbl CKT (GEN-2012-016 Tap)
<b>PRIOR QUEUED SUBTOTAL</b>	<b>5,495.90</b>		
<b>AREA TOTAL</b>	<b>5,495.90</b>		

<b>GROUP 2: HITCHLAND AREA</b>			
<b>Request</b>	<b>Capacity</b>	<b>Area</b>	<b>Proposed Point of Interconnection</b>
ASGI-2011-002	10.00	SPS	Herring 115kV
GEN-2002-008	240.00	SPS	Hitchland 345kV
GEN-2002-009	80.00	SPS	Hansford 115kV
GEN-2003-020	160.00	SPS	Martin 115kV
GEN-2006-020S	18.90	SPS	DWS Frisco 115kV
GEN-2006-044	370.00	SPS	Hitchland 345kV
GEN-2007-046	199.50	SPS	Hitchland 115kV
GEN-2007-057	34.50	SPS	Moore County East 115kV
GEN-2008-047	300.00	SPS	Tap Hitchland - Woodward Ckt 1 (Beaver County) 345kV
GEN-2008-124T	42.00	SPS	TC-Keyes Texas County 69kV
GEN-2009-073T	48.00	SPS	TC-Eva Texas County 69kV
GEN-2010-001	300.00	SPS	Tap Hitchland - Woodward Ckt 1 (Beaver County) 345kV
GEN-2010-014	358.80	SPS	Hitchland 345kV
GEN-2011-012	104.50	SPS	Tap Moore County - Hitchland 345kV
GEN-2011-014	201.00	SPS	Tap Hitchland - Woodward Ckt 1 (Beaver County) 345kV
GEN-2011-021	299.00	SPS	Beaver County 345kV
GEN-2011-022	299.00	SPS	Hitchland 345kV
SPS Distributed (Dumas 19th St)	20.00	SPS	Dumas 19th Street 115kV
SPS Distributed (Etter)	20.00	SPS	Etter 115kV
SPS Distributed (Moore E)	25.00	SPS	Moore East 115kV
SPS Distributed (Sherman)	20.00	SPS	Sherman 115kV
SPS Distributed (Spearman)	10.00	SPS	Spearman 69kV
SPS Distributed (TC-Texas County)	20.00	SPS	Texas County 115kV
<b>PRIOR QUEUED SUBTOTAL</b>	<b>3,180.20</b>		
GEN-2013-001	200.00	SPS	Tap Moore County - Hitchland 230kV
<b>CURRENT CLUSTER SUBTOTAL</b>	<b>200.00</b>		
<b>AREA TOTAL</b>	<b>3,380.20</b>		

<b>GROUP 3: SPEARVILLE AREA</b>			
<b>Request</b>	<b>Capacity</b>	<b>Area</b>	<b>Proposed Point of Interconnection</b>
ASGI-2012-006	22.50	SUNCMKEC	Tap Hugoton - Rolla 69kV
GEN-2001-039A	105.00	SUNCMKEC	Tap Greensburg - Ft Dodge (Shooting Star Tap) 115kV
GEN-2002-025A	150.00	SUNCMKEC	Spearville 230kV
GEN-2004-014	154.50	SUNCMKEC	Spearville 230kV
GEN-2005-012	250.00	SUNCMKEC	Spearville 345kV
GEN-2006-006	205.50	SUNCMKEC	Spearville 345kV
GEN-2006-021	101.00	SUNCMKEC	Flat Ridge Tap 138kV
GEN-2006-022	150.00	SUNCMKEC	Ninnescah 115kV
GEN-2007-038	200.00	SUNCMKEC	Spearville 345kV
GEN-2007-040	200.00	SUNCMKEC	Buckner 345kV
GEN-2008-018	405.00	SPS	Finney 345kV
GEN-2008-079	98.90	SUNCMKEC	Tap Cudahy - Ft Dodge 115kV
GEN-2008-124	200.00	SUNCMKEC	Spearville 345kV
GEN-2010-009	165.60	SUNCMKEC	Buckner 345kV
GEN-2010-015	200.10	SUNCMKEC	Spearville 345kV
GEN-2010-045	197.80	SUNCMKEC	Buckner 345kV
GEN-2010-061	180.00	MIDW	Tap Post Rock - Spearville (GEN-2011-017T) 345kV
GEN-2011-008	600.00	SUNCMKEC	Clark County 345kV
GEN-2011-016	200.10	SUNCMKEC	Spearville 345kV
GEN-2011-017	299.00	SUNCMKEC	Tap Spearville - PostRock (GEN-2011-017T) 345kV
GEN-2011-023	299.00	SUNCMKEC	Clark County 345kV
GEN-2011-043	150.00	SUNCMKEC	Thistle 345kV
GEN-2011-044	150.00	SUNCMKEC	Thistle 345kV
GEN-2012-007	120.00	SUNCMKEC	Rubart 115kV
GEN-2012-011	200.00	SUNCMKEC	Tap Spearville - Post Rock 345kV (North of GEN-2011-017 Tap)
GEN-2012-024	180.00	SUNCMKEC	Clark County 345kV
GEN-2013-010	99.00	SUNCMKEC	Tap Spearville - Post Rock 345kV (GEN-2012-011 Tap)
Gray County Wind (Montezuma)	110.00	SUNCMKEC	Gray County Tap 115kV
<b>PRIOR QUEUED SUBTOTAL</b>	<b>5,393.00</b>		
<b>AREA TOTAL</b>	<b>5,393.00</b>		



**GROUP 4: NW KANSAS AREA**

Request	Capacity	Area	Proposed Point of Interconnection
GEN-2001-039M	99.00	SUNCMKEC	Central Plains Tap 115kV
GEN-2003-006A	200.00	SUNCMKEC	Elm Creek 230kV
GEN-2003-019	250.00	MIDW	Smoky Hills Tap 230kV
GEN-2006-031	75.00	MIDW	Knoll 115kV
GEN-2006-040	108.00	SUNCMKEC	Mingo 115kV
GEN-2007-011	135.00	SUNCMKEC	Syracuse 115kV
GEN-2008-017	300.00	SUNCMKEC	Setab 345kV
GEN-2008-025	101.00	SUNCMKEC	Ruleton 115kV
GEN-2008-092	201.00	MIDW	Knoll 230kV
GEN-2009-008	199.50	MIDW	South Hays 230kV
GEN-2009-020	48.60	MIDW	Tap Nekoma - Bazine 69kV
GEN-2010-048	70.00	MIDW	Tap Beach Station - Redline 115kV
GEN-2010-057	201.00	MIDW	Rice County 230kV
GEN-2012-002	101.20	SUNCMKEC	Tap Pile - Scott City 115kV
GEN-2012-026	100.00	MIDW	Colby 115kV
<b>PRIOR QUEUED SUBTOTAL</b>	<b>2,189.30</b>		
<b>AREA TOTAL</b>	<b>2,189.30</b>		

**GROUP 5: AMARILLO AREA**

Request	Capacity	Area	Proposed Point of Interconnection
ASGI-2013-001	11.50	SPS	PanTex South 115kV
GEN-2002-022	240.00	SPS	Bushland 230kV
GEN-2006-047	240.00	SPS	Tap Bushland - Deaf Smith (Buffalo) 230kV
GEN-2007-048	400.00	SPS	Tap Amarillo S - Swisher 230kV
GEN-2008-051	322.00	SPS	Potter County 345kV
GEN-2008-088	50.60	SPS	Vega 69kV
Llano Estacado (White Deer)	80.00	SPS	Llano Wind 115kV
<b>PRIOR QUEUED SUBTOTAL</b>	<b>1,344.10</b>		
<b>AREA TOTAL</b>	<b>1,344.10</b>		

<b>GROUP 6: S-TX PANHANDLE/NW AREA</b>			
<b>Request</b>	<b>Capacity</b>	<b>Area</b>	<b>Proposed Point of Interconnection</b>
ASGI-2010-010	42.20	SPS	Lovington 115kV
ASGI-2010-020	30.00	SPS	Tap LE-Tatum - LE-Crossroads 69kV
ASGI-2010-021	15.00	SPS	Tap LE-Saunders Tap - LE-Anderson 69kV
ASGI-2011-001	28.80	SPS	Lovington 115kV
ASGI-2011-003	10.00	SPS	Hendricks 115kV
ASGI-2011-004	20.00	SPS	Pleasant Hill 69kV
ASGI-2012-002	18.15	SPS	FE-Clovis Interchange 115kV
ASGI-2013-002	18.40	SPS	FE Tucumcari 115kV
ASGI-2013-003	18.40	SPS	FE Clovis 115kV
GEN-2001-033	180.00	SPS	San Juan Tap 230kV
GEN-2001-036	80.00	SPS	Norton 115kV
GEN-2006-018	170.00	SPS	TUCO Interchange 230kV
GEN-2006-026	604.00	SPS	Hobbs 230kV & Hobbs 115kV
GEN-2008-008	60.00	SPS	Graham 69kV
GEN-2008-009	60.00	SPS	San Juan Tap 230kV
GEN-2008-022	300.00	SPS	Tap Eddy Co - Tolk (Chaves County) 345kV
GEN-2010-006	205.00	SPS	Jones 230kV
GEN-2010-020	20.00	SPS	Roswell 69kV
GEN-2010-046	56.00	SPS	TUCO Interchange 230kV
GEN-2010-058	20.00	SPS	Chaves County 115kV
GEN-2011-025	82.30	SPS	Tap Floyd County - Crosby County 115kV
GEN-2011-045	205.00	SPS	Jones 230kV
GEN-2011-046	27.00	SPS	Lopez 115kV
GEN-2011-048	175.00	SPS	Mustang 230kV
GEN-2012-001	61.20	SPS	Tap Grassland - Borden County 230kV
GEN-2012-008	40.00	SPS	Mustang 115kV & Mustang 230kV
GEN-2012-009	15.00	SPS	Mustang 230kV
GEN-2012-010	15.00	SPS	Mustang 230kV
GEN-2012-020	477.12	SPS	TUCO 230kV
GEN-2012-034	7.00	SPS	Mustang 230kV
GEN-2012-035	7.00	SPS	Mustang 230kV
GEN-2012-036	7.00	SPS	Mustang 230kV
GEN-2012-037	203.00	SPS	TUCO 345kV
GEN-2013-013	248.40	SPS	Tap Eddy County - Tolk 345kV
GEN-2013-016	203.00	SPS	TUCO 345kV
GEN-2013-017	200.00	SPS	Tap TUCO - OKU 345kV
SPS Distributed (Hopi)	10.00	SPS	Hopi 115kV
SPS Distributed (Jal)	10.00	SPS	S Jal 115kV
SPS Distributed (Lea Road)	10.00	SPS	Lea Road 115kV
SPS Distributed (Monument)	10.00	SPS	Monument 115kV
SPS Distributed (Ocotillo)	10.00	SPS	Ocotillo 115kV
<b>PRIOR QUEUED SUBTOTAL</b>	<b>3,978.97</b>		
GEN-2012-043	153.00	SPS	Tap Eddy County - Tolk 345kV (GEN-2013-013 Tap)
<b>CURRENT CLUSTER SUBTOTAL</b>	<b>153.00</b>		
<b>AREA TOTAL</b>	<b>4,132.0</b>		

<b>GROUP 7: SW OKLAHOMA AREA</b>			
<b>Request</b>	<b>Capacity</b>	<b>Area</b>	<b>Proposed Point of Interconnection</b>
GEN-2001-026	74.00	WFEC	Washita 138kV
GEN-2002-005	120.00	WFEC	Red Hills Tap 138kV
GEN-2003-004	100.00	WFEC	Washita 138kV
GEN-2003-005	100.00	WFEC	Anadarko - Paradise (Blue Canyon) 138kV
GEN-2003-022	120.00	AEPW	Washita 138kV
GEN-2004-020	27.00	AEPW	Washita 34.5kV
GEN-2004-023	20.60	WFEC	Washita 138kV
GEN-2005-003	30.60	WFEC	Washita 138kV
GEN-2006-002	101.00	AEPW	Sweetwater 230kV
GEN-2006-035	225.00	AEPW	Sweetwater 230kV
GEN-2006-043	99.00	AEPW	Sweetwater 230kV
GEN-2007-032	150.00	WFEC	Tap Clinton Junction - Clinton 138kV
GEN-2007-052	150.00	WFEC	Anadarko 138kV
GEN-2008-023	150.00	AEPW	Hobart Junction 138kV
GEN-2008-037	101.00	WFEC	Tap Washita - Blue Canyon Wind 138kV
GEN-2009-016	100.80	AEPW	Falcon Road 138kV
GEN-2011-037	7.00	WFEC	Blue Canyon 5 138kV
GEN-2011-049	250.00	OKGE	Border 345kV
GEN-2012-028	74.80	WFEC	Gotebo 69kV
<b>PRIOR QUEUED SUBTOTAL</b>	<b>2,000.80</b>		
<b>AREA TOTAL</b>	<b>2,000.80</b>		

<b>GROUP 8: N-OK/S-KS AREA</b>			
<b>Request</b>	<b>Capacity</b>	<b>Area</b>	<b>Proposed Point of Interconnection</b>
ASGI-2010-006	150.00	AECI	Tap Fairfax (AECI) - Shilder (AEPW) 138kV
GEN-2002-004	200.00	WERE	Latham 345kV
GEN-2005-013	201.00	WERE	Tap Latham - Neosho (Caney River) 345kV
GEN-2007-025	300.00	WERE	Viola 345kV
GEN-2008-013	300.00	OKGE	Tap Wichita - Woodring (Hunter) 345kV
GEN-2008-021	42.00	WERE	Wolf Creek 345kV
GEN-2008-071	76.80	OKGE	Newkirk 138kV
GEN-2008-098	100.80	WERE	Tap Lacygne - Wolf Creek (Anderson County) 345kV
GEN-2009-025	60.00	OKGE	Tap Deer Creek - Sinclair Blackwell 69kV
GEN-2010-003	100.80	WERE	Tap Lacygne - Wolf Creek (Anderson County) 345kV
GEN-2010-005	300.00	WERE	Viola 345kV
GEN-2010-055	4.50	AEPW	Wekiwa 138kV
GEN-2011-057	150.40	WERE	Creswell 138kV
GEN-2012-023	115.00	WERE	Viola 345kV
GEN-2012-027	136.00	AEPW	Shidler 138kV
GEN-2012-032	300.00	OKGE	Tap Rose Hill - Sooner 345kV
GEN-2012-033	98.82	OKGE	Tap and Tie South 4th - Bunch Creek & Enid Tap - Fairmont (GEN-2012-033T) 138kV
GEN-2012-040	76.50	WFEC	Newkirk 138kV
GEN-2012-041	121.50	OKGE	Tap Rose Hill - Sooner 345kV
GEN-2013-009	100.30	AEPW	Tap Alluwe Tap - Vinita Junction 138kV
GEN-2013-012	147.00	OKGE	Redbud 345kV
<b>PRIOR QUEUED SUBTOTAL</b>	<b>3,081.42</b>		
<b>AREA TOTAL</b>	<b>3,081.4</b>		

<b>GROUP 9/10: NEBRASKA AREA</b>			
<b>Request</b>	<b>Capacity</b>	<b>Area</b>	<b>Proposed Point of Interconnection</b>
GEN-2002-023N	0.80	NPPD	Harmony 115kV
GEN-2003-021N	75.00	NPPD	Ainsworth Wind Tap 115kV
GEN-2004-005N	30.00	NPPD	St Francis 115kV
GEN-2004-023N	75.00	NPPD	Columbus Co 115kV
GEN-2006-020N	42.00	NPPD	Bloomfield 115kV
GEN-2006-037N1	75.00	NPPD	Broken Bow 115kV
GEN-2006-038N005	80.00	NPPD	Broken Bow 115kV
GEN-2006-038N019	80.00	NPPD	Petersburg North 115kV
GEN-2006-044N	40.50	OPPD	North Petersburg 115kV
GEN-2007-011N08	81.00	NPPD	Bloomfield 115kV
GEN-2008-086N02	200.00	NPPD	Tap Ft Randle - Columbus (Madison County) 230kV
GEN-2008-1190	60.00	OPPD	S1399 161kV
GEN-2008-123N	89.70	NPPD	Tap Guide Rock - Pauline 115kV
GEN-2009-040	73.80	WERE	Marshall 115kV
GEN-2010-041	10.50	OPPD	S 1399 161kV
GEN-2010-044	99.00	NPPD	Harbine 115kV
GEN-2010-051	200.00	NPPD	Tap Twin Church - Hoskins 230kV
GEN-2011-018	73.60	NPPD	Steele City 115kV
GEN-2011-027	120.00	NPPD	Hoskins 230kV
GEN-2011-055	52.80	OPPD	South Sterling 69kV
GEN-2011-056	3.60	NPPD	Jeffrey 115kV
GEN-2011-056A	3.60	NPPD	John 1 115kV
GEN-2011-056B	4.50	NPPD	John 2 115kV
GEN-2012-005	81.00	NPPD	Tap Fort Randall - Columbus (North of Madison Co) 230kV
GEN-2012-017	115.00	NPPD	Cooper 345kV
GEN-2012-018	200.00	NPPD	Tap Hoskins - Twin Church 230kV (GEN-2010-051T)
GEN-2012-021	4.80	LES	Terry Bundy Generating Station 115kV
GEN-2013-002	50.60	LES	Tap Sheldon - Folsom 115kV CKT 1
GEN-2013-004	6.00	NPPD	Tap Fort Randall - Columbus (Madison County)
GEN-2013-005	73.50	NPPD	Madison County (GEN-2008-086N2 Sub)
GEN-2013-006	50.60	NPPD	Tap Fort Randall - Columbus (Madison County)
GEN-2013-008	1.20	NPPD	Steele City 115kV
GEN-2013-014	25.50	NPPD	Tap Guide Rock - Pauline (GEN-2008-123N Tap) 115kV
GEN-2013-015	125.80	NPPD	Tap Pauline - Hildreth 115kV
GEN-2013-018	51.00	OPPD	Tap S974 - Hydrocarbon Tap 69kV
NPPD Distributed (Broken Bow)	8.30	NPPD	Broken Bow 115kV
NPPD Distributed (Burwell)	3.00	NPPD	Ord 115kV
NPPD Distributed (Columbus Hydro)	45.00	NPPD	Columbus 115kV
NPPD Distributed (North Platte - Lexington)	54.00	NPPD	Multiple: Jeffrey 115kV, John_1 115kV, John_2 115kV
NPPD Distributed (Ord)	10.80	NPPD	Ord 115kV
NPPD Distributed (Stuart)	2.10	NPPD	Ainsworth 115kV
<b>PRIOR QUEUED SUBTOTAL</b>	<b>2,478.60</b>		
<b>AREA TOTAL</b>	<b>2,478.6</b>		

**GROUP 12: NW AR AREA**

Request	Capacity	Area	Proposed Point of Interconnection
GEN-2006-010	620.00	AEPW	Turk 138kV
GEN-2013-011	30.00	AEPW	Turk 138kV
<b>PRIOR QUEUED SUBTOTAL</b>	<b>650.00</b>		
<b>AREA TOTAL</b>	<b>650.00</b>		

**GROUP 13: NW MISSOURI AREA**

Request	Capacity	Area	Proposed Point of Interconnection
GEN-2008-129	80.00	MIPU	Pleasant Hill 161kV
GEN-2010-036	4.60	WERE	6th Street 115kV
GEN-2010-056	151.20	MIPU	Tap Saint Joseph - Cooper 345kV
GEN-2011-011	50.00	KACP	Iatan 345kV
<b>PRIOR QUEUED SUBTOTAL</b>	<b>285.80</b>		
<b>AREA TOTAL</b>	<b>285.80</b>		

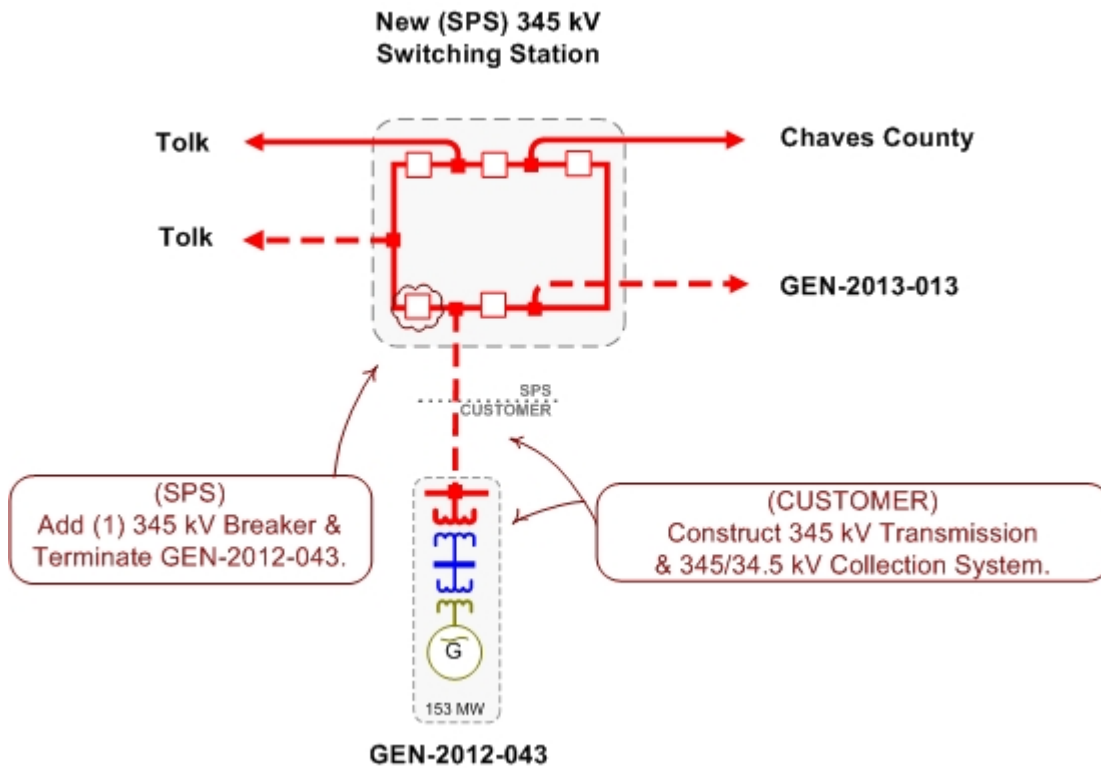
**GROUP 14: S OKLAHOMA AREA**

Request	Capacity	Area	Proposed Point of Interconnection
GEN-2011-040	111.00	OKGE	Tap Ratliff - Pooleville 138kV
GEN-2011-050	109.80	AEPW	Tap Rush Springs - Marlow 138kV
GEN-2012-004	41.40	OKGE	Tap Ratliff - Pooleville 138kV
GEN-2013-007	100.30	OKGE	Tap Prices Falls - Carter 138kV
<b>PRIOR QUEUED SUBTOTAL</b>	<b>362.50</b>		
<b>AREA TOTAL</b>	<b>362.50</b>		

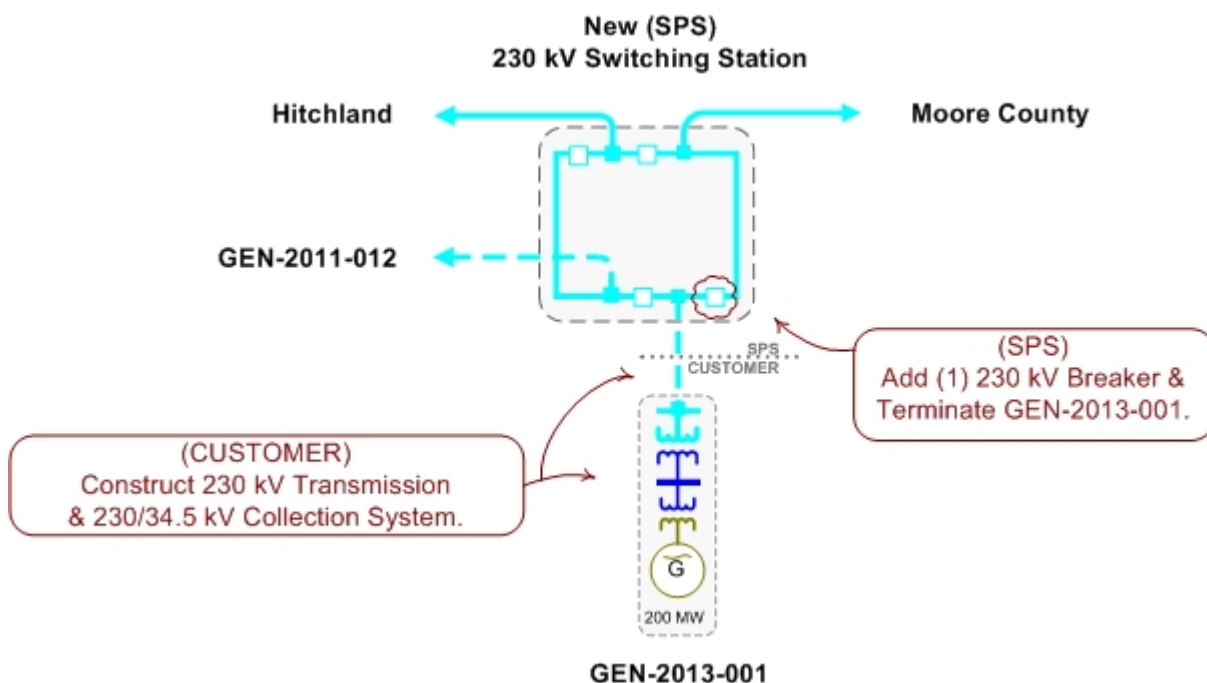
<b>CLUSTER TOTAL (CURRENT STUDY)</b>	<b>353.0</b>	<b>MW</b>
<b>PQ TOTAL (PRIOR QUEUED)</b>	<b>30,440.6</b>	<b>MW</b>
<b>CLUSTER TOTAL (INCLUDING PRIOR QUEUED)</b>	<b>30,793.6</b>	<b>MW</b>

### D: Proposed Point of Interconnection One Line Diagrams

#### GEN-2012-043



#### GEN-2013-001



## **E: Cost Allocation per Interconnection Request (Including Prior Queued Upgrades)**

Important Note:

**\*\*WITHDRAWAL OF HIGHER QUEUED PROJECTS WILL CAUSE A RESTUDY  
AND MAY RESULT IN HIGHER INTERCONNECTION COSTS\*\***

This section shows each Generation Interconnection Request Customer, their current study impacted Network Upgrades, and the previously allocated upgrades upon which they rely to accommodate their interconnection to the transmission system.

The costs associated with the current study Network Upgrades are allocated to the Customers shown in this report.

In addition should a higher queued request, defined as one this study includes as a prior queued request, withdraw, the Network Upgrades assigned to the withdrawn request may be reallocated to the remaining requests that have an impact on the Network Upgrade under a restudy. Also, should a Interconnection Request choose to go into service prior to the operation date of any necessary Network Upgrades, the costs associated with those upgrades may be reallocated to the impacted Interconnection Request. The actual costs allocated to each Generation Interconnection Request Customer will be determined at the time of a restudy.

The required interconnection costs listed do not include all costs associated with the deliverability of the energy to final customers. These costs are determined by separate studies if the Customer submits a Transmission Service Request through SPP's Open Access Same Time Information System (OASIS) as required by Attachment Z1 of the SPP OATT. In addition, costs associated with a short circuit analysis will be allocated should the Interconnection Request Customer choose to execute a Facility Study Agreement.

There may be additional costs allocated to each Customer. See Appendix F for more details.

# Appendix E. Cost Allocation Per Request

(Including Previously Allocated Network Upgrades\*)

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
<b>GEN-2012-043</b>			
GEN 2013-013 tap - Tolk 345kV CKT 2 Build approximately 48 miles of 345kV line from Gen 2013-013 tap to Tolk	Current Study	\$63,000,000.00	\$63,000,000.00
GEN-2012-043 interconnection costs See one line diagram	Current Study	\$5,000,000.00	\$5,000,000.00
Sundown - Wolfforth 230kV Replace line traps	Current Study	\$200,000.00	\$200,000.00
Amoco Wasson - Oxy Tap 230kV CKT 1 Replace line traps at both terminals	Previously Allocated		\$200,000.00
Beaver County - Woodward 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$226,040,727.00
Beaver County 345kV Expansion Beaver County Expansion: Tap & Tie in Hitchland - Woodward 345kV CKT 2	Previously Allocated		\$3,500,000.00
Border - Woodward 345kV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Deaf Smith - Plant X 230kV CKT 1 Replace line traps at both ends to atleast	Previously Allocated		\$1,000,000.00
Eddy County 230/115/13kV Transformer CKT 1 NRIS only required upgrade: Per 2013 ITP NT SPP-NTC-200214	Previously Allocated		\$4,265,720.00
Eddy County 230/115/13kV Transformer CKT 2 NRIS only required upgrade: Per 2012 ITP NT SPP-NTC-200166	Previously Allocated		\$6,761,086.00
Elk City - Gracemont 345kV CKT 1 Build approximately 105 miles of 345kV	Previously Allocated		\$175,061,392.00
Hitchland - Beaver County 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$226,040,727.00
Hitchland - Woodward 345kV CKT 2 Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$215,877,433.00
Hitchland 230/115/13kV Transformer CKT 2 NRIS only required upgrade: Build second 230/115/13kV transformer at Hitchland	Previously Allocated		\$6,000,000.00

\* Withdrawal of higher queued projects will cause a restudy and may result in higher costs



<b>Interconnection Request and Upgrades</b>	<b>Upgrade Type</b>	<b>Allocated Cost</b>	<b>Upgrade Cost</b>
Hitchland 345/230kV Autotransformer CKT 2 Priority Project: Hitchland 345/230kV Autotransformer CKT 2 (Total Project E&C Cost Shown).	Previously Allocated		\$8,883,760.00
Mustang - Yoakum 230kV CKT 1 Replace line traps at both terminals	Previously Allocated		\$200,000.00
Oxy Tap - Yoakum 230kV CKT 1 Replace line traps at both terminals	Previously Allocated		\$200,000.00
Plant X Station 230/115/13kV Transformer CKT 2 NRIS only required upgrade: Build second 230/115/13kV transformer at Plant X	Previously Allocated		\$8,000,000.00
Sweetwater - Elk City 345kV CKT 1 Build Sweetwater Substation and approximately 45 miles of 345kV	Previously Allocated		\$87,489,138.00
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$5,776,280.00
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$426,504,292.00
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$6,585,986.00
Tolk - Plant X 230kV CKT 3 Build a 3rd circuit between Tolk - Plant X 230kV	Previously Allocated		\$20,000,000.00
Tolk 345/230/13kV Transformer CKT 2 Build second 345/230/13kV transformer at Tolk	Previously Allocated		\$15,000,000.00
TUCO 345/230/13.2kV Autotransformer CKT 3 Build TUCO 345/230/13.2kV Autotransformer CKT 3 at new substation adjacent to the TUCO substation	Previously Allocated		\$15,000,000.00
TUCO Interchange - Stanton 115kV CKT 1 NRIS only required upgrade: Rebuild approximately 18 miles of 115kV	Previously Allocated		\$10,000,000.00
TUCO Interchange - Sweetwater 345kV CKT 2 Build approximately 142 miles of 345kV	Previously Allocated		\$123,000,000.00
TUCO Interchange 345/230/13.2KV Autotransformer CKT 2 Balanced Portfolio: TUCO 345/230 kV Transformer CKT 2 (Total Project E&C Cost Shown)	Previously Allocated		\$14,900,907.00
Woodward XFMR 345/138/13.8kV CKT 2 Balanced Portfolio: Woodward 345/138kV Transformer CKT 2 & 50 MVAR Reactor (Total Project E&C Cost Shown).	Previously Allocated		\$249,247,072.00
	<b>Current Study Total</b>		<b>\$68,200,000.00</b>

## GEN-2013-001

\* Withdrawal of higher queued projects will cause a restudy and may result in higher costs

Thursday, August 29, 2013

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
GEN-2013-001 interconnection costs See one line diagram	Current Study	\$2,000,000.00	\$2,000,000.00
Beaver County - Buckner 345kV Build approximately 90 miles of 345kV from Beaver County - Gray County @ 3000 amps	Previously Allocated		\$170,209,050.00
Beaver County - Woodward 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$226,040,727.00
Beaver County 345kV Expansion Beaver County Expansion: Tap & Tie in Hitchland - Woodward 345kV CKT 2	Previously Allocated		\$3,500,000.00
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Clark - Thistle 345KV Dbl CKT Priority Project: Spearville - Clark - Thistle Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$426,504,292.00
Finney Switching Station - Holcomb 345KV CKT 2 Assigned to ICS-2008-001 Customer	Previously Allocated		\$10,507,445.00
Hitchland - Beaver County 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$226,040,727.00
Hitchland - Woodward 345kV CKT 2 Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$215,877,433.00
Hitchland 345/230kV Autotransformer CKT 2 Priority Project: Hitchland 345/230kV Autotransformer CKT 2 (Total Project E&C Cost Shown).	Previously Allocated		\$8,883,760.00
Matthewson - Cimarron 345kV CKT 2 Build second 345kV circuit from Matthewson - Cimarron @ 3000 amps	Previously Allocated		\$42,903,753.00
Spearville -Clark 345KV Dbl CKT Priority Project: Spearville - Clark - Thistle Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$426,504,292.00
Tatonga - Matthewson 345kV CKT 2 Build second 345kV circuit from Tatonga - Matthewson @ 3000 amps	Previously Allocated		\$104,260,473.00
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$5,776,280.00
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$426,504,292.00
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$6,585,986.00

\* Withdrawal of higher queued projects will cause a restudy and may result in higher costs

<b>Interconnection Request and Upgrades</b>	<b>Upgrade Type</b>	<b>Allocated Cost</b>	<b>Upgrade Cost</b>
TUCO Interchange 345/230/13.2KV Autotransformer CKT 2 Balanced Portfolio: TUCO 345/230 kV Transformer CKT 2 (Total Project E&C Cost Shown)	Previously Allocated		\$14,900,907.00
Woodward XFMR 345/138/13.8kV CKT 2 Balanced Portfolio: Woodward 345/138kV Transformer CKT 2 & 50 MVAR Reactor (Total Project E&C Cost Shown).	Previously Allocated		\$249,247,072.00
	<b>Current Study Total</b>	\$2,000,000.00	
<b>TOTAL CURRENT STUDY COSTS:</b>		<b>\$70,200,000.00</b>	

\* Withdrawal of higher queued projects will cause a restudy and may result in higher costs

## **F: Cost Allocation per Proposed Study Network Upgrade**

Important Note:

**\*\*WITHDRAWAL OF HIGHER QUEUED PROJECTS WILL CAUSE A RESTUDY  
AND MAY RESULT IN HIGHER INTERCONNECTION COSTS\*\***

This section shows each Direct Assigned Facility and Network Upgrade and the Generation Interconnection Request Customer(s) which have an impact in this study assuming all higher queued projects remain in the queue and achieve commercial operation.

The required interconnection costs listed do not include all costs associated with the deliverability of the energy to final customers. These costs are determined by separate studies if the Customer submits a Transmission Service Request through SPP's Open Access Same Time Information System (OASIS) as required by Attachment Z1 of the SPP OATT. In addition, costs associated with a short circuit analysis will be allocated should the Interconnection Request Customer choose to execute a Facility Study Agreement.

There may be additional costs allocated to each Customer. See Appendix E for more details.

# Appendix F. Cost Allocation by Upgrade

<b>GEN-2013-013 tap - Tolk 345kV CKT 2</b>		<b>\$63,000,000.00</b>
Build approximately 48 miles of 345kV line from Gen 2013-013 tap to Tolk		
	GEN-2012-043	\$63,000,000.00
	<b>Total Allocated Costs</b>	<b>\$63,000,000.00</b>
<b>GEN-2012-043 interconnection costs</b>		<b>\$5,000,000.00</b>
See one line diagram		
	GEN-2012-043	\$5,000,000.00
	<b>Total Allocated Costs</b>	<b>\$5,000,000.00</b>
<b>GEN-2013-001 interconnection costs</b>		<b>\$2,000,000.00</b>
See one line diagram		
	GEN-2013-001	\$2,000,000.00
	<b>Total Allocated Costs</b>	<b>\$2,000,000.00</b>
<b>Sundown - Wolfforth 230kV</b>		<b>\$200,000.00</b>
Replace line traps		
	GEN-2012-043	\$200,000.00
	<b>Total Allocated Costs</b>	<b>\$200,000.00</b>

\* Withdrawal of higher queued projects will cause a restudy and may result in higher costs

## **G: Power Flow Analysis (Constraints Used For Mitigation)**

See next page.







SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	06NR		2	13G	G12_043	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	239	0.04924	100.9421	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06NR		2	13G	G12_043	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	239	0.04924	100.8976	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	00NR		2	13SP	G12_043	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.04413	100.7701	DEAF SMITH COUNTY INTERCHANGE (GE M101353) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR		2	13SP	G12_043	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.05494	100.7452	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	00NR		2	13SP	G12_043	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.0433	100.6177	SWISHER COUNTY INTERCHANGE (GE M101686) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR		2	13SP	G12_043	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.0433	100.5909	KRESS INTERCHANGE - SWISHER COUNTY INTERCHANGE 115KV CKT 1
FDNS	00NR		2	13SP	G12_043	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.04437	100.362	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1
FDNS	00NR		2	13SP	G12_043	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.04426	100.261	FLOYD COUNTY INTERCHANGE - TUCO INTERCHANGE 115KV CKT 1
FDNS	00NR		2	13SP	G12_043	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.04402	100.1273	CROSBY COUNTY INTERCHANGE - LUBBOCK EAST INTERCHANGE 115KV CKT 1
FDNS	00NR		2	13SP	G12_043	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.04436	100	GEN525492 1-PLANT X GEN #2
FDNS	00NR		2	13SP	G12_043	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.04436	100	GEN525493 1-PLANT X GEN #3
FDNS	00NR		2	13SP	G12_043	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.04245	99.9	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1
FDNS	00G12_043		2	13SP	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.24055	102.2856	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0982	124.0075	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0982	123.7085	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0982	119.5382	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0982	119.4581	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.15806	117.7562	SPP-SWPS-K31
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.15806	114.856	SPP-SWPS-K31
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.07758	111.4292	OCHILTREE - TRI COUNTY REC-COLE 115KV CKT 1
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.10501	110.2365	MOORE COUNTY INTERCHANGE (ENRCO 136402) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.16342	109.6231	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.07758	107.8789	OCHILTREE - TRI COUNTY REC-COLE 115KV CKT 1
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.16342	107.655	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.10501	107.4081	MOORE COUNTY INTERCHANGE (ENRCO 136402) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.11181	106.0195	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.11181	104.1431	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.11181	104.1378	SPP-SWPS-04
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.11181	103.5821	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0786	103.2391	GEN523972 1-HARRINGTON GEN #2 24 KV
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0786	103.2122	GEN523971 1-HARRINGTON GEN #1 24 KV
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0786	103.1618	GEN523973 1-HARRINGTON GEN #3 24 KV
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0786	103.1277	GEN525562 1-TOLK GEN #2 24 KV
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.11181	102.3384	SPP-SWPS-04
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0786	102.133	GEN525561 1-TOLK GEN #1 24 KV
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.11181	101.7981	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0786	101.4262	GEN523972 1-HARRINGTON GEN #2 24 KV
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0786	101.3962	GEN523971 1-HARRINGTON GEN #1 24 KV
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0786	101.3448	GEN523973 1-HARRINGTON GEN #3 24 KV
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0786	101.3116	GEN525562 1-TOLK GEN #2 24 KV
FDNS	00NR		0	23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0786	100.3349	GEN525561 1-TOLK GEN #1 24 KV
FDNS	00NR		0	23SP	G13_001	FROM->TO	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1	185	0.05937	108.3672	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR		0	23SP	G13_001	FROM->TO	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1	185	0.05937	104.6333	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR		0	23SP	G13_001	TO->FROM	STANTON SUB - TUCO INTERCHANGE 115KV CKT 1	160	0.03656	110.9319	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	00NR		0	23SP	G13_001	FROM->TO	TUCO INTERCHANGE (GE M102345) 230/115/13.2KV TRANSFORMER CKT 1	252	0.0459	113.0034	TUCO INTERCHANGE (ENRCO 136401) 230/115/13.2KV TRANSFORMER CKT 2
FDNS	00NR		0	23SP	G13_001	FROM->TO	TUCO INTERCHANGE (GE M102345) 230/115/13.2KV TRANSFORMER CKT 1	252	0.0459	109.8249	TUCO INTERCHANGE (ENRCO 136401) 230/115/13.2KV TRANSFORMER CKT 2
FDNS	00NR		2	23SP	G13_001	TO->FROM	STANTON SUB - TUCO INTERCHANGE 115KV CKT 1	160	0.03653	110.961	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1

## **H: Power Flow Analysis (Other Constraints Not Requiring Mitigation)**

See next page.























## **I: Power Flow Analysis (Constraints from Category C Contingencies)**

See next page.

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING	CONTINGENCY
							(MVA)	TDF		
FNSL-Blown up	06ALL		2 13G	G12_043		Non-converged contingency	0	0.25902	-	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FNSL-Blown up	06ALL		2 13G	G12_043		Non-converged contingency	0	0.17088	-	OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FNSL-Blown up	06ALL		2 13G	G12_043		Non-converged contingency	0	0.05586	-	EDDY_NORTH 6230.00 230KV CKT 1
FNSL-Blown up	0		2 13WP	G12_043		Non-converged contingency	0	0.16826	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FNSL-Blown up	0		2 13WP	G12_043		Non-converged contingency	0	0.16826	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FNSL-Blown up	0		2 13WP	G12_043		Non-converged contingency	0	0.14694	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FNSL-Blown up	0		2 13WP	G12_043		Non-converged contingency	0	0.06581	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1
FNSL-Blown up	0		2 13WP	G12_043		Non-converged contingency	0	0.03349	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FNSL-Blown up	0		2 18WP	G12_043		Non-converged contingency	0	0.22335	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FNSL-Blown up	0		2 18WP	G12_043		Non-converged contingency	0	0.16047	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FNSL-Blown up	0		2 18WP	G12_043		Non-converged contingency	0	0.16047	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FNSL-Blown up	0		2 18WP	G12_043		Non-converged contingency	0	0.14851	-	CHAN/TASCOS6230.00 - XIT_INTG 6230.00 230KV CKT 1 & NEWHART 230 - PLANT X STATION 230KV CKT 1
FNSL-Blown up	0		2 18WP	G12_043		Non-converged contingency	0	0.1439	-	CHAN/TASCOS6230.00 - XIT_INTG 6230.00 230KV CKT 1 & NEWHART 230 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FNSL-Blown up	0		2 18WP	G12_043		Non-converged contingency	0	0.11242	-	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FNSL-Blown up	0		2 18WP	G12_043		Non-converged contingency	0	0.05911	-	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 & CHAN/TASCOS6230.00 - POTTER COUNTY INTERCHANGE 230KV CKT 1
FNSL-Blown up	0		2 18WP	G12_043		Non-converged contingency	0	0.05186	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & HOBBS INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FNSL-Blown up	0		2 18WP	G12_043		Non-converged contingency	0	0.04851	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FNSL-Blown up	0		2 18WP	G12_043		Non-converged contingency	0	0.03283	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & AMARILLO SOUTH INTERCHANGE - RANDALL COUNTY INTERCHANGE 230KV CK
FNSL-Blown up	0		2 23SP	G12_043		Non-converged contingency	0	0.1737	-	CROCKETT - TENASKA RUSK COUNTY 345KV CKT 1 & LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FNSL-Blown up	0		2 23SP	G12_043		Non-converged contingency	0	0.15947	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FNSL-Blown up	0		2 23SP	G12_043		Non-converged contingency	0	0.13076	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FNSL-Blown up	0		2 23SP	G12_043		Non-converged contingency	0	0.12636	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FNSL-Blown up	0		2 23SP	G12_043		Non-converged contingency	0	0.12209	-	CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1 & CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FNSL-Blown up	0		2 23SP	G12_043		Non-converged contingency	0	0.12209	-	CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FNSL-Blown up	0		2 23SP	G12_043		Non-converged contingency	0	0.09503	-	CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FNSL-Blown up	0		2 23SP	G12_043		Non-converged contingency	0	0.09503	-	CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FNSL-Blown up	0		2 23SP	G12_043		Non-converged contingency	0	0.09254	-	EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1 & CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FNSL-Blown up	0		2 23SP	G12_043		Non-converged contingency	0	0.0598	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1
FNSL-Blown up	0		2 23SP	G12_043		Non-converged contingency	0	0.04924	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FNSL-Blown up	0		2 23SP	G12_043		Non-converged contingency	0	0.0482	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	BAILEY COUNTY REC-EARTH INTERCHANGE - CASTRO COUNTY INTERCHANGE 115KV CKT 1	160	0.0777	107.0732	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.07884	128.9918	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.04103	127.2351	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.0777	124.045	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.06592	120.9666	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.0572	117.6504	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05827	117.4517	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05432	116.8059	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	116.7277	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	116.6121	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	115.7435	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	115.3996	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.0572	115.3886	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05228	114.6612	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.0524	114.5788	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05423	114.5434	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	114.3508	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05696	114.2793	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITC
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	114.206	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &POTTER COUNTY INTERCHANGE 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	114.0711	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	114.0208	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	113.7255	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	113.7118	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.0519	113.6893	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	113.6574	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	113.624	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	113.6157	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	113.6104	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05353	113.5524	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	113.3294	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	113.3159	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05194	113.2419	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &HARRINGTON STATION 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	113.2065	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	113.2062	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05194	112.9572	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05362	112.9197	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05189	112.8465	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.834	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05213	112.7787	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05073	112.7635	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.7575	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05362	112.7202	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05096	112.6993	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.0499	112.644	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05232	112.5477	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05298	112.5322	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05298	112.532	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05196	112.5024	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05484	112.4776	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05213	112.4665	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05223	112.4392	AMARILLO SOUTH INTERCHANGE - RANDALL COUNTY INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05208	112.4155	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K3
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.3913	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.052	112.3882	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.3717	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.3716	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05202	112.3662	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05259	112.3371	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.3282	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.052	112.3225	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.321	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.3165	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05209	112.3102	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.2966	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.2952	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.2944	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05197	112.2914	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05154	112.289	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G13_013T 345.00 - TOLK STATION 345KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05154	112.289	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G13_013T 345.00 - TOLK STATION 345KV CKT 2
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05194	112.2862	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.2845	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.052	112.2822	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.2817	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.2763	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G11_048_1 230.00 - Golden Spread REC - Mustang Interchange 230 kv Gen
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.2763	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.2757	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05073	112.2743	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1



SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05199	112.2742	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05199	112.2738	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05203	112.2734	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05195	112.2707	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05196	112.2688	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.2629	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.2623	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.2619	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05201	112.2602	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.052	112.2326	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05218	112.2312	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.052	112.2251	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05591	112.2064	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05198	112.1966	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05207	112.1927	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05224	112.1842	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05195	112.1461	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05211	112.1379	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.0512	112.1209	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.0512	112.1209	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05213	112.1021	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05203	112.0793	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05186	112.0496	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05259	111.9727	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05018	111.4621	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05022	111.4605	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & PLANT X STATION - TOLK STATION EAST 230KV CKT 2
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05115	111.3979	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.06457	111.1041	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05261	110.9834	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.04675	110.8455	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05016	110.7396	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05095	110.2103	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.05016	109.5528	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.04921	107.7356	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1	350.5669	0.29569	120.3467	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1	350.5669	0.25481	100.7285	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL	2	13G	G12_043	FROM->TO	BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1	175	0.1219	116.9316	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1	175	0.11378	116.0621	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1	175	0.08688	112.3123	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	351	0.25836	118.0707	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1	171	0.1219	118.3023	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1	171	0.1219	118.2605	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1	171	0.11378	117.1037	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1	171	0.11378	116.6627	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1	171	0.08688	112.8658	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1	171	0.08688	111.9584	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FNSL	06ALL	2	13G	G12_043	TO->FROM	CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1	96	0.11367	157.3239	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1	96	0.10237	144.95	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1	96	0.11367	138.0221	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1	96	0.07699	130.537	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1	96	0.10237	129.7956	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1	96	0.07699	106.6389	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1	96	0.08424	105.3254	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1	96	0.08381	104.2673	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1	96	0.08526	103.5956	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1	96	0.07699	100.5679	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1	96	0.07699	99.9	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FNSL	06ALL	2	13G	G12_043	FROM->TO	CANYON EAST SUB - OSAGE SWITCHING STATION 115KV CKT 1	96	0.11367	147.9716	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	CANYON EAST SUB - OSAGE SWITCHING STATION 115KV CKT 1	96	0.10237	135.7285	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	CANYON EAST SUB - OSAGE SWITCHING STATION 115KV CKT 1	96	0.11367	128.7634	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	CANYON EAST SUB - OSAGE SWITCHING STATION 115KV CKT 1	96	0.07699	122.2455	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	CANYON EAST SUB - OSAGE SWITCHING STATION 115KV CKT 1	96	0.10237	120.7992	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FNSL	06ALL	2	13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.11367	168.7081	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.10237	156.2258	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.11367	149.3177	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	141.1224	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.10237	140.9003	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	118.0458	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.08424	116.7478	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.08381	115.6974	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.08526	115.0233	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	111.9982	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	111.3384	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	110.5968	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07983	110.4335	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	109.6872	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	109.4227	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	109.4113	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	109.363	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.08343	109.3232	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.06855	109.2854	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.0799	109.1546	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	108.6497	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07682	108.2458	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.08068	107.7064	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	107.0413	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07161	106.8681	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	106.81	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	106.347	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.08381	106.1189	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	105.4531	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07873	104.6705	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07811	104.6449	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07811	104.6439	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	104.6016	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	104.5466	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	104.5453	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.08424	104.4279	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07771	104.108	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07738	103.7069	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07658	103.6884	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07584	103.5898	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.0779	103.413	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &CHAVES CO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07758	103.3838	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07976	103.3351	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07664	103.2802	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07649	103.2318	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.05499	102.9106	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY	
							(MVA)	TDF	(% MVA)			
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.08381	102.6877	AMARILLO SOUTH INTERCHANGE - G07-48T	230.00 230KV CKT 1 & BUFFALO	230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.08526	102.5709	BUFFALO	230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07771	102.4117	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07701	102.3417	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07702	102.3314	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07715	102.233	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	102.1871	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07701	102.1048	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07684	102.0664	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07746	102.0381	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07713	102.017	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.077	102.0133	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 & BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.077	101.9609	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 & BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.0775	101.9449	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 & BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07707	101.9146	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K3	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07707	101.9144	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	101.909	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07713	101.8988	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07701	101.8667	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	101.8441	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	101.8366	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 & BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	101.8361	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	101.826	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 & BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.077	101.8071	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07715	101.807	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	101.8062	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 & BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.077	101.8036	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.077	101.8027	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.077	101.8009	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07718	101.7918	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	101.7903	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	101.7903	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	101.7903	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	101.7902	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	101.7902	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	101.7902	BUFFALO	230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATI	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07707	101.7869	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & JONES STATION - Jones Station Bus#2 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07672	101.7777	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.077	101.7738	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & MUSTANG STATION - SEMINOLE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07751	101.7669	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07716	101.7631	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07702	101.7075	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07673	101.6138	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07673	101.6138	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 2	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07695	101.5732	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230K	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	101.547	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07695	101.5316	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07718	101.5062	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07671	101.4956	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07683	101.376	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.0779	101.3418	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07708	101.2621	CHERRY1 - HARRINGTON STATION 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07702	101.0739	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	101.0735	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07647	100.9653	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07511	100.9219	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.0771	100.8288	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.06239	100.614	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07775	100.5638	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07573	100.2975	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	CANYON WEST SUB - DAWN SUB 115KV CKT 1	96	0.07699	100.1572	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.07984	149.7894	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.07619	138.3509	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.07358	137.0251	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.05525	107.5641	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.05971	105.3554	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.06044	104.9038	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.05857	103.8627	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.05525	103.0784	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.05525	102.7863	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & BUFFALO 230.00 - G06-47 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.05525	102.574	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.05298	102.0864	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING	CONTINGENCY
							(MVA)	TDF		
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.05525	102.0325	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.05525	101.5206	BUSHLAND INTERCHANGE - WILDOR2_JU56230.00 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.0584	101.471	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.05525	101.3768	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.05525	101.2469	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.05525	101.2376	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.05525	101.2116	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.05938	101.067	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.05663	101.0628	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.05788	100.8254	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &PLANT X STATION - TOLK STATION EAST 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.05694	100.6757	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.05798	100.4603	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.0564	100	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CARGILL SUB - FRIONA SUB 115KV CKT 1	96	0.05723	99.9	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.07984	155.1976	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 &PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.07619	144.8877	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.07358	143.5662	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	113.5164	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05971	111.3171	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.06044	110.8995	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05857	109.7616	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	108.9952	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	108.9706	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	108.4598	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05298	107.9876	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	107.9195	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	107.44	BUSHLAND INTERCHANGE - WILDOR2_JU56230.00 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.0584	107.2671	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	107.2478	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	107.1142	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	107.1062	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	107.0781	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05938	106.9204	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05663	106.8567	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05788	106.6201	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &PLANT X STATION - TOLK STATION EAST 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05694	106.5393	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05798	106.4547	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.0564	105.8906	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05723	105.7791	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	105.6127	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	105.5206	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	105.364	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05602	105.0565	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05628	104.8409	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05557	104.5943	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05857	104.5465	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	103.9908	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	103.9898	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	103.7511	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05594	103.7363	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05594	103.7356	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05325	103.1673	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05567	103.0853	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05697	102.8304	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05628	102.7708	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05293	102.6347	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05527	102.3589	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05613	102.3456	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05515	102.3121	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05526	102.2731	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05547	102.2493	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05591	102.2122	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05591	102.2122	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 2
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05521	102.2051	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05593	102.1078	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.0555	102.0811	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	102.0771	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05517	102.0617	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05403	102.0565	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	102.0183	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05521	101.9903	CHERRY1 - HARRINGTON STATION 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05535	101.982	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05537	101.9724	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	101.9318	Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05521	101.9252	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	101.9135	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	101.9103	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	101.9075	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	101.9051	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	101.9033	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	101.8981	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	101.898	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	101.898	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	101.898	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	101.898	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	101.898	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05529	101.8972	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05526	101.8482	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05619	101.8481	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05555	101.8462	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	101.8303	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	101.8193	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05523	101.8191	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05526	101.7873	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05528	101.699	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05521	101.6858	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	101.6754	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05469	101.6579	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05515	101.6533	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	101.4906	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.0556	101.3734	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05568	101.1893	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05438	100.8945	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.03607	100.8336	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05468	100.7613	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05525	100.7363	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05499	100.7095	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #K3
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05454	100.5526	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1



SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05471	100.5468	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05471	100.5468	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05438	100.3345	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05436	100.2235	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARGILL SUB - PARMER COUNTY SUB 115KV CKT 1	96	0.05436	100.2234	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITC
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	154	0.20595	195.9176	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	154	0.11564	151.2351	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	154	0.1133	120.1852	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	154	0.10558	116.166	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G12_043	TO->FROM	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	154	0.20451	115.8582	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	154	0.1027	114.2425	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	154	0.08874	112.371	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	154	0.11564	112.2335	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	154	0.105	111.3374	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	154	0.13092	109.7393	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	154	0.13403	109.223	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	154	0.105	107.4228	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	154	0.13337	105.8209	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	154	0.09517	103.4583	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	154	0.09142	103.2138	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	154	0.12317	102.2652	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	154	0.13337	102.2443	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	154	0.09613	100.6858	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1	557	1	134.5363	G13_013T 345.00 - TOLK STATION 345KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1	557	1	132.8278	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 & TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	COULTER INTERCHANGE - HILLSIDE 115KV CKT 1	176	0.1219	110.0846	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	COULTER INTERCHANGE - HILLSIDE 115KV CKT 1	176	0.11378	109.2701	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	COULTER INTERCHANGE - HILLSIDE 115KV CKT 1	176	0.08688	105.5811	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.07984	179.0668	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.07619	168.4861	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.07358	167.1511	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	136.9327	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05971	134.7085	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.06044	134.1762	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05857	133.1411	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	132.3444	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING	CONTINGENCY
							(MVA)	TDF		
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	132.2364	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BUFFALO 230.00 - G06-47
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	131.8187	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	131.2886	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05298	131.2508	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	130.7934	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.0584	130.6282	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	130.6073	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	130.463	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	130.4549	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	130.4269	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05938	130.2812	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05663	130.2163	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05788	129.9744	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &PLANT X STATION - TOLK STATION EAST 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05694	129.8937	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05798	129.6123	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.0564	129.2456	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05723	129.118	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	128.9718	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	128.8649	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	128.7077	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05602	128.4187	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05628	128.1878	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05857	127.8718	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05557	127.7395	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	127.3417	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	127.3407	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	127.0921	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05594	127.051	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05594	127.0504	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05567	126.4074	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05325	126.3933	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05697	126.1576	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05628	126.0974	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05293	125.9783	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05527	125.679	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05613	125.6683	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05515	125.605	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05526	125.5882	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05547	125.571	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05521	125.5518	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05591	125.5388	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05591	125.5388	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05593	125.4238	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.0555	125.3993	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	125.3906	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05517	125.3754	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	125.3325	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05535	125.2881	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05537	125.2784	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05521	125.2781	CHERRY1 - HARRINGTON STATION 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	125.248	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	125.2291	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	125.2257	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	125.2229	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	125.2205	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	125.2187	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	125.2134	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	125.2134	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	125.2134	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	125.2134	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	125.2134	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & Golden Spread REC - Mustang Interchange 230 kv Generation Bus - MUSTANG
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	125.2134	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05529	125.2126	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05521	125.2102	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05526	125.1704	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05619	125.1627	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05555	125.1609	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	125.1446	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05403	125.1442	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05523	125.1392	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	125.1337	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05526	125.1217	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & MUSTANG STATION - SEMINOLE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05528	125.0115		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05521	124.9961		HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	124.9853		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05469	124.9822		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05515	124.9676		Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	124.7926		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.0556	124.6808		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05568	124.4943		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05438	124.199		G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05468	124.092		MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	124.0289		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05499	124.0218		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K3
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05454	123.8754		FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05471	123.8607		BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05471	123.8607		BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05438	123.6325		G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05436	123.1723		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITC
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05436	123.1723		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	123.0119		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05452	122.9547		GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05401	122.7868		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03607	122.6868		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05293	122.4839		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05398	122.0906		STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03723	121.5645		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05398	121.1551		GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04973	121.027		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FNSL	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05527	120.8001		CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05169	120.2121		Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.06809	119.8413		PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05525	118.4449		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04965	117.92		PLANT X STATION - TOLK STATION EAST 230KV CKT 2 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04979	117.9194		PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04745	117.7999		BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	115.2155		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05298	114.5838		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04809	114.2322	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03772	112.9757	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03706	112.155	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04034	111.0005	CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.05468	110.3808	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 & TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03174	109.5985	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04481	109.4233	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03607	109.287	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.0438	109.2412	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	109.0327	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.0455	108.9614	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	108.5394	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04375	108.3577	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	107.8708	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04316	107.7915	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03275	107.7827	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04317	107.6595	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	107.6085	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	107.5896	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	107.5809	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	107.5763	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	107.546	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.0305	107.274	CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	107.1108	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03723	106.6002	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04366	106.4259	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	106.2243	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03275	106.2187	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	106.0449	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	106.0397	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04244	105.928	OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	105.9097	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04288	105.5848	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04375	105.5268	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03509	105.4908	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03361	105.3556	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03467	105.1787	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	104.9583	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04364	104.9159	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03981	104.7645	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03499	104.6027	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03275	104.5888	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03275	104.5501	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03345	104.4941	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03275	104.4531	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04328	104.3348	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03362	104.3167	LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03275	104.2992	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04231	104.2366	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04241	104.1333	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04241	104.1331	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1	
FDNS	0		2 18SP	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03146	104.1265	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03945	104.0033	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04246	103.9974	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.0422	103.9884	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04221	103.965	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03351	103.9289	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.0421	103.8684	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.0429	103.8652	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_013T 345.00 - TOLK STATION 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.0429	103.8651	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_013T 345.00 - TOLK STATION 345KV CKT 2	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04249	103.8152	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04216	103.8035	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04116	103.7844	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04334	103.7703	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.0422	103.7357	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	103.7124	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04235	103.7075	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04232	103.7044	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	103.6946	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	103.6515	CHERRY1 - HARRINGTON STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03275	103.6417	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - G06-47 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	103.6317	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04223	103.602	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04222	103.6011	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04215	103.5885	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04225	103.5798	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	103.5734	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04255	103.572	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	103.5581	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	103.5548	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	103.5536	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	103.5438	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	103.5381	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	103.5381	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	103.5381	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	103.5381	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	103.538	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	103.538	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION 23
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04172	103.5358	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	103.5307	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	103.5266	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04214	103.4784	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04397	103.4571	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04217	103.4331	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.0422	103.4277	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04228	103.3808	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04192	103.3647	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	103.3533	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04223	103.3291	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04284	103.2891	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	103.2089	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03275	103.1047	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04261	103.0635	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04175	103.0531	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04296	103.0275	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04181	103.01	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.0419	102.9998	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.0419	102.9998	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04175	102.9023	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04186	102.8843	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03759	102.7675	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04043	102.7674	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04334	102.6651	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION EAST 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04171	102.5224	SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03275	102.4397	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	102.4152	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03275	102.3901	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04194	102.3222	ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04231	102.2524	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03275	102.1777	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04327	102.1608	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.0336	102.1032	OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03275	102.0882	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04151	102.032	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04227	101.8247	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04151	101.8102	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.0414	101.7101	ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03275	101.4872	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03981	101.381	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04124	101.1755	Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04124	101.1754	Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04219	101.1675	G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03387	100.9735	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03981	100.9384	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.0327	100.726	TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03361	100.6884	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03273	100.6536	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03981	100.6396	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03275	100.5817	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03294	100.318	TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03945	100.2842	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03309	100.2383	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03309	100.2381	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03981	100.2334	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - G06-47 230.00 230KV CKT 1



SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03391	100.229	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03772	100.1737	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03981	100.1294	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.04234	100	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03981	100	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03981	100	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03354	100	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03981	99.9	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03553	99.9	CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 &PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03364	99.9	G13_013T 345.00 - TOLK STATION 345KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03364	99.9	G13_013T 345.00 - TOLK STATION 345KV CKT 2 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03275	99.9	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	96	0.03269	99.9	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FNSL	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.11367	171.8853	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.10237	159.3998	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.11367	152.4782	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	144.3155	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.10237	144.0673	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	121.1677	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.08424	119.8635	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.08381	118.81	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.08526	118.1361	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	115.1162	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	114.445	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	113.7076	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07983	113.5391	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	112.7983	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	112.5265	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	112.515	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	112.4669	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.08343	112.4316	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.06855	112.4178	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.0799	112.2633	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	111.7557	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07682	111.3824	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING	CONTINGENCY
							(MVA)	TDF		
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.08068	110.8117	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	110.1463	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07161	110.0042	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	109.9165	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	109.4539	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.08381	109.2215	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	108.5706	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07873	107.7727	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07811	107.7458	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07811	107.7448	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	107.7005	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	107.6544	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	107.653	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.08424	107.5487	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07771	107.213	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07738	106.8072	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07658	106.773	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07584	106.7119	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.0779	106.5124	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07758	106.4841	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07976	106.4348	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07664	106.3804	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07649	106.3438	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.05499	106.0473	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.08381	105.804	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.08526	105.6876	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07771	105.5154	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07701	105.4438	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07702	105.4305	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07715	105.3318	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	105.2906	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07701	105.2065	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07684	105.1681	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07746	105.1375	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07713	105.1163	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.077	105.115	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING	CONTINGENCY
							(MVA)	TDF		
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.077	105.062	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.0775	105.046	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	105.0078	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07707	105.0067	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K3
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07707	105.0065	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07713	104.9979	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07701	104.9588	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	104.9467	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	104.9388	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	104.9359	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	104.9255	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07715	104.9081	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.077	104.9061	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	104.9052	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.077	104.9027	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.077	104.9017	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.077	104.9	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07718	104.8929	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	104.8893	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	104.8892	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	104.8892	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	104.8892	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	104.8892	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	104.8891	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07707	104.8859	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07672	104.8787	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.077	104.873	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07751	104.8658	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07716	104.862	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07702	104.8058	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07673	104.7124	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G13_013T 345.00 - TOLK STATION 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07673	104.7124	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G13_013T 345.00 - TOLK STATION 345KV CKT 2
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07695	104.6718	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230K
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	104.6403	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07695	104.632	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07718	104.6071	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07671	104.5998	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07683	104.4746	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.0779	104.4405	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07708	104.3647	CHERRY1 - HARRINGTON STATION 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	104.1734	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07702	104.1727	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07647	104.0637	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07511	104.0205	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.0771	103.9292	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.06239	103.746	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07775	103.6644	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07573	103.3967	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	103.274	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07621	102.746	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07621	102.746	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07595	102.7206	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07574	102.6904	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.0757	102.5652	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION EAST 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07649	102.5064	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07573	102.4005	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	102.3949	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	101.751	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07983	101.5717	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07582	100.8616	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	100.6881	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	100.4904	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	100.4758	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	100.4303	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.08343	100.1613	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	99.9	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	99.9	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	99.9	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	99.9	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FNSL	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.11367	176.8059	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.10237	164.2456	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.11367	157.291	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	148.9406	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.10237	148.8059	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	125.8775	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.08424	124.5691	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.08381	123.5104	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.08526	122.8361	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	119.8153	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	119.1283	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	118.3951	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07983	118.2315	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	117.4851	G11_022_1 345.00 - Hitchland interchange 345KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	117.2035	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	117.1921	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	117.1436	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.08343	117.1129	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.0799	116.9518	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.06855	116.7492	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	116.4363	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07682	115.9581	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.08068	115.4816	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	114.8225	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G13_001_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	114.5939	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07161	114.514	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	114.1323	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.08381	113.8939	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	113.1758	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07873	112.4344	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07811	112.4144	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07811	112.4133	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	112.3641	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	112.329	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	112.3276	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.08424	112.1499	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07771	111.8766	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07584	111.5214	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07738	111.4642	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07658	111.353	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.0779	111.18	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07758	111.1471	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07976	111.0963	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07664	111.0469	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07649	111.0027	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.05499	110.4622	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.08381	110.3974	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.08526	110.2755	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07771	110.1836	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07701	110.1115	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07702	110.0928	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07715	109.9879	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	109.9605	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07701	109.8566	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07684	109.8345	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07746	109.7993	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.077	109.7815	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07713	109.7781	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.077	109.7279	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.0775	109.7193	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07707	109.6785	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K3
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07707	109.6783	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	109.6696	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07713	109.6597	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07701	109.6308	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	109.6137	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	109.6053	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	109.5998	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	109.5906	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07715	109.5732	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.077	109.5679	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	109.567	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.077	109.5646	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.077	109.5636	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.077	109.5618	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07718	109.558	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	109.5513	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	109.5512	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	109.5512	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	109.5512	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	109.5512	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	109.5511	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & Golden Spread REC - Mustang Interchange 230 kv Generation Bus - MUSTANG STATI
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07707	109.5478	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07672	109.545	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.077	109.5357	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07751	109.5278	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07716	109.524	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07702	109.4669	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07673	109.3727	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07673	109.3727	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07695	109.3345	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230K
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	109.2987	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07695	109.2975	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07671	109.2764	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07718	109.273	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07683	109.1347	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.0779	109.0991	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07708	109.0341	CHERRY1 - HARRINGTON STATION 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	108.8501	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07702	108.833	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07647	108.725	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07511	108.6803	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.0771	108.5981	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07775	108.3267	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.06239	108.0785	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07573	108.0608	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	107.8532	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07621	107.4073	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07621	107.4073	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07595	107.3975	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07574	107.322	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.0757	107.2017	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION EAST 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07649	107.179	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07573	107.0602	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	106.9685	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	106.3267	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07983	106.152	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07582	105.5289	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	105.2605	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	105.0628	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	105.0488	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	105.0026	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.08343	104.7263	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	104.5059	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	104.4978	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	104.4919	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	104.4735	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.0799	104.363	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07475	103.7488	STATELINE INTERCHANGE - STLN-DEMAR6 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FNSL	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07704	103.46	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	102.9666	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.0724	102.8287	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	102.6993	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.08068	102.596	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	102.2193	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07475	101.8755	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.08381	101.0901	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07873	100.5038	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	100.4995	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	100.4982	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07811	100.4833	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07811	100.4823	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07699	100.4527	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.07771	100	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.27512	147.1854	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.24004	131.0528	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.22912	119.5644	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1



SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	119.2649	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.21348	117.4663	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	115.0069	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.22533	113.8643	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.22927	113.0195	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.21138	112.3426	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.2209	111.7085	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	110.9295	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.21615	110.5643	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	110.5408	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	110.2516	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	110.1084	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	109.588	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	109.4226	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	109.3989	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	109.0455	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	108.8843	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	108.8568	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	108.8094	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	108.8005	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	108.7659	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	108.146	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20591	108.1429	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	108.0609	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20135	107.9793	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.22376	107.9415	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	107.8917	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	107.8552	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	107.8474	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.21346	107.8381	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.15261	107.4534	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	106.8844	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20572	106.8716	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	106.8586	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.1589	106.5231	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19942	106.4702	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20216	106.2327	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.21414	106.2074	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	106.1994	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	106.1872	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	106.1096	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	106.0552	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.16431	106.0389	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.16568	105.9553	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20048	105.9505	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	105.8768	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.15261	105.736	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.15261	105.34	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.1977	105.0178	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.2209	105.0137	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	104.9982	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.15261	104.6982	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20866	104.6802	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.1575	104.5663	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.21252	104.2649	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	104.2125	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.15261	104.2026	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19942	104.1997	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19748	104.1482	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.15261	104.1471	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.15261	104.0806	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	104.0683	SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20881	103.9833	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20881	103.9825	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19811	103.9645	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19811	103.9641	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	103.8877	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	103.8672	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	103.8661	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.15261	103.5969	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19678	103.5821	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19685	103.4995	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20911	103.4987	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19857	103.4689	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.1964	103.4526	CHERRY1 - HARRINGTON STATION 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	103.3461	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	103.3298	G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19639	103.3059	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19657	103.2347	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19795	103.2206	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	103.1962	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	103.1643	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.1976	103.1486	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19744	103.1432	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19711	103.1341	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	103.1256	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20705	103.1099	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19645	103.0972	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19704	103.066	CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19666	103.0295	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20757	103.0257	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.1971	103.0211	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	103.0134	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19704	103.0013	OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19726	102.9986	Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19726	102.9985	Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19683	102.9952	ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19813	102.9945	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.1971	102.9656	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.1965	102.9623	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19716	102.9492	ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	102.9273	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	102.9245	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	102.9237	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	102.9215	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19715	102.9092	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	102.905	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	102.8961	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	102.896	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G10-46 230KV CKT 1 230.00 - TUCO INTERCHANGE
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	102.8959	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	102.8959	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G12-037 345KV CKT 1 345.00 - TUCO INTERCHANGE
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	102.8959	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_016_1 345KV CKT 1 345.00 - TUCO INTERCHANGE
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19673	102.8959	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION 23
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19315	102.8909	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19692	102.8837	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19672	102.8722	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19668	102.8397	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19679	102.8348	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.1967	102.8299	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19668	102.7802	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19642	102.7589	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.1972	102.7199	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20629	102.7087	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.1966	102.7011	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	102.6343	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.1944	102.5528	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_013T 345.00 - TOLK STATION 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.1944	102.5528	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_013T 345.00 - TOLK STATION 345KV CKT 2
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.21095	102.5201	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20028	102.482	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19746	102.4722	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19657	102.4425	OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20566	102.4298	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20563	102.4205	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &CHERRY1 - HARRINGTON STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20572	102.3951	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	102.3738	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.21033	102.3017	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20587	102.1952	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19479	102.1704	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20581	102.1235	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20582	102.09	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20705	102.0666	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20638	102.0643	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19394	101.973	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20582	101.9105	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	101.9062	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G08-09 TAP 230KV CKT 1 230.00 - SAN JUAN MESA
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20579	101.8936	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20549	101.8519	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	101.8371	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20601	101.8168	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20648	101.8094	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.1949	101.794	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.1949	101.794	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	101.7791	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.206	101.7387	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	101.7202	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	101.7134	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20621	101.6992	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.2063	101.6904	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	101.6781	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20579	101.6772	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	101.6758	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20579	101.6755	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.15346	101.6746	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20587	101.6706	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 23
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20579	101.6699	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19465	101.6647	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19439	101.638	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.1548	101.6373	LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20596	101.5978	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19394	101.5975	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20618	101.5893	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.15261	101.5845	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20577	101.5841	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20577	101.5795	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	101.572	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	101.5719	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	101.5719	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	101.5719	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	101.5719	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	101.5719	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STA

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20598	101.5713	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20596	101.5675	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.2066	101.5599	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20603	101.5576	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.15261	101.5555	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20578	101.5458	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & HARRINGTON STATION - NICHOLS STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20612	101.5394	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20582	101.536	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.15795	101.5206	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.2058	101.4293	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20605	101.4272	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20385	101.3903	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20385	101.3903	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 2
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20638	101.3079	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.2056	101.298	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20536	101.2728	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19408	101.2015	SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.15261	101.1492	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20623	101.1348	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.15261	101.1218	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20538	101.116	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.21252	101.0172	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20114	100.9763	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.15261	100.6819	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20771	100.658	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.19748	100.564	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.15494	100.5108	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20215	100.3017	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.1927	100.2725	STATELINE INTERCHANGE - STLN-DEMAR6 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.15915	100.2559	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.15294	100.1923	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.16568	100.1405	G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20319	100	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.1851	100	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20352	99.9	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20352	99.9	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL	2	13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.20275	99.9	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	351	0.1884	99.9	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.07984	164.7346	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.07619	154.1233	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.07358	152.8363	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	123.9963	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05971	121.8548	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.06044	121.3802	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05857	120.3782	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	119.6152	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	119.4151	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	119.1192	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05298	118.6083	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	118.5997	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	118.1128	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.0584	118.0143	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	117.9549	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	117.8236	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	117.8151	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	117.7891	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05938	117.6477	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05663	117.6161	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05788	117.3869	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & PLANT X STATION - TOLK STATION EAST 230KV CKT 2
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05694	117.2713	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05798	117.0306	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.0564	116.643	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05723	116.548	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	116.3735	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	116.289	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	116.1405	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05602	115.8793	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05628	115.655	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05857	115.3487	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05557	115.2228	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	114.8256	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	114.8246	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	114.5873	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05594	114.564	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05594	114.5633	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05567	113.9423	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05697	113.706	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05325	113.6908	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05628	113.6462	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05293	113.5344	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05527	113.2449	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05613	113.2349	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05526	113.1582	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05521	113.1517	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05547	113.1415	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05515	113.1207	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05591	113.1115	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G13_013T 345.00 - TOLK STATION 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05591	113.1115	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G13_013T 345.00 - TOLK STATION 345KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05593	112.994	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.0555	112.9768	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	112.9692	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05517	112.9555	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	112.9128	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05535	112.8759	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05537	112.8666	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	112.8311	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	112.8135	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	112.8102	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	112.8075	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	112.8051	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	112.8034	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	112.7984	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	112.7984	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	112.7984	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	112.7984	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	112.7984	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &Golden Spread REC - Mustang Interchange 230 kv Generation Bus - MUSTANG
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	112.7984	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05529	112.7976	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &JONES STATION - Jones Station Bus#2 230KV CKT 1



SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05521	112.7735		CHERRY1 - HARRINGTON STATION 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05526	112.7563		Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05619	112.7497		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05555	112.748		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05403	112.7389		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	112.7315		HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05521	112.7218		Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	112.7216		Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05526	112.6968		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05523	112.67		CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05528	112.6044		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05521	112.5882		HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	112.5779		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05469	112.5764		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05515	112.5609		Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	112.3942		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.0556	112.2874		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05568	112.1127		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CARLISLE INTERCHANGE - TUOCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05438	111.8184		G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05468	111.7114		MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	111.6552		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05499	111.6532		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K3
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05454	111.5045		FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05471	111.503		BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05471	111.503		BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05438	111.2852		G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05436	110.8414		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITC
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05436	110.8414		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	110.6712		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05452	110.6347		GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05401	110.47		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05293	110.1654		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05398	109.8089		STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.03607	109.2724		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05398	108.9037		GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FNSL	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05527	108.579		CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.04973	108.574	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05169	108.036	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.06809	107.944	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05525	106.2943	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.04965	105.8668	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.04979	105.8611	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.04745	105.1134	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.04219	103.1462	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.05298	102.5876	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.04809	102.2226	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.03772	101.0857	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.03723	100.9038	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#20 - DEAF SMITH REC-#24 115KV CKT 1	99	0.03706	100.3315	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.07984	158.296	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 &PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.07619	147.3505	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.07358	146.0745	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	117.6272	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05971	115.4974	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.06044	115.0494	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05857	114.0564	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	113.3018	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	113.0178	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	112.813	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05298	112.3315	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	112.2952	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	111.8001	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.0584	111.7509	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	111.6618	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	111.5339	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	111.525	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	111.5	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05938	111.3626	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05663	111.356	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05788	111.1287	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &PLANT X STATION - TOLK STATION EAST 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05694	110.9853	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05798	110.7559	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING (% MVA)	CONTINGENCY
							(MVA)	TDF		
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.0564	110.3615	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05723	110.2815	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	110.0893	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	110.0157	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	109.8703	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05602	109.6254	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05628	109.4	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05857	109.0889	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05557	108.9619	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	108.5696	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	108.5686	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	108.3321	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05594	108.3124	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05594	108.3117	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05567	107.6982	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05697	107.4649	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05628	107.4071	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05293	107.2997	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05325	107.2429	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05527	107.0091	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05613	106.9997	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05521	106.9478	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05526	106.9229	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05547	106.907	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05591	106.8785	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05591	106.8785	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05515	106.8389	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05593	106.7556	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.0555	106.7436	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	106.736	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05517	106.7233	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	106.6801	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05535	106.6445	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05537	106.6353	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	106.5989	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	106.5816	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB	TDF	TC%LOADING	CONTINGENCY
							(MVA)		(% MVA)	
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	106.5783	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	106.5757	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	106.5733	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	106.5716	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	106.5666	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	106.5666	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	106.5666	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	106.5666	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	106.5666	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & Golden Spread REC - Mustang Interchange 230 kv Generation Bus - MUSTANG
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	106.5666	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05529	106.5658	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05526	106.5261	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05619	106.5184	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05555	106.5166	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	106.4996	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05403	106.4955	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	106.4902	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05521	106.4676	CHERRY1 - HARRINGTON STATION 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05526	106.463	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05521	106.4259	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05523	106.3978	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05528	106.374	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05521	106.3566	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05469	106.3486	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	106.3469	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05515	106.3306	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	106.1649	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G13_013T_1 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.0556	106.0599	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05568	105.8899	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05438	105.5901	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05468	105.4894	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05499	105.4308	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K3
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	105.428	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05471	105.2871	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05471	105.2871	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	DEAF SMITH REC.#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05454	105.2835	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05438	105.0694	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05436	104.6041	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITC
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05436	104.6041	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	104.4486	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05452	104.4178	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05401	104.2351	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05293	103.9454	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05398	103.6039	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05398	102.7047	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FNSL	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05527	102.3967	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.04973	102.1971	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.03607	102.072	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.06809	102.0204	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05169	101.877	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1	99	0.05525	100.0999	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	DEAF SMITH REC-#6 - FRIONA SUB 115KV CKT 1	96	0.07984	144.2449	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	DEAF SMITH REC-#6 - FRIONA SUB 115KV CKT 1	96	0.07619	132.3478	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	DEAF SMITH REC-#6 - FRIONA SUB 115KV CKT 1	96	0.07358	131.0328	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	DEAF SMITH REC-#6 - FRIONA SUB 115KV CKT 1	96	0.05525	101.9373	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#6 - HEREFORD INTERCHANGE 115KV CKT 1	96	0.07984	142.3284	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#6 - HEREFORD INTERCHANGE 115KV CKT 1	96	0.07619	130.0748	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	DEAF SMITH REC-#6 - HEREFORD INTERCHANGE 115KV CKT 1	96	0.07358	128.7552	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1	478	0.71956	127.17	G13_013T 345.00 - TOLK STATION 345KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 2
FDNS	06ALL	2	13G	G12_043	TO->FROM	EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1	478	0.71849	125.3565	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 & TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1	558	1	125.9182	G13_013T 345.00 - TOLK STATION 345KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 2
FDNS	06ALL	2	13G	G12_043	FROM->TO	EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1	558	1	125.4874	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 & TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1	558	1	121.6783	G13_013T 345.00 - TOLK STATION 345KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 2
FDNS	06ALL	2	13G	G12_043	FROM->TO	EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1	558	1	121.635	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 & TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	02ALL	2	13G	G12_043	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.06417	104.511	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1
FDNS	02ALL	2	13G	G12_043	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.06417	104.511	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2
FDNS	02ALL	2	13G	G12_043	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.06417	103.4737	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1
FDNS	02ALL	2	13G	G12_043	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.06417	103.4737	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2
FDNS	06ALL	2	13G	G12_043	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.08756	102.8098	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.08756	101.8958	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	02ALL	2	13G	G12_043	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.07261	101.3479	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	02ALL	2	13G	G12_043	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.06044	100.926	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.09037	100.9204	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &G13_017T 345.00 - TUCCO INTERCHANGE 345KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.05588	100.877	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.06044	100.7742	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 &G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.07261	100.534	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &G13_017T 345.00 - TUCCO INTERCHANGE 345KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.06044	100.136	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 &G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.09037	100.1193	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &G13_017T 345.00 - TUCCO INTERCHANGE 345KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.05588	100.0902	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.06044	100	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 &G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.06804	99.9	NORTHEAST STATION - ONETA 345KV CKT 1 &LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.06802	99.9	TULSA NORTH - WEKIWA 345KV CKT 1 &LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.04254	134.105	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 &G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.04254	133.329	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 &G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.03063	101.7287	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 &MATTHEWSON 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.03063	101.7287	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 &MATTHEWSON 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	02ALL		2 13G	G12_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04254	240.4123	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 &G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		2 13G	G12_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04254	239.0091	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 &G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		2 13G	G12_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03063	180.5378	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 &MATTHEWSON 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		2 13G	G12_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03063	180.5378	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 &MATTHEWSON 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	02ALL		2 13G	G12_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03008	163.847	MATTHEWSON 345.00 - WOODRING 345KV CKT 1 &G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	G13_013T 345.00 - TOLK STATION 345KV CKT 1	557	1	126.0548	G13_013T 345.00 - TOLK STATION 345KV CKT 2 &CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	G13_013T 345.00 - TOLK STATION 345KV CKT 1	557	0.87783	103.4822	G13_013T 345.00 - TOLK STATION 345KV CKT 2 &EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	G13_013T 345.00 - TOLK STATION 345KV CKT 2	557	1	126.0548	G13_013T 345.00 - TOLK STATION 345KV CKT 1 &CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	G13_013T 345.00 - TOLK STATION 345KV CKT 2	557	0.87783	103.4822	G13_013T 345.00 - TOLK STATION 345KV CKT 1 &EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	GRAPEVINE INTERCHANGE (PENN 0257751) 230/115/13.2KV TRANSFORMER CKT 1	129	0.03023	100.3596	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	HALE CO INTERCHANGE - PLANT X STATION 115KV CKT 1	154	0.08318	101.3995	TOLK STATION EAST - TUCCO INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	HALE CO INTERCHANGE - TUCCO INTERCHANGE 115KV CKT 1	96	0.05886	126.5904	SWISHER COUNTY INTERCHANGE - TUCCO INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	HALE CO INTERCHANGE - TUCCO INTERCHANGE 115KV CKT 1	96	0.08565	124.0923	TOLK STATION EAST - TUCCO INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	HALE CO INTERCHANGE - TUCCO INTERCHANGE 115KV CKT 1	96	0.08513	108.0825	TOLK STATION EAST - TUCCO INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 18WP	G12_043	FROM->TO	JONES STATION - TUCCO INTERCHANGE 230KV CKT 1	361	0.03335	104.7189	JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	LAMB COUNTY INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.10646	126.5882	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 &PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1	351	0.13396	102.0227	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 &PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	LAMB COUNTY INTERCHANGE (WH ALM20172) 230/115/13.2KV TRANSFORMER CKT 1	251	0.13396	133.1999	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 &PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	LAMB COUNTY INTERCHANGE (WH ALM20172) 230/115/13.2KV TRANSFORMER CKT 1	251	0.13396	131.0623	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 &PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	LAMB COUNTY INTERCHANGE (WH ALM20172) 230/115/13.2KV TRANSFORMER CKT 1	251	0.18597	110.7436	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	LAMB COUNTY INTERCHANGE (WH ALM20172) 230/115/13.2KV TRANSFORMER CKT 1	251	0.18597	110.1351	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	LAMB COUNTY REC-SOUTH OLTON - LAMTON INTERCHANGE 115KV CKT 1	160	0.07931	100.1255	TOLK STATION EAST - TUCCO INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LAMB COUNTY REC-SOUTH OLTON - PLANT X STATION 115KV CKT 1	160	0.07931	104.5782	TOLK STATION EAST - TUCCO INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1	351	0.37451	109.3606	G13_013T 345.00 - TOLK STATION 345KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1	351	0.37341	109.2819	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 & TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LP-DOUD_TP 3115.00 - SP-WOLF_TP 3115.00 115KV CKT 1	175	0.20595	182.9497	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LP-DOUD_TP 3115.00 - SP-WOLF_TP 3115.00 115KV CKT 1	175	0.11564	143.8581	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LP-DOUD_TP 3115.00 - SP-WOLF_TP 3115.00 115KV CKT 1	175	0.1133	116.5568	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LP-DOUD_TP 3115.00 - SP-WOLF_TP 3115.00 115KV CKT 1	175	0.10558	112.7956	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G12_043	TO->FROM	LP-DOUD_TP 3115.00 - SP-WOLF_TP 3115.00 115KV CKT 1	175	0.20451	112.6026	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LP-DOUD_TP 3115.00 - SP-WOLF_TP 3115.00 115KV CKT 1	175	0.1027	111.1911	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LP-DOUD_TP 3115.00 - SP-WOLF_TP 3115.00 115KV CKT 1	175	0.08874	109.5744	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LP-DOUD_TP 3115.00 - SP-WOLF_TP 3115.00 115KV CKT 1	175	0.11564	109.4695	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LP-DOUD_TP 3115.00 - SP-WOLF_TP 3115.00 115KV CKT 1	175	0.105	108.6748	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LP-DOUD_TP 3115.00 - SP-WOLF_TP 3115.00 115KV CKT 1	175	0.13092	107.2252	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LP-DOUD_TP 3115.00 - SP-WOLF_TP 3115.00 115KV CKT 1	175	0.13403	106.7953	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LP-DOUD_TP 3115.00 - SP-WOLF_TP 3115.00 115KV CKT 1	175	0.105	105.2218	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LP-DOUD_TP 3115.00 - SP-WOLF_TP 3115.00 115KV CKT 1	175	0.13337	103.8122	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LP-DOUD_TP 3115.00 - SP-WOLF_TP 3115.00 115KV CKT 1	175	0.09517	101.6874	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LP-DOUD_TP 3115.00 - SP-WOLF_TP 3115.00 115KV CKT 1	175	0.09142	100.9246	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LP-DOUD_TP 3115.00 - SP-WOLF_TP 3115.00 115KV CKT 1	175	0.12317	100.6653	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LP-DOUD_TP 3115.00 - SP-WOLF_TP 3115.00 115KV CKT 1	175	0.13337	100.6446	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	TO->FROM	LUBBOCK EAST INTERCHANGE - LUBBOCK SOUTH INTERCHANGE 115KV CKT 1	160	0.03928	109.6781	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	TO->FROM	LUBBOCK EAST INTERCHANGE - LUBBOCK SOUTH INTERCHANGE 115KV CKT 1	160	0.03095	100.0931	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.25831	111.834	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.26535	111.8198	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.22322	110.4719	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.26371	108.9324	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.26371	105.2323	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.04791	145.7984	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.03744	144.412	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.04791	138.036	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.03744	133.7365	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	290	0.03825	120.0673	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	290	0.03825	110.6865	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.03395	108.2915	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.03395	104.5263	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	OASIS INTERCHANGE (ABB LLM60041) 230/115/13.2KV TRANSFORMER CKT 1	252	0.03083	111.8794	ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WE
FDNS	0		2 13SP	G12_043	FROM->TO	OASIS INTERCHANGE (ABB LLM60041) 230/115/13.2KV TRANSFORMER CKT 1	252	0.03083	110.5607	ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WE

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0		2 13SP	G12_043	FROM->TO	ROOSEVELT COUNTY INTERCHANGE (ABB LMM60042) 230/115/13.2KV TRANSFORMER CKT 1	252	0.04698	117.3761	OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	ROOSEVELT COUNTY INTERCHANGE (ABB LMM60042) 230/115/13.2KV TRANSFORMER CKT 1	252	0.04698	116.7247	OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	ROOSEVELT COUNTY INTERCHANGE (ABB LMM60042) 230/115/13.2KV TRANSFORMER CKT 1	252	0.04698	114.3133	OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	ROOSEVELT COUNTY INTERCHANGE (ABB LMM60042) 230/115/13.2KV TRANSFORMER CKT 1	252	0.04698	113.8309	OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.20595	187.1481	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.11564	148.1737	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.1133	120.8952	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.10558	117.0137	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.20451	116.8663	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.1027	115.457	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.08874	113.8568	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.11564	113.7617	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.105	112.9622	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.13092	111.4917	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.13403	111.0752	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.105	109.5076	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.13337	108.0988	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.09517	105.9501	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.12317	104.9428	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.13337	104.9207	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.09142	104.9103	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.09613	103.5002	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.08962	102.2314	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.08874	102.0073	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.11564	101.936	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.11564	101.9332	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.06553	101.7214	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.10316	101.2041	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.08874	101.1572	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.13627	101.0932	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.0624	100.5331	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.09084	100.5204	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.11564	100.459	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.08874	100.4415	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.08874	100.4247	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.08874	100.3848	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1



SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.09151	100.3265	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.12389	100.3251	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.092	100.1846	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.08874	100.097	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	TO->FROM	SP-WOLF_TP 3115.00 - YUMA INTERCHANGE 115KV CKT 1	175	0.08999	99.9	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.27884	130.4115	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.27148	129.6593	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	127.4125	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.27686	126.1947	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.27686	122.1342	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.25093	116.3171	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.25324	113.917	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	113.1199	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	113.0762	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	111.9251	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	110.8037	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	109.9225	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	109.9047	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	109.8549	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23925	109.7019	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	109.6028	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23693	109.2493	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	108.9796	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23925	108.1092	STATELINE INTERCHANGE - STLN-DEMAR6 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	107.4137	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23634	107.034	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23838	106.9739	SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	106.8188	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23264	106.8188	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23656	106.7662	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23598	106.7288	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23762	106.7153	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	106.2188	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - G06-47 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23623	106.1219	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23623	106.1219	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23419	105.8586	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	105.7816	WILDOR2_US6230.00 - WILDORADO WIND GEN 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	105.6653	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23762	105.5361	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23659	105.4677	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23442	104.8677	OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23245	104.5229	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	104.5032	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23421	104.5029	CHERRY1 - HARRINGTON STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23368	104.4644	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23433	104.3844	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23434	104.3603	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23399	104.3332	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.22562	104.1488	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23355	104.0909	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23559	104.0494	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_013T 345.00 - TOLK STATION 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23559	104.0494	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_013T 345.00 - TOLK STATION 345KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23339	104.0261	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23268	103.9894	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.22978	103.9833	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23359	103.9601	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23361	103.9573	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23374	103.9412	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23361	103.89	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23361	103.8633	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23361	103.8442	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.2336	103.8304	ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23361	103.787	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23617	103.7704	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	103.7699	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	103.7667	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	103.7667	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	103.7667	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	103.7667	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	103.7667	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION 23
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	103.7665	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23355	103.7559	OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23284	103.746	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23359	103.745	ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23401	103.7405	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23359	103.7177	Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23359	103.7175	Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23386	103.6961	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23355	103.6554	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	103.6511	G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.2312	103.6391	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23267	103.6294	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23258	103.6195	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23295	103.6148	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23353	103.6039	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23361	103.5999	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	103.5669	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23297	103.4945	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23351	103.4909	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	103.4552	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.2312	103.3325	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	103.3214	SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23076	103.272	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23094	103.2681	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.16463	103.1364	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23442	102.9799	CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23354	102.7765	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23335	102.5489	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23153	102.5271	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23153	102.5265	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23264	102.224	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23283	101.6521	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.23003	101.354	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.22562	101.0485	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.22779	100.8872	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.22551	100.6125	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.17072	210.109	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.1695	122.3721	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.09259	118.5127	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.09418	116.2763	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.09209	115.3637	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.08953	113.9892	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.1088	113.83	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.07841	113.5115	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.10623	113.2643	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.09185	111.9365	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.1084	110.5067	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.09185	107.6469	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.08878	107.4573	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.1084	106.8559	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.10017	106.4774	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.09045	103.8743	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.05875	103.5485	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.09418	103.4778	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.09418	103.4767	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.08375	103.2165	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.09259	102.7735	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.11238	102.4743	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.10079	101.7113	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.09418	101.6469	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.0965	101.2527	OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.09418	100.2851	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.07769	100.1292	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TERRY COUNTY INTERCHANGE - WOLFFORTH INTERCHANGE 115KV CKT 1	138	0.09615	100	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.73815	123.6163	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.792	123.5652	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.73279	116.5963	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.74441	114.5809	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	1	114.0471	TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1 &CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.72609	113.5952	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.7086	110.0692	OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 &PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.7258	109.2682	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.73279	108.9831	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FNSL	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70026	108.972	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 &PLANT X STATION - TOLK STATION WEST 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB	TDF	TC%LOADING	CONTINGENCY
							(MVA)		(% MVA)	
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70829	108.0681	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.72544	107.8885	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70873	107.3089	ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.71147	107.0906	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70977	105.108	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70314	104.9249	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70079	104.6522	OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70305	104.5439	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70117	104.5122	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.7019	104.4434	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70022	104.4005	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70016	104.279	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70117	104.2406	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70494	104.2251	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70012	104.2104	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70039	104.2089	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70039	104.2089	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70012	104.2043	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70012	104.2038	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70012	104.1948	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70012	104.1875	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70036	104.1855	SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	104.1846	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & Golden Spread REC - Mustang Interchange 230kv Generation Bus - MUSTANG STATION 230
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	104.1844	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	104.1844	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	104.1844	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	104.1844	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	104.1833	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	104.1823	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70014	104.1772	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70057	104.1736	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70012	104.1716	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70042	104.1692	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.69998	104.1653	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	104.161	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	104.1609	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70009	104.1556	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.69998	104.1556	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70009	104.1439	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.71098	104.1365	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70075	104.1341	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70001	104.1226	CHERRY1 - HARRINGTON STATION 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70088	104.121	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70007	104.1155	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70337	104.1053	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	104.0811	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70013	104.0735	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.7002	104.0731	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.69997	104.0567	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.69978	104.0536	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.69985	103.9563	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.69985	103.9563	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70016	103.9454	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.69997	103.878	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.69961	103.8328	STATELINE INTERCHANGE - STLN-DEMARCG 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.69976	103.7756	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.69977	103.7322	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.69961	103.6426	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	103.4258	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.69998	103.3975	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.69859	103.381	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70054	103.3019	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	103.1357	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.69859	103.1068	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70376	103.0488	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70067	103.021	Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70067	103.021	Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70361	102.9848	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	102.7313	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	102.6467	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	102.6319	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	102.6077	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	06ALL	2	13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.69828	102.4648		Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	101.9701		G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	101.965		G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	101.9503		PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	101.9229		PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	101.9128		PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.67406	101.6819		PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.67406	101.6819		PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 2
FDNS	06ALL	2	13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	101.4832		G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	101.4437		PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	101.4376		PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.70011	101.1125		FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	TO->FROM	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1	610	0.6879	100.2579		PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.42302	154.3849		PLANT X STATION - TOLK STATION EAST 230KV CKT 2 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29348	149.8203		BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29773	146.9955		G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27327	143.5606		PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27698	141.268		JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27598	140.5112		PLANT X STATION - TOLK STATION EAST 230KV CKT 2 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27531	139.9693		BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	139.7268		FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27425	139.321		PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	137.7502		G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26505	137.5461		G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.2875	137.4859		TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27517	137.0508		G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27276	137.0496		G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	136.6273		G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	136.5015		G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	136.3113		G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	136.1962		G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	135.9192		G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26381	135.821		LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26418	135.7775		GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	135.7518		G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26208	135.2225		GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26177	135.1906	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	134.2269	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26396	134.1716	TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26418	133.7657	STATELINE INTERCHANGE - STLN-DEMAR6 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	133.6391	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	133.3021	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	132.9019	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - G06-47 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	132.6994	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26272	132.5562	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FNSL	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26172	132.4305	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26505	132.2451	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26139	132.071	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26139	132.071	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25753	132.0283	CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	131.9718	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	131.8026	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25459	131.7272	SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25227	131.6622	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26195	131.6384	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26272	131.5948	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	131.4676	SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.2591	131.2465	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	131.1974	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25913	131.123	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	130.9408	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.2624	130.8648	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	130.8038	G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25898	130.7855	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25903	130.7607	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25948	130.7584	CHERRY1 - HARRINGTON STATION 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26002	130.7445	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25944	130.7424	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25903	130.7171	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25675	130.6926	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25952	130.6628	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25956	130.6608	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	



SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	130.6277	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26004	130.5579	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25921	130.5282	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25905	130.513	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.2602	130.4576	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25904	130.4563	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26282	130.4507	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25906	130.4498	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25828	130.4482	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - EDDY NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25999	130.442	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25953	130.3932	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	130.389	Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	130.3876	Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 23
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25903	130.3856	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25903	130.3744	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25903	130.3736	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25903	130.3703	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25905	130.3606	ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CK
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26019	130.3284	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	130.3284	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	130.3259	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	130.3257	ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	130.3257	G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	130.3257	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	130.3257	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	130.3257	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & Golden Spread REC - Mustang Interchange 230 KV Generation Bus - MUSTANG STATION 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25907	130.3154	ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25931	130.3105	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25903	130.2828	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25919	130.2563	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25903	130.2499	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25865	130.2095	OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26034	129.9998	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25427	129.9877	G13_013T 345.00 - TOLK STATION 345KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25427	129.9877	G13_013T 345.00 - TOLK STATION 345KV CKT 2 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.45483	129.6896	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 & TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING	CONTINGENCY
							(MVA)	TDF		
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27517	129.5151	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25655	129.4203	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25655	129.4199	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.20962	129.4049	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26383	129.3564	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25753	129.1176	OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25227	128.5435	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.24303	126.0397	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.35205	124.6587	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FNSL	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.36513	122.5778	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	121.8784	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.36513	117.8587	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.3554	117.6844	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29442	117.6479	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.34725	117.58	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28809	117.4424	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29348	115.4478	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.3538	114.9492	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29773	114.4711	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27327	114.4152	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29348	112.8759	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27459	112.4642	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.3538	111.8529	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27698	111.5284	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.32775	111.4251	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27598	111.0714	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30748	110.6125	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31414	110.4013	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27425	110.0763	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	109.8199	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.33443	109.6273	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.3422	109.5929	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FNSL	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27531	109.1689	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.32832	109.1465	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	108.9605	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27276	108.7108	EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27517	108.5668	CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	108.3219	G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	108.3214	G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1 &G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	108.2958	BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	108.2863	BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	108.2545	G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	108.1285	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26505	108.0936	AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.2875	108.082	TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	108.0803	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26381	108.0243	LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26418	107.8269	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31236	107.7989	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	107.7245	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26208	107.5803	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.32929	107.4392	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	107.1933	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	107.1933	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.34084	107.109	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	107.068	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26396	106.9984	TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	106.9366	G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1 &BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26177	106.9034	LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31679	106.7907	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26418	106.7456	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30961	106.7371	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29042	106.7266	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 &AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.32245	106.5897	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	106.5786	G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1 &G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	106.2772	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	106.2741	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	106.2295	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	106.222	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.32148	106.0966	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31446	106.0567	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	106.0022	CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	105.9704	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26172	105.92	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26272	105.9017	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	105.8234	BUFFALO 230.00 - G06-47 230.00 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.3118	105.676	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29442	105.6245	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	105.5579	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26139	105.527	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26139	105.527	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	105.4662	WILDOR2_JUSE6230.00 - WILDORADO WIND GEN 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28809	105.4617	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	105.3374	G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1 & G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26505	105.2545	AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26195	105.2105	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31236	105.1441	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30018	105.1061	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26272	105.0789	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	105.0453	SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29067	105.0298	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25753	104.9573	CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	104.7809	G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1 & G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	104.6742	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29442	104.6681	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31446	104.6421	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.2591	104.5768	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30515	104.5698	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31578	104.5366	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28809	104.5305	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25913	104.5163	Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	104.4805	G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1 & G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31195	104.4661	LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25898	104.3982	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.2624	104.3807	CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25944	104.3435	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26002	104.3431	EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	104.3282	G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31656	104.288	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25227	104.2486	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	104.2462	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25903	104.1974	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31703	104.1891	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25903	104.183	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31924	104.1756	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & CHAVESCO COUNTY INTERCHANGE 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.34084	104.1737	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26004	104.1532	PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25948	104.1467	CHERRY1 - HARRINGTON STATION 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25675	104.1265	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	104.1254	GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25921	104.1242	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25952	104.1012	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25904	104.1001	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25906	104.0952	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25956	104.0646	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25905	104.0634	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25903	104.0094	MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25903	104.0056	OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25903	104.0038	AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25903	104.0002	AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25905	103.9999	ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	103.9925	Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29561	103.9922	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	103.9921	Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25953	103.9886	JONES STATION - Jones Station Bus#2 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	103.9827	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25999	103.9814	Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	103.9803	HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	103.9801	ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	103.9801	G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	103.9801	G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	103.9801	G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25902	103.9801	Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00	
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26282	103.9746	CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.2602	103.9738		JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25903	103.9689		MUSTANG STATION - SEMINOLE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1 CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25828	103.9683		HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25931	103.9588		ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25907	103.9546		PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26019	103.9492		EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30804	103.8905		PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &PLANT X STATION - TOLK STATION EAST 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25919	103.8702		HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29442	103.8168		PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29442	103.7722		PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29442	103.7716		PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	103.7485		BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25865	103.7041		OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28809	103.702		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28809	103.6972		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30567	103.6932		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30123	103.6647		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &PLANT X STATION - TOLK STATION EAST 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28809	103.6608		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30914	103.6189		PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26034	103.6095		CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29442	103.5993		G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30252	103.5785		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31135	103.5406		MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31175	103.5279		PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28809	103.5132		G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25427	103.4908		G13_013T 345.00 - TOLK STATION 345KV CKT 2 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25427	103.4907		G13_013T 345.00 - TOLK STATION 345KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.3126	103.4799		G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29413	103.4485		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29348	103.4358		FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29818	103.4348		PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29442	103.4243		PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28809	103.4054		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28809	103.4047		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29442	103.3427		PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29442	103.3421	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25459	103.3144	SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28809	103.29	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30667	103.2572	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	103.2443	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.33093	103.2058	TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31095	103.0995	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31095	103.0995	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29982	103.0371	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.3082	103.0307	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30003	102.9827	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	102.9212	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30106	102.873	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27517	102.8489	CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29453	102.8486	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	102.8021	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25655	102.7773	TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25655	102.7769	TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.3043	102.7094	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30912	102.706	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.3112	102.7028	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	102.6594	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25762	102.6222	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25753	102.6176	OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31155	102.601	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25762	102.5971	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29348	102.5565	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.3098	102.5105	TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28486	102.4932	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 &TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.3126	102.4867	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.26383	102.4672	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30832	102.2563	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &PLANT X STATION - TOLK STATION EAST 230KV CKT 2
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27327	102.1986	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 &PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28809	102.1381	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29442	102.1207	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29442	102.0615	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	101.9875	SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28369	101.9713	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31578	101.9277	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29394	101.8759	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29442	101.8631	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28809	101.8554	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28809	101.851	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30205	101.8453	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29095	101.8306	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30686	101.8038	CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29737	101.8001	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30039	101.7792	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25762	101.7668	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	101.7557	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29044	101.7331	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30794	101.7321	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28809	101.7143	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29348	101.6999	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29348	101.6986	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29203	101.6916	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29348	101.6592	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30844	101.6466	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30691	101.6137	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30831	101.6133	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29442	101.577	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29348	101.5602	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	101.5576	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30792	101.5226	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29814	101.5186	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30792	101.501	GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.287	101.4807	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 &Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FNLS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29659	101.4713	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30563	101.4683	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31498	101.4618	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30857	101.4582	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31396	101.4573	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1



SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	101.4349	G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30815	101.4097	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29161	101.403	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31035	101.3885	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29773	101.3742	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30993	101.3695	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	101.3559	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30795	101.3544	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.3079	101.3524	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	101.3505	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30797	101.3481	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30864	101.3407	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29348	101.3341	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30856	101.321	CHERRY1 - HARRINGTON STATION 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30794	101.3128	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29348	101.312	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29348	101.3114	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30858	101.3008	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30868	101.2841	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.3209	101.2738	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28007	101.2706	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 &LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30797	101.2563	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25762	101.2542	BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30796	101.2521	ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 23
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27327	101.2517	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30797	101.2468	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30797	101.2453	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	101.2204	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	101.2176	ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	101.2176	G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	101.2176	G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	101.2176	G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	101.2176	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30791	101.2175	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &Golden Spread REC - Mustang Interchange 230 kv Generation Bus - MUSTANG STA
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30828	101.2145	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30797	101.2086	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30776	101.2086	AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.3074	101.1936	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30776	101.1897	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25227	101.1736	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30804	101.1671	JONES STATION - Jones Station Bus#2 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30867	101.1666	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29042	101.1486	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 &AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30788	101.1452	Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30788	101.1451	Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHA
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30794	101.1437	Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30796	101.1435	ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30792	101.1355	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30805	101.1308	Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29348	101.1202	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 &BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31037	101.1186	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27459	101.1137	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30809	101.1055	JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30808	101.0635	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29442	101.0284	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30755	100.966	OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27327	100.9634	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27327	100.9632	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30874	100.9427	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28002	100.935	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27809	100.9231	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 &LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28809	100.9204	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28809	100.8783	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25762	100.8641	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.3044	100.8489	G13_013T 345.00 - TOLK STATION 345KV CKT 2 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.3044	100.8488	G13_013T 345.00 - TOLK STATION 345KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30021	100.8272	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29442	100.7748	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29203	100.7696	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30611	100.694	SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29056	100.6787	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &PLANT X STATION - TOLK STATION EAST 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29442	100.6642	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29814	100.6282	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.2985	100.6268	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.3043	100.6118	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29773	100.5737	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29773	100.571	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27327	100.5441	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27327	100.5438	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27327	100.5078	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31325	100.5013	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29915	100.4404	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28809	100.4385	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29442	100.4089	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.2832	100.3893	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31789	100.3604	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25762	100.3551	BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30686	100.3506	OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29018	100.3351	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29773	100.3279	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27901	100.3191	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 &PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.25762	100.3051	BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27327	100.2894	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 &PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27459	100.2846	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &G10-14 345.00 - Hitchland Interchange 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29094	100.2273	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31924	100.1683	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29348	100.1553	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28369	100.1526	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29617	100.1287	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28569	100.1269	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 &PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29348	100.0804	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.297	100.0537	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 &PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.31217	100	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30832	100	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &PLANT X STATION - TOLK STATION EAST 230KV CKT 2
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30507	100	TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30507	100	TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29453	100	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29348	100	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28988	100		BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28988	100		BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28899	100		Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.28809	100		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27668	100		GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 & PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.20962	100		TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.30106	99.9		PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29602	99.9		BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.29602	99.9		BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.27327	99.9		G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 & PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1	610	0.75634	158.7429		PLANT X STATION - TOLK STATION EAST 230KV CKT 2 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1	610	0.51639	136.991		PLANT X STATION - TOLK STATION EAST 230KV CKT 2 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1	610	1	114.0517		TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 & CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1	610	0.63976	108.5339		PLANT X STATION - TOLK STATION EAST 230KV CKT 2 & CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1	610	0.51639	101.9321		PLANT X STATION - TOLK STATION EAST 230KV CKT 2 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1	610	0.58978	100.6811		PLANT X STATION - TOLK STATION EAST 230KV CKT 2 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.24146	104.5768		TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.24146	104.57		TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.24146	103.4195		TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.24146	103.4142		TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.2708	101.5497		Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.2708	101.5423		Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.2708	99.9		Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.2708	99.9		Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.20595	223.2424		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	179.4172		G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.1133	148.5733		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.20451	143.7423		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.10558	143.7306		PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.1027	142.1404		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	140.3888		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	140.3182		LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.105	139.389		BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.13092	137.6514		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.13403	137.2279		PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.105	135.4703		BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING (% MVA)	CONTINGENCY
							(MVA)	TDF		
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.13337	133.8785	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04576	132.357	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.073	132.185	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09517	131.3576	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.12317	130.265	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.13337	130.2351	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09142	129.2113	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09613	128.5689	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	128.0946	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	127.9096	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06553	127.7086	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	127.2846	ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08962	127.1346	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	126.8852	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.10316	126.8312	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	126.7904	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	126.7897	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0624	126.4097	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11857	126.0296	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	125.8965	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.13627	125.806	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05069	125.7739	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04542	125.6709	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	125.2133	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09084	125.1751	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	125.1146	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	125.0934	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	125.0469	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.12389	125.0427	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09151	124.9116	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.092	124.8033	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	124.784	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06985	124.6562	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08999	124.5668	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09165	124.4011	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	124.2602	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05174	124.2455	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11811	123.9992	GRAPEVINE INTERCHANGE - STATLINE INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	123.9578	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11797	123.9422	OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05095	123.8339	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	123.8062	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	123.7444	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04318	123.5552	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09084	123.4883	STATLINE INTERCHANGE - STLN-DEMAR6 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04523	123.4703	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08897	123.4416	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11711	123.437	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04526	123.3028	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	123.1757	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	123.156	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G0847 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	123.1374	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G1001 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	123.1269	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	123.0839	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	123.0814	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04661	122.8472	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09931	122.8465	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	122.8261	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0884	122.7462	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	122.737	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08956	122.7197	OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09049	122.6693	SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	122.6094	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08986	122.6025	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09025	122.5362	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04451	122.5238	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05148	122.3882	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09151	122.2958	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	122.2642	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11811	122.252	STATLINE INTERCHANGE - STLN-DEMAR6 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	122.1609	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04571	122.1561	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	122.111	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04352	122.1065	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08973	122.101	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08973	122.101	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04606	122.0222	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	121.943	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	121.9217	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04786	121.8831	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04574	121.8477	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04458	121.8398	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04661	121.8259	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05148	121.8239	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	121.8199	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	121.8171	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	121.8125	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	121.8093	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04278	121.7949	TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	121.7696	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	121.7149	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	121.7125	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	121.7079	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	121.6881	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0888	121.6653	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09025	121.6549	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	121.5885	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04567	121.5789	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08987	121.5342	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04606	121.5292	STATELINE INTERCHANGE - STLN-DEMAR6 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	121.5051	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04517	121.4889	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04517	121.4881	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04517	121.4843	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04509	121.4661	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04517	121.4621	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	121.418	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04203	121.3521	TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08877	121.3515	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	121.3082	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04519	121.2901	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04465	121.2879	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05319	121.2714	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07995	121.2686	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04511	121.2627	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	121.2499	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	121.2469	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09083	121.214	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	121.1981	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04492	121.1932	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09102	121.1914	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_013T 345.00 - TOLK STATION 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09102	121.1914	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_013T 345.00 - TOLK STATION 345KV CKT 2
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	121.1742	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	121.1733	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04569	121.1723	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04811	121.1431	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09059	121.1378	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08833	121.1242	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04511	121.1225	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04527	121.0854	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08879	121.0811	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04523	121.0564	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0456	121.0553	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0456	121.0553	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04583	121.0329	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04521	121.0079	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04521	120.9999	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04524	120.9851	ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	120.9811	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08794	120.9799	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	120.9705	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08904	120.9664	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04529	120.9611	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	120.9611	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1



SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	120.9609	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &G11_048_1 230.00 - Golden Spread REC - Mustang Interchange 230 kV Generation
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04525	120.9501	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08891	120.9346	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	120.9293	G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04766	120.9261	G13_013T 345.00 - TOLK STATION 345KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04766	120.9261	G13_013T 345.00 - TOLK STATION 345KV CKT 2 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04515	120.9233	AMARILLO SOUTH INTERCHANGE - RANDALL COUNTY INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04626	120.9133	OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	120.9082	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0448	120.8987	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04467	120.8982	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04583	120.8856	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0448	120.8842	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04513	120.8824	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	120.8737	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04528	120.8668	CHERRY1 - HARRINGTON STATION 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08899	120.8599	CHERRY1 - HARRINGTON STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04529	120.8507	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	120.8483	SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0457	120.813	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08858	120.7772	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11695	120.7641	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08904	120.7554	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11742	120.7468	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04519	120.7021	ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08876	120.6576	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08877	120.6549	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	120.6514	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08871	120.6192	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08879	120.618	ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08897	120.5974	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	120.5533	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09133	120.5147	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08871	120.5102	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	120.5098	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	120.5097	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	120.5073		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	120.5073		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION 23
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	120.5072		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	120.5072		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	120.5072		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	120.5069		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	120.4931		Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08801	120.4702		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	120.4699		Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08871	120.4674		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	120.4607		ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08917	120.4583		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	120.4445		EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08871	120.4299		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08873	120.4206		Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08873	120.4204		Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03786	120.4151		CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.044	120.4075		G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04626	120.4002		CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08877	120.392		OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08881	120.3915		HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04372	120.324		CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08886	120.2424		HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08639	120.2411		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11679	120.2231		BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11679	120.2231		BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08811	120.1918		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04532	120.1778		OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0881	120.1687		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04527	120.1356		CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	120.0946		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04408	120.0857		CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08879	120.0502		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.1207	119.9649		G13_013T 345.00 - TOLK STATION 345KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.1207	119.9649		G13_013T 345.00 - TOLK STATION 345KV CKT 2 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	119.9348		G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	119.9333	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08812	119.881	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	119.8599	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08838	119.8121	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	119.78	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0868	119.7005	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11703	119.6735	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	119.6527	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	119.6467	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.044	119.6186	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.088	119.541	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.088	119.5406	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11742	119.4926	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04468	119.3467	SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04454	119.3258	LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04262	119.3082	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11428	119.2974	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0884	119.2929	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	119.2181	SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03753	119.1661	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11546	119.1194	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04611	118.9554	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04615	118.9018	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	118.8996	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03701	118.8777	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08956	118.6648	CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11543	118.6	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11591	118.5196	OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV C
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	118.4634	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11584	118.3709	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FNSL	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	118.3681	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07247	118.3584	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	118.3515	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11168	118.28	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	118.2589	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	118.2379	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11312	118.2185	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11557	118.1441	JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11442	118.0744	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11559	118.0698	Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11468	118.0669	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11565	118.0294	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11566	118.021	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11573	118.0157	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11571	118.0133	ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHA
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11551	117.9938	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03701	117.9827	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.1168	117.9462	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &CHAVESCO COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11593	117.945	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08874	117.9256	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.10715	117.912	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11561	117.9108	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11589	117.9036	CHERRY1 - HARRINGTON STATION 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11566	117.8464	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11594	117.8358	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	117.8337	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	117.8317	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTA
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	117.8316	ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	117.8316	G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	117.8316	G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	117.8316	G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	117.8306	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11562	117.8106	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11578	117.8095	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11561	117.7912	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11561	117.7604	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	117.7387	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11521	117.691	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11563	117.6803	ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11565	117.6681	Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH IN
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11565	117.6667	Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11554	117.5874	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11457	117.2892		LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0876	117.2598		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11224	117.1342		LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.1146	117		LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	116.9975		G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11314	116.9791		LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11473	116.9323		SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	116.8751		LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05825	116.6648		BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04003	116.5191		PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11406	116.4084		PLANT X STATION - TOLK STATION EAST 230KV CKT 2 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11454	116.3391		TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11454	116.3385		TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.043	116.2863		CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09371	116.2391		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	116.0633		LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	115.9603		FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.10754	115.7135		TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.21374	115.5924		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	115.5536		SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0551	115.5282		G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03811	115.3656		CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08381	115.157		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0843	114.7513		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11009	114.7344		PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11797	114.6328		CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11422	113.9892		LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	113.9231		G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11312	113.7751		AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05572	113.5604		G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07995	113.4405		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05732	113.0088		BASE CASE
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05501	112.9515		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	112.9244		G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	112.8056		G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	112.7063		CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05569	112.6692		GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08026	112.6016		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	112.5559		CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	112.4939		JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	112.4927		G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	112.2239		G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	112.1712		JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11564	112.1549		LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - G0822 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11367	112.1426		JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	112.0732		ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05524	112.0654		GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05579	111.6354		OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05472	111.5923		LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	111.5049		G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	111.3256		ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11314	111.2008		LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	111.1942		G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03709	111.0504		CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04336	111.0249		NEWHART 230 - PLANT X STATION 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05569	111.0132		STATELINE INTERCHANGE - STLN-DEMAR6 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	110.9224		G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05495	110.7915		PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11239	110.7272		TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	110.6697		G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	110.3553		BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.10849	110.2627		G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.10947	110.205		BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05538	110.1882		G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03733	110.1468		LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05462	110.0896		Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06459	110.0307		TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	109.9995		G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FNSL	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05517	109.9966		MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03718	109.9902		LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03511	109.9582		CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	109.9532		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04455	109.9099	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &CHAVESCO 345KV CKT 1 345.00 - G13_013T 345.00
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05427	109.8606	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05509	109.7492	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05509	109.7492	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0546	109.5969	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05304	109.5397	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0372	109.5373	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11318	109.4823	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 &LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05371	109.4691	SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05521	109.4654	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05572	109.4055	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04053	109.3573	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	109.3307	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05538	109.3261	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	109.3164	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	109.309	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05753	109.2983	G13_013T 345.00 - TOLK STATION 345KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05753	109.2983	G13_013T 345.00 - TOLK STATION 345KV CKT 2 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05373	109.0924	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.10947	109.0762	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07774	108.8704	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05406	108.81	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05457	108.7817	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05442	108.7473	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05467	108.7357	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05469	108.7305	CHERRY1 - HARRINGTON STATION 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	108.7305	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05472	108.7188	OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03645	108.7119	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0547	108.6589	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09556	108.5873	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05462	108.5723	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05797	108.5654	G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1 &Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05462	108.5632	ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05572	108.5452	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05561	108.5145	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05456	108.5059	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1	
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	108.5049	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05459	108.4739	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05471	108.4722	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05459	108.47	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0552	108.4211	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05456	108.3954	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05456	108.3943	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	108.3856	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	108.3843	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION 2	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	108.3842	ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	108.3842	G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	108.3842	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	108.3842	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	108.3837	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07579	108.3824	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05381	108.3789	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05456	108.3587	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05457	108.3543	ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05464	108.353	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05465	108.3423	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &JONES STATION - Jones Station Bus#2 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	108.3276	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05797	108.3041	G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1 &Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1	
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	108.2938	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	108.2808	Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	108.2516	Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 23	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05207	108.21	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1	
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.035	108.0349	TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	108.0104	G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03689	108.0004	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &JONES STATION - Jones Station Bus#2 230KV CKT 1	
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04112	107.9693	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0539	107.9356	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05463	107.9274	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &MUSTANG STATION - SEMINOLE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09401	107.9062	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03652	107.8994	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1	
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03773	107.896	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1	



SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FNSL	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0927	107.8845	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0383	107.8823	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03775	107.8733	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	107.818	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05732	107.8075	G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1 & G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05405	107.7987	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05405	107.7983	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03554	107.7978	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - HOBBS INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	107.7193	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09948	107.7172	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	107.6957	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09491	107.6422	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0383	107.6285	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09298	107.608	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.10738	107.5902	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0394	107.5875	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05391	107.5848	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04178	107.5601	NEWHART 230 - SWISHER COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	107.5569	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03711	107.5253	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09036	107.4604	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	107.4476	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	107.447	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	107.4446	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03712	107.4315	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0525	107.4287	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05797	107.4221	ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	107.4093	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03711	107.3957	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03711	107.3797	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	107.3663	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	107.3518	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	107.3496	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	107.3294	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	107.2621	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	107.2504	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03752	107.2486	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03659	107.244	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03821	107.2332	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	107.178	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0792	107.1586	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	107.1075	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03417	107.1029	TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	107.059	SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	107.0568	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04126	107.0444	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	107.0356	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	107.0044	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	107.0029	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	106.9993	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03813	106.9967	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05732	106.981	ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1 &G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05039	106.9739	TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03758	106.9541	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03721	106.9412	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04445	106.9324	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05304	106.9279	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	106.9263	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	106.9241	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	106.921	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FNSL	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07868	106.9148	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	106.9134	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03711	106.9072	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03711	106.9063	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03769	106.9048	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03718	106.8774	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04075	106.8733	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03749	106.8618	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03749	106.8618	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03711	106.8528	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	106.8446	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03716	106.8237	ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03716	106.8182	OASIS INTERCHANGE - PLEASANT HILL 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03715	106.8158	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	106.8157	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03715	106.8145	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03645	106.7964	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	106.7938	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	106.7931	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05579	106.7909	CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03711	106.7896	AMARILLO SOUTH INTERCHANGE - RANDALL COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	106.7839	PLEASANT HILL - ROOSEVELT COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05372	106.7833	LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03674	106.771	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03674	106.7709	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0366	106.7623	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03769	106.7551	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	106.7551	G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03719	106.7477	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09606	106.7388	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	106.7349	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03716	106.7253	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09556	106.7203	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05732	106.7195	ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1 & G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03968	106.7145	G13_013T 345.00 - TOLK STATION 345KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03968	106.7144	G13_013T 345.00 - TOLK STATION 345KV CKT 2 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	106.7058	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	106.7017	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03758	106.6833	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03716	106.6799	CHERRY1 - HARRINGTON STATION 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	106.6777	SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03716	106.6741	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	106.6707	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	106.615	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03834	106.6106	OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03713	106.6065	ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	106.5984	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03645	106.5843	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09569	106.5483	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 &TOLK STATION EAST - TUOCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04075	106.5205	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUOCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03714	106.5191	CARLISLE INTERCHANGE - TUOCO INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03718	106.478	OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &CARLISLE INTERCHANGE - TUOCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09189	106.4773	TOLK STATION EAST - TUOCO INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09387	106.4528	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUOCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09491	106.4413	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1 &TOLK STATION EAST - TUOCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03894	106.4355	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUOCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03713	106.4026	Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1 &CARLISLE INTERCHANGE - TUOCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03713	106.3982	Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &CARLISLE INTERCHANGE - TUOCO INTERCHANGE
FNSL	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08985	106.3944	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 &TOLK STATION EAST - TUOCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07961	106.3555	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &JONES STATION - TUOCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	106.3411	TOLK STATION EAST - TUOCO INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	106.279	ANTELOPE 1 - TUOCO INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUOCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.10029	106.2251	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUOCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06553	106.1089	JONES STATION - TUOCO INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03834	106.1028	CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 &CARLISLE INTERCHANGE - TUOCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	106.0606	TOLK STATION EAST - TUOCO INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03945	105.9717	SWISHER COUNTY INTERCHANGE - TUOCO INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUOCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09075	105.9433	TOLK STATION EAST - TUOCO INTERCHANGE 230KV CKT 1 &CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09278	105.9397	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 &TOLK STATION EAST - TUOCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05113	105.9366	G12-020 230.00 - TUOCO INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - TUOCO INTERCHANGE 345KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0372	105.9202	CARLISLE INTERCHANGE - TUOCO INTERCHANGE 230KV CKT 1 &MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	105.908	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 &TOLK STATION EAST - TUOCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03607	105.861	CARLISLE INTERCHANGE - TUOCO INTERCHANGE 230KV CKT 1 &HOBBS INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09313	105.8444	TOLK STATION EAST - TUOCO INTERCHANGE 230KV CKT 1 &CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03482	105.8037	CARLISLE INTERCHANGE - TUOCO INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09274	105.7657	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 &TOLK STATION EAST - TUOCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09197	105.742	TOLK STATION EAST - TUOCO INTERCHANGE 230KV CKT 1 &PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	105.6647	TOLK STATION EAST - TUOCO INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05329	105.6539	G12-020 230.00 - TUOCO INTERCHANGE 230KV CKT 1 &LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09264	105.6511	TOLK STATION EAST - TUOCO INTERCHANGE 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03479	105.6464	CARLISLE INTERCHANGE - TUOCO INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - TUOCO INTERCHANGE 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09274	105.5814	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 &TOLK STATION EAST - TUOCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0452	105.5657	CARLISLE INTERCHANGE - TUOCO INTERCHANGE 230KV CKT 1 &Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	105.5327	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 &TOLK STATION EAST - TUOCO INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09536	105.532		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09264	105.5314		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	105.5213		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09264	105.5091		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09264	105.5051		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	105.4882		G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06496	105.4804		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06418	105.4737		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03787	105.4651		CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09256	105.4281		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09257	105.4181		Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03766	105.4068		CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0379	105.3858		CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 &JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	105.2084		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09286	105.2		Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	105.1986		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06418	105.1962		DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09374	105.1853		BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09374	105.1853		BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09258	105.1758		AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09206	105.1685		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09428	105.1642		G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08813	105.1578		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0686	105.1199		JONES STATION - TUCO INTERCHANGE 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09276	105.0436		HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03646	104.9874		LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09271	104.9648		HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09293	104.9589		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0927	104.9456		Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09297	104.9096		CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09274	104.8958		ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	104.8776		EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09247	104.8572		G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	104.8569		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	104.8567		TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &G11_048_1 230.00 - Golden Spread REC - Mustang Interchange 230 kV Generation Bus
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	104.8486		HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 &TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	104.8336	AMARILLO SOUTH INTERCHANGE - RANDALL COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09204	104.8305	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	104.816	G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09428	104.7997	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03776	104.7984	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	104.7849	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09268	104.7837	ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09497	104.7832	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09497	104.7832	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 2	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	104.7819	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09281	104.7694	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09353	104.7581	OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09192	104.7456	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09192	104.745	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09207	104.7429	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	104.7324	SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09297	104.7219	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09292	104.7184	CHERRY1 - HARRINGTON STATION 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09267	104.7009	Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09267	104.6971	Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230	
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03774	104.6311	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09389	104.6059	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09269	104.5554	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09525	104.5398	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07914	104.5192	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09931	104.3069	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09353	104.2425	CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06632	104.21	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06418	104.2011	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09272	104.1807	OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04398	104.1683	NEWHART 230 - PLANT X STATION 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1	
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07577	103.9876	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09144	103.9823	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1	
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03571	103.9693	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09231	103.9637	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1	
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08429	103.959	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05458	103.9412	BASE CASE
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07394	103.9296	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09276	103.9115	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	103.8205	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.1012	103.7869	LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06931	103.6982	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06936	103.5715	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05835	103.4313	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06561	103.4256	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	103.3734	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06639	103.2595	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07868	103.2033	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09458	103.1748	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06561	103.1424	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07932	103.1286	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09247	103.1162	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03703	103.0648	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.043	103.0603	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04114	103.0583	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09483	103.0304	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	103.0228	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05802	102.9522	Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1 & GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	02ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08797	102.8392	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	102.8291	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08394	102.7549	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06811	102.6241	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05571	102.6238	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06609	102.6066	TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0389	102.4822	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04342	102.3879	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03611	102.3858	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - HOBBS INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06995	102.3732	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07551	102.3578	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0371	102.3566	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03832	102.2999	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	102.2617	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07057	102.2263	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03746	102.1998	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	102.1679	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07932	102.1557	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	102.1399	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09463	102.1288	SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06561	102.1255	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0383	102.094	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06674	102.0584	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	102.0418	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	102.0396	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	102.0394	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05153	102.0166	TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	102.0085	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05548	101.9888	Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07369	101.9859	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.9688	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.9534	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03769	101.9042	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	101.8641	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.8616	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08394	101.849	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03769	101.8489	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03769	101.8352	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03769	101.8219	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.7937	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0389	101.7365	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.734	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03879	101.7274	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06925	101.7264	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03717	101.724	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0381	101.6844	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.6659	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03701	101.6455	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.6383	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.6376	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1



SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.6366	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04831	101.6312	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	101.6257	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	101.6242	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03775	101.6218	CHAN/TASCOS6230.00 - POTTER COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03535	101.6211	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	101.6188	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.6067	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03475	101.6035	TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03731	101.6016	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03731	101.6015	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03768	101.599	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03775	101.5948	CHAN/TASCOS6230.00 - XIT_INTG 6230.00 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03828	101.5833	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03768	101.5693	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08797	101.5533	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03815	101.5496	PLANT X STATION - TOLK STATION EAST 230KV CKT 2 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03768	101.5405	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03778	101.5368	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0698	101.5239	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	101.5214	G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04935	101.5082	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08797	101.5072	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03775	101.5047	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0682	101.486	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03773	101.4738	ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03772	101.4648	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03772	101.4644	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03768	101.463	AMARILLO SOUTH INTERCHANGE - RANDALL COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03773	101.4604	OASIS INTERCHANGE - PLEASANT HILL 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06925	101.4548	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.4457	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G11_048_1 230.00 - Golden Spread REC - Mustang Interchange 230 kv Generation
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.445	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.4425	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04173	101.4374	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.4298	PLEASANT HILL - ROOSEVELT COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06914	101.4229	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03701	101.4155	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03773	101.4064	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	101.4001	G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	101.3949	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.3909	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03776	101.389	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.3864	G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03773	101.3432	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.3383	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03808	101.3172	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03808	101.3172	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03773	101.3132	CHERRY1 - HARRINGTON STATION 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.3089	SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03827	101.296	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07057	101.2862	STATELINE INTERCHANGE - STLN-DEMAR6 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05797	101.272	G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06984	101.2594	MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08151	101.2491	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 18SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03321	101.2382	PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.2252	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08759	101.2249	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04026	101.2196	G13_013T 345.00 - TOLK STATION 345KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04026	101.2196	G13_013T 345.00 - TOLK STATION 345KV CKT 2 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03718	101.2027	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0377	101.1801	ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05819	101.1786	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03827	101.1686	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	101.1667	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.09218	101.1453	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05485	101.1438	G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03771	101.1423	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03662	101.1416	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & HOBBS INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03815	101.1014	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03536	101.0891	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05732	101.0828	G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04003	101.0631	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06404	101.0628	TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06123	101.0442	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06263	101.0401	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03775	101.0211	OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	101.0161	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06536	101.0115	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0387	100.9966	STATELINE INTERCHANGE - STLN-DEMAR6 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04455	100.995	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0377	100.9583	Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05797	100.9334	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0377	100.9289	Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05485	100.8912	G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1 &CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.069	100.8826	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	02ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11469	100.8582	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	100.8505	BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04239	100.8291	NEWHART 230 - SWISHER COUNTY INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05732	100.8251	G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1 &G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0689	100.7992	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 &HOBBS INTERCHANGE - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.069	100.7509	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 &MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06536	100.7335	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.069	100.7302	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 &AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05732	100.7256	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 &G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07384	100.7155	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.069	100.7072	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 &OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05751	100.6951	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 &G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0683	100.6728	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 &PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04504	100.6646	TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	100.6625	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	100.6281	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 &G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06903	100.6273	Harrington Station East Bus - Harrington Station Mid Bus 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	100.6194	WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03893	100.5647	OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03953	100.5514	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0	2	13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06891	100.5118	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 &JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.08797	100.5008	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 &BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03565	100.493	TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06612	100.4859	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05732	100.4675	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04136	100.4634	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05712	100.4528	Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05751	100.4381	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06916	100.3931	Harrington Station East Bus - PRINGLE INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06891	100.3484	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06975	100.3374	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06975	100.3374	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0491	100.3278	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05797	100.3168	FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07014	100.2996	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06909	100.2935	HUTCHINSON COUNTY INTERCHANGE - NICHOLS STATION 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03778	100.283	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06536	100.22	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06905	100.2195	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06905	100.1955	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07055	100.1954	OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06922	100.181	PLANT X STATION - TOLK STATION WEST 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05648	100.1588	G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1 & CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06909	100.1579	ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07551	100.1526	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04136	100.1338	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	100.1298	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	100.1291	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & G11_048_1 230.00 - Golden Spread REC - Mustang Interchange 230 kV Generation Bus 230
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06917	100.1257	CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	100.1234	HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	100.1231	EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05867	100.1023	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	100.096	G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06896	100.0878	AMARILLO SOUTH INTERCHANGE - RANDALL COUNTY INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07244	100.0797	G13_013T 345.00 - TOLK STATION 345KV CKT 2 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07244	100.0796	G13_013T 345.00 - TOLK STATION 345KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05797	100.0711	G10-14 345.00 - Hitchland Interchange 345KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06933	100.0679	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06832	100.0679	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	100.0618	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	100.0612	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04312	100.0598	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04549	100	G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.07014	100	G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06918	100	Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06915	100	CHERRY1 - HARRINGTON STATION 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06913	100	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	100	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	100	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06904	100	SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06835	100	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06835	100	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05914	100	JONES STATION - TUCO INTERCHANGE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05732	100	ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1 & G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05485	100	ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05484	100	TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.03893	100	CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.0699	99.9	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06991	99.9	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.06536	99.9	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05915	99.9	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05802	99.9	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 & G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05797	99.9	Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05797	99.9	Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05797	99.9	Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1 & BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05648	99.9	G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1 & CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.05588	99.9	Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1 & CUNNINGHAM STATION - LEA COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.04003	99.9	SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FNSL	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1	154	0.11557	99.9	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE (WH 7001668) 230/115/13.2KV TRANSFORMER CKT 1	193	0.11717	102.955	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G12_043	FROM->TO	WOLFFORTH INTERCHANGE (WH 7001668) 230/115/13.2KV TRANSFORMER CKT 1	193	0.11717	101.7448	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G12_043	TO->FROM	WOODWARD - WOODWARD EHV 138KV CKT 1	287	0.03547	111.8613	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		2 13G	G12_043	TO->FROM	WOODWARD - WOODWARD EHV 138KV CKT 1	287	0.03547	111.2107	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FNSL-Blown up	0		2 13WP	G13_001		Non-converged contingency	0	1.00074	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 & G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FNSL-Blown up	0		2 13WP	G13_001		Non-converged contingency	0	0.72523	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 &G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1
FNSL-Blown up	0		2 13WP	G13_001		Non-converged contingency	0	0.05864	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 &Harrington Station East Bus - Harrington Station Mid Bus 230KV C
FNSL-Blown up	0		2 18WP	G13_001		Non-converged contingency	0	0.05206	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 &GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FNSL-Blown up	0		2 18WP	G13_001		Non-converged contingency	0	0.04252	-	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1
FNSL-Blown up	0		2 18WP	G13_001		Non-converged contingency	0	0.03385	-	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 &CHAN/TASCOS6230.00 - POTTER COUNTY INTERCHANGE 230KV CKT 1
FNSL-Blown up	0		2 23SP	G13_001		Non-converged contingency	0	0.27479	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 &G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1
FNSL-Blown up	0		2 23SP	G13_001		Non-converged contingency	0	0.06491	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 &Harrington Station East Bus - Harrington Station Mid Bus 230KV C
FNSL-Blown up	0		2 23SP	G13_001		Non-converged contingency	0	0.05999	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 &BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FNSL-Blown up	0		2 23SP	G13_001		Non-converged contingency	0	0.0552	-	CROCKETT - TENASKA RUSK COUNTY 345KV CKT 1 &LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FNSL-Blown up	0		2 23SP	G13_001		Non-converged contingency	0	0.054	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 &GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FNSL-Blown up	0		2 23SP	G13_001		Non-converged contingency	0	0.05244	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 &GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FNSL-Blown up	0		2 23SP	G13_001		Non-converged contingency	0	0.03594	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 &Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CK
FNSL-Blown up	0		2 23SP	G13_001		Non-converged contingency	0	0.03184	-	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 &HARRINGTON STATION - NICHOLS STATION 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	CANYON EAST SUB - OSAGE SWITCHING STATION 115KV CKT 1	96	0.03672	107.7998	CARLISLE INTERCHANGE - LUBBOCK POWER & LIGHT-MILWAUKEE 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	CANYON EAST SUB - OSAGE SWITCHING STATION 115KV CKT 1	96	0.04441	102.7822	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	EAST PLANT INTERCHANGE - MANHATTAN SUB 115KV CKT 1	154	0.03701	100.2353	Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.06723	104.511	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.06723	104.511	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2
FDNS	02ALL		2 13G	G13_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.06723	103.4737	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.06723	103.4737	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2
FDNS	06ALL		2 13G	G13_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.13592	102.8098	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 &Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G13_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.13592	101.8958	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 &Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.05861	101.3479	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.05508	100.926	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 &G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G13_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.04982	100.9204	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.05979	100.877	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.05508	100.7742	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 &G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.05861	100.534	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.05508	100.136	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 &G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G13_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.04982	100.1193	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 &G13_017T 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.05979	100.0902	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.05508	100	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 &G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.05092	99.9	NORTHEAST STATION - ONETA 345KV CKT 1 &LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	287	0.0509	99.9	TULSA NORTH - WEKIWA 345KV CKT 1 &LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.05971	134.105	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 &G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.05971	133.329	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 &G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.04115	101.7287	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 &MATTHEWSON 345.00 - TATONGA7 345.00 345KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL	2	13G	G13_001	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.04115	101.7287	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & MATTHEWSON 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05971	240.4123	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05971	239.0091	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04115	180.5378	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & MATTHEWSON 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04115	180.5378	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & MATTHEWSON 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04035	176.5798	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & BORDER 7345.00 - SWEETWATER7 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04035	173.7551	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03778	164.8305	MATTHEWSON 345.00 - NORTHWEST 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0375	164.115	CIMARRON - DRAPER LAKE 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03744	163.8798	CIMARRON - MINCO 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03817	163.847	MATTHEWSON 345.00 - WOODRING 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03744	163.4406	GRACEMONT - MINCO 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03722	163.0312	CIMARRON - MATTHEWSON 345.00 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03722	163.0312	CIMARRON - MATTHEWSON 345.00 345KV CKT 2 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	162.7889	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & CHSHLMV7 345.00 - HUNTERS7 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	162.7571	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G12-032 345.00 - G12-032 TAP 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0372	162.716	JOHNSON COUNTY - SUNNYSIDE 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03754	162.6567	ARCADIA - NORTHWEST 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03716	162.5653	DRAPER LAKE - SEMINOLE 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03716	162.54	DRAPER LAKE - SEMINOLE 345KV CKT 2 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03715	162.5325	DRAPER LAKE - SEMINOLE 345KV CKT 3 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03706	162.5316	G12-041 TAP 345.00 - SOONER 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03706	162.5265	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G12-032 TAP 345.00 - G12-041 TAP 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03716	162.5173	FT SMITH - MUSKOGEE 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	162.4955	MUSKOGEE - PECAN CREEK 345KV CKT 2 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03714	162.4945	ARCADIA - SEMINOLE 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03717	162.4894	CIMARRON - NORTHWEST 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	162.4652	MUSKOGEE - PECAN CREEK 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	162.4472	ORIGINW7 345.00 - SUNNYSIDE 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0377	162.4406	NORTHWEST - SPRING CREEK 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	162.4363	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G12-016 345.00 - G12-016 TAP 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	162.4363	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G12-041 345.00 - G12-041 TAP 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03714	162.4351	ARCADIA - REDBUD 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03714	162.4304	ARCADIA - REDBUD 345KV CKT 2 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03733	162.4267	MUSKOGEE - SEMINOLE 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0377	162.4166	SOONER - SPRING CREEK 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	162.4137	G08-46 345.00 - SUNNYSIDE 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	162.4118	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & CANHILLS TAP345.00 - G12-031 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	162.3754	MINCO - MINCO WIND 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	162.3643	G11-010 345.00 - MINCO 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	162.3317	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & CANADIN7 345.00 - CANHILLS TAP345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	162.3307	CANHILLS TAP345.00 - CIMARRON 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	162.3167	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G11-007 345.00 - MATTHEWSON 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03694	162.3016	SOONER - WOODRING 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	162.1143	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & CRSRDSW7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03703	161.9957	HUNTERS7 345.00 - WOODRING 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	161.762	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G11_051T 345.00 - G11_051_1 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	161.7528	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G07-21 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	161.4085	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G11_024_1 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	161.407	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G08-19 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	160.474	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G07-62 345.00 - G07-62-1 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	160.474	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G07-62 345.00 - G07-62-2 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	160.4536	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G07-62 345.00 - G07-62-3 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	160.4536	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G07-62 345.00 - G07-62-4 345.00 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	159.5452	G11_019_1 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	159.5452	G11_020_1 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	154.7761	G07-62 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03552	138.6374	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 & G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03168	136.9127	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 & G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03552	134.3413	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03168	133.1496	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1 & G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03017	130.452	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 & G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03134	130.0699	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 & G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03504	129.7806	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03182	126.5005	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 & G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03182	126.5005	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 & G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.04983	124.2482	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03073	123.6668	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03378	123.1369	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 & G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03552	123.1119	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03168	122.2458	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 & AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	02ALL	2	13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03552	118.7001	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 & AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1



SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL		2 13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03168	118.4082	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03017	115.9757	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03134	115.4748	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03504	114.289	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03182	112.073	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03182	112.073	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.04983	109.7999	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03073	109.1117	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03378	107.835	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 &DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1	96	0.03047	101.1778	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	HAPPY INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03552	117.0935	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	HAPPY INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03168	115.0798	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	HAPPY INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03552	112.7057	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	HAPPY INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03168	111.3867	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	HAPPY INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03017	108.6888	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	HAPPY INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03134	108.2799	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	HAPPY INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03504	108.1549	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	HAPPY INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03182	104.7968	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	HAPPY INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03182	104.7968	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	HAPPY INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.04983	102.5886	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	HAPPY INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03073	102.0829	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	HAPPY INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03378	101.5386	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	HAPPY INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03552	101.5333	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 &BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	FROM->TO	HAPPY INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03168	100.4868	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	0		2 13SP	G13_001	FROM->TO	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1	617	0.06599	100	Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2 &Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G13_001	FROM->TO	HARRINGTON STATION - NICHOLS STATION 230KV CKT 2	617	0.06582	100.2794	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 &Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 13SP	G13_001	FROM->TO	HARRINGTON STATION - RANDALL COUNTY INTERCHANGE 230KV CKT 1	351	0.05369	109.4901	HARRINGTON STATION - NICHOLS STATION 230KV CKT 1 &Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.10885	113.9392	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.10885	109.4313	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &G11_012T 230.00 - MOORE COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0332	109.2135	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03062	105.5622	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03048	105.4767	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03038	105.3238	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03038	105.3235	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	105.258	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 &HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	105.1641	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &BUSHLAND INTERCHANGE - WILDOR2_US6230.00 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0305	105.15	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & PLANT X STATION - TOLK STATION EAST 230KV CKT 2
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03051	105.1444	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	105.1139	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03061	105.1085	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	105.0966	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0332	105.0942	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03062	105.0825	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03064	105.0601	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	105.0552	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03068	105.053	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & HARRINGTON STATION - NICHOLS STATION 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03061	105.053	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & NEWHART 230 - PLANT X STATION 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03062	105.0482	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03062	105.0374	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	105.0373	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K33 230KV
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	105.0343	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	105.0188	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	105.0178	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03062	105.0073	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & CUNNINGHAM STATION - HOBBS INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	105.0036	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03062	105.0032	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	105.0024	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9987	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 & HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03065	104.9945	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9802	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9801	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.976	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9756	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & PLEASANT HILL - ROOSEVELT COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03062	104.9749	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9698	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9666	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9653	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & OASIS INTERCHANGE - PLEASANT HILL 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9648	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9647	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9646	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9644	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.964	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB	TDF	TC%LOADING (% MVA)	CONTINGENCY
							(MVA)			
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9626	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9622	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9621	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.962	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &G11_048_1 230.00 - Golden Spread REC - Mustang Interchange 230 KV Generation Bus 23
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9568	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9556	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &G13_013T 345.00 - TOLK STATION 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9556	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &G13_013T 345.00 - TOLK STATION 345KV CKT 2
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9542	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03064	104.9535	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &HOBBS INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9534	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03061	104.9533	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03056	104.9492	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03062	104.9465	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &NEWHART 230 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9427	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 &HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9412	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03046	104.9406	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - RANDALL COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9313	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.9313	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03043	104.9284	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03066	104.9235	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03061	104.9225	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03064	104.9201	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03061	104.8912	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03057	104.8638	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.8195	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0306	104.8136	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0306	104.7891	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03066	104.7869	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.7641	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03211	104.6751	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.665	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.6241	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03039	104.6236	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.6176	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03405	104.6141	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03011	104.5766	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03035	104.5353	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03003	104.4893	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03037	104.4208	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.3936	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & BEAVER CO 345.00 - G11_014_1 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.3223	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & Golden Spread REC - Mustang Interchange 230 kv Generation Bus - MUSTANG STATION 230KV
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03698	104.3033	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03698	104.3033	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.2819	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.1525	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.1486	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.0338	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03162	104.026	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & CHERRY1 - HARRINGTON STATION 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03204	104.0217	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	104.012	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	103.9703	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	103.8524	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	103.8216	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G10-14 345.00 - Hitchland Interchange 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	103.4843	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G13_016_1 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	103.4457	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G12-037 345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03629	102.4818	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03062	101.514	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03048	101.4472	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & LUBBOCK SOUTH INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03038	101.2986	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03038	101.2983	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	101.2184	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1 & HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	101.1415	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & BUSHLAND INTERCHANGE - WILDOR2_JUS6230.00 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0305	101.1285	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & PLANT X STATION - TOLK STATION EAST 230KV CKT 2
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03051	101.123	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & PLANT X STATION - TOLK STATION WEST 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	101.0924	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & BUFFALO 230.00 - G06-47 230.00 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	101.0762	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & WILDOR2_JUS6230.00 - WILDORADO WIND GEN 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03061	101.0718	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03062	101.0462	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03064	101.0414	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & JONES STATION - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	101.0363	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & Roosevelt County Interchange SOUTH - TOLK STATION EAST 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03068	101.0361	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & HARRINGTON STATION - NICHOLS STATION 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03061	101.0351	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & NEWHART 230 - PLANT X STATION 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	101.0222	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K33 230KV
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03062	101.0193	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & JONES STATION - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	101.0158	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & ROOSEVELT COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 2
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03062	101.0118	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	101.0011	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	101.0001	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & JONES STATION - Jones Station Bus#2 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9915	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & EAST PLANT INTERCHANGE - HARRINGTON STATION 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03062	100.99	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & CUNNINGHAM STATION - HOBBS INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9863	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & TOLK STATION EAST - TOLK STATION TAP 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03062	100.9859	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & PECOS INTERCHANGE - POTASH JUNCTION INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03065	100.9806	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & Harrington Station Mid Bus - NICHOLS STATION 230KV CKT 2
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9651	LUBBOCK EAST INTERCHANGE - LUBBOCK POWER & LIGHT-WADSWORTH 230KV CKT 1 & HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9593	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & OASIS INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9589	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & PLEASANT HILL - ROOSEVELT COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03062	100.9584	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & PECOS INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9503	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & ROOSEVELT COUNTY INTERCHANGE - Roosevelt County Interchange SWITCH #4K33 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9489	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & OASIS INTERCHANGE - PLEASANT HILL 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9485	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - OXYBRU_TP 6230.00 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9484	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & OXYBRU_TP 6230.00 - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9483	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & AMOCO WASSON SWITCHING STATION - MUSTANG STATION 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9481	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & MUSTANG STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9477	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & SAN JUAN MESA TAP - SAN JUAN MESA WIND GEN 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9467	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & Jones Station Bus#2 - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9465	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9464	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G08-09 230.00 - SAN JUAN MESA TAP 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.946	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G12_043_1 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9459	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G13_013T 345.00 - G13_013_1 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9458	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G11_048_1 230.00 - Golden Spread REC - Mustang Interchange 230 kV Generation Bus 23
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.941	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & HOBBS INTERCHANGE - NEF 230.00 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9406	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & CHAVESCO 345.00 - G08-22 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9395	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9395	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G13_013T 345.00 - TOLK STATION 345KV CKT 2
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03064	100.9374	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & HOBBS INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9374	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - SEVEN RIVERS INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9352	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03062	100.9332	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & NEWHART 230 - SWISHER COUNTY INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03056	100.9332	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & TOLK STATION WEST - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9286	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & GRASSLAND INTERCHANGE - Jones Station Bus#2 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.927	Jones Station Bus#2 - LUBBOCK POWER & LIGHT-HOLLY PLANT 230KV CKT 1 & HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03046	100.9249	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & AMARILLO SOUTH INTERCHANGE - RANDALL COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03061	100.9193	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & OASIS INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9158	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G12_001T 230.00 - G12_001_1 230.00 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.9158	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G12_001T 230.00 - GRASSLAND INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03043	100.9129	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03066	100.9082	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03061	100.9073	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & TOLK STATION TAP - TOLK STATION WEST 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03064	100.9057	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & HARRINGTON STATION - Harrington Station Mid Bus 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03061	100.8767	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & CHAVES COUNTY INTERCHANGE - SAN JUAN MESA TAP 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03057	100.8337	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.8084	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G08-51 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0306	100.8008	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & CHAVESCO 345.00 - G13_013T 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03066	100.7747	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.0306	100.7613	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & CHAVESCO 345.00 - EDDY COUNTY INTERCHANGE 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.7526	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03211	100.6673	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & CHERRY1 - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.6559	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.616	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G10-46 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03039	100.6128	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.6123	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G11_012T 230.00 - G11_012_1 230.00 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03011	100.5757	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03405	100.5572	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & MOORE COUNTY INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03035	100.5301	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03003	100.4847	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03037	100.4151	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & Harrington Station Mid Bus - RANDALL COUNTY INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.385	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & BEAVER CO 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03698	100.3422	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03698	100.3422	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.3251	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION 230KV
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.2929	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & G11_012T 230.00 - G13_001_1 230.00 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.1471	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & BEAVER CO 345.00 - G11_021_1 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100.1434	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & BEAVER CO 345.00 - G10-01 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03204	100	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 & Harrington Station East Bus - POTTER COUNTY INTERCHANGE 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03162	100	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &CHERRY1 - HARRINGTON STATION 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &ANTELOPE 1 - TUCO INTERCHANGE 230KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &BEAVER CO 345.00 - G08-47 345.00 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	100	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &G11_022_1 345.00 - Hitchland Interchange 345KV CKT 1
FDNS	0		2 23SP	G13_001	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	250	0.03063	99.9	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1 &FINNEY SWITCHING STATION - G08-18 345.00 345KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	KRESS INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03552	113.8742	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	KRESS INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03168	111.8214	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	KRESS INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03552	109.477	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	KRESS INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03168	108.1339	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	KRESS INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03017	105.436	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	KRESS INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03134	105.0251	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	KRESS INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03504	104.9259	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	KRESS INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03182	101.5552	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	KRESS INTERCHANGE - TULIA TAP 115KV CKT 1	96	0.03182	101.5552	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03552	141.5511	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03168	139.8281	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03552	137.2461	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03168	136.0536	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03017	133.356	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03134	132.9778	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03504	132.6779	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03182	129.3967	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03182	129.3967	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.04983	127.1414	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03073	126.5535	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03378	126.0264	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1 &G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03552	125.9943	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 &BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03168	125.1409	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03552	121.5774	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03168	121.2964	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03017	118.8622	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03134	118.3607	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03504	117.1618	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03182	114.9498	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03182	114.9498	BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.04983	112.6719	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 &AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03073	111.9787	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1 & AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03378	110.702	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.03047	104.0481	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1 & BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G13_001	FROM->TO	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	351	0.04991	106.7153	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G13_001	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.05268	132.5562	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & G12-020 230.00 - TUCO INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G13_001	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.05268	105.9017	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G13_001	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.06346	103.4799	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G13_001	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.08814	101.4807	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	06ALL		2 13G	G13_001	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.03154	100.694	SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1 & SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G13_001	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.03537	100.2273	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	06ALL		2 13G	G13_001	FROM->TO	TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1	502	0.03025	100.0537	G11_012T 230.00 - HITCHLAND INTERCHANGE 230KV CKT 1 & PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
FDNS	06ALL		2 13G	G13_001	FROM->TO	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.03891	104.5768	TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G13_001	FROM->TO	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.03891	104.57	TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G13_001	FROM->TO	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.03891	103.4195	TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G13_001	FROM->TO	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.03891	103.4142	TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1 & G13_017T 345.00 - G13_017_1 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G13_001	FROM->TO	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.03483	101.5497	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G13_001	FROM->TO	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.03483	101.5423	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	06ALL		2 13G	G13_001	FROM->TO	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.03483	99.9	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & TUCO INTERCHANGE - TUCO2 230.00 230KV CKT 1
FDNS	06ALL		2 13G	G13_001	FROM->TO	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.03483	99.9	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1 & TUCO INTERCHANGE - TUCO2 345.00 345KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	WOODWARD - WOODWARD EHV 138KV CKT 1	287	0.05013	111.8613	G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		2 13G	G13_001	TO->FROM	WOODWARD - WOODWARD EHV 138KV CKT 1	287	0.05013	111.2107	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1 & G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1



## **J: Group 2 Dynamic Stability Analysis Report**

See report on next page.



# Group 2 Impact Study

## PISIS-2013-001

August 2013  
Generator Interconnection



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## Executive Summary

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PISIS-2013-001 Interconnection Customers have requested a Definitive Interconnection System Impact Study detailing the impacts of interconnecting the generation projects shown below.

- GEN-2013-001 – 200.0MW wind farm using G.E. 1.6MW generators connected to a 230kV substation along the Hitchland – Moore County 230kV transmission line on the Southwestern Public Service (SPS) Transmission System.

There are sixteen (16) previously queued generation projects in the Group 2 area.

A stability analysis and power factor analysis were performed for the addition of the generation project in Group 2. The analyses were performed on three seasonal models, the modified versions of the 2014 summer peak, the 2014 winter peak, and the 2023 summer peak cases. A total of fifty-five (55) contingencies were evaluated for each season.

With all Base Case and previously assigned Network Upgrades in service, GEN-2013-001 was found to remain on line, and the transmission system was found to remain stable for all conditions studied. The wind turbine generators in GEN-2013-001 have the capability of pre-contingency voltage recovery, and the post fault voltage recovery was found to be within the criterion of 0.7 pu to 1.2 pu.

The power factor analysis showed that GEN-2013-001 required a power factor range of 0.99 leading (absorbing) to 0.97 lagging (supplying) for the three study cases, 2014 summer, 2014 winter, and 2023 summer peak conditions. GEN-2013-001 will be required to provide the pro-forma standard 0.95 leading (absorbing) to 0.95 lagging (supplying) at the Point of Interconnection.

Low Voltage Ride Through (LVRT) analysis showed no generators tripping offline due to low voltage.

All generators in the monitored areas remained stable for all of the modeled disturbances.

Nothing in this study should be construed as a guarantee of delivery or transmission service. If the customer wishes to sell power from the facility, a separate request for transmission service must be requested on Southwest Power Pool's OASIS by the Customer.

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## Introduction

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PISIS-2013-001 Interconnection Customers have requested a Definitive Interconnection System Impact Study detailing the impacts of interconnecting the generation projects shown below.

- GEN-2013-001 – 200.0MW wind farm using G.E. 1.6MW generators connected to a 230kV substation along the Hitchland – Moore County 230kV transmission line on the Southwestern Public Service (SPS) Transmission System.

There are sixteen (16) previously queued generation projects in the Group 2 area. These Interconnection Requests are listed below.

- ASGI-2011-002 – 10MW of DeWind 2.0MW wind generators interconnected at the Herring 115kV substation.
- GEN-2002-008 – 240MW of G.E. 1.5MW wind generator interconnected to the Hitchland 345kV substation.
- GEN-2002-009 – 79.8MW of Suzlon 2.1MW wind generators interconnected to the Hansford 115kV substation.
- GEN-2003-020 – 159MW of G.E. 1.5MW wind generators interconnected at the Martin 115kV substation.
- GEN-2006-020S – 20MW of DeWind 2.0MW wind generators interconnected at the DWS Frisco 115kV substation.
- GEN-2006-044 – 370MW of DeWind 2.0MW wind generators interconnected at the Hitchland 345kV substation.
- GEN-2007-046 – 199.5MW of G.E. 1.5MW wind generators interconnected at the Hitchland 115kV substation.
- GEN-2007-057 – 34.5MW of G.E. 1.5MW wind generators interconnected at the Moore County East 115kV substation.
- GEN-2008-047 – 300MW of G.E. 1.5MW wind generators interconnected at the Beaver County 345kV substation.
- GEN-2008-124T – 42MW of G.E. 1.5MW wind generators interconnected at the Texas County Keyes 69kV substation.
- GEN-2010-001 – 300.3MW of Suzlon 2.1MW wind generators interconnected at the Beaver County 345kV substation
- GEN-2010-014 – 358.8MW of Siemens 2.3MW wind generators interconnected at the Hitchland 345kV substation.
- GEN-2011-012 – 104.5MW of G.E. 2.75MW wind generators interconnected to a 230kV substation along the Hitchland – Moore County 230kV transmission line.
- GEN-2011-014 – 201MW of Siemens 3.0MW wind generators interconnected at the Beaver County 345kV substation.
- GEN-2011-021 – 299MW of Siemens 2.3MW wind generators interconnected at the Beaver County 345kV substation
- GEN-2011-022 – 299MW of Siemens 2.3MW wind generators interconnected at the Hitchland 345kV substation

A stability analysis and a power factor analysis were performed for the addition of the generation project in Group 2. The analyses were performed on three seasonal models, the modified versions of the 2014 summer peak, the 2014 winter peak, and the 2023 summer peak cases.

The stability analysis determines the impacts of the new interconnecting project on the stability and voltage recovery of the nearby systems and the ability of the interconnecting project to meet FERC Order 661A. If problems with stability or voltage recovery are identified, the need for reactive compensation or system upgrades is investigated. The three-phase faults and the single line-to-ground faults listed in Table 1 were used in the stability analysis.

The power factor analysis determines the power factor at the point of interconnection for the wind interconnection project for pre-contingency and post-contingency conditions. The contingencies used in the power factor analysis (Table 3) are a subset of the stability analysis contingencies shown in Table 1.

Nothing in this System Impact Study constitutes a request for transmission service or grants the Interconnection Customer any rights to transmission service.

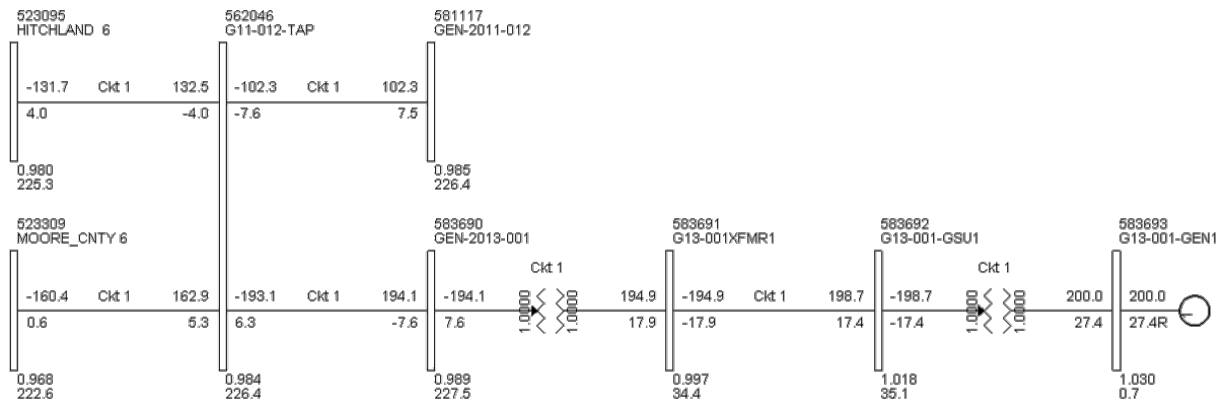
# Facilities

## Generating Facility

GEN-2013-001 Interconnection Customer’s request to interconnect a total of 200.0MW is comprised of one-hundred twenty-five (125) G.E. 1.6MW wind turbine generators and associated interconnection facilities.

## Interconnection Facilities

The Point of Interconnection for GEN-2013-001 Interconnection Customer is a 230kV substation along the Hitchland – Moore County 230kV transmission line in Sherman County, Texas. Figure 1 depicts the one-line diagram of the local transmission system including the POI as well as the power flow model representing the request.



**Figure 1: Proposed POI Configuration and Request Power Flow Model**

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## Stability Analysis

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Transient stability analysis is used to determine if the transmission system can maintain angular stability and ensure bus voltages stay within planning criteria bandwidth during and after a disturbance while considering the addition of a generator interconnection request.

### Model Preparation

Transient stability analysis was performed using modified versions of the 2012 series of Model Development Working Group (MDWG) dynamic study models including the 2014 summer peak, 2014 winter peak, and the 2023 summer peak seasonal models. The cases are then loaded with prior queued interconnection requests and network upgrades assigned to those interconnection requests. Finally the prior queued and study generation are dispatched into the SPP footprint. Initial simulations are then carried out for a no-disturbance run of twenty (20) seconds to verify the numerical stability of the model.

### Disturbances

Fifty-five (55) contingencies were identified for use in this study and are listed in Table 1. These contingencies included three-phase faults and single-phase line faults at locations defined by SPP. Single-phase line faults were simulated by applying fault impedance to the positive sequence network at the fault location to represent the effect of the negative and zero sequence networks on the positive sequence network. The fault impedance was computed to give a positive sequence voltage at the specified fault location of approximately 60% of pre-fault voltage. This method is in agreement with SPP current practice.

Except for transformer faults, the typical sequence of events for a three-phase and a single-phase fault is as follows:

1. apply fault at particular location
2. continue fault for five (5) cycles, clear the fault by tripping the faulted facility
3. after an additional twenty (20) cycles, re-close the previous facility back into the fault
4. continue fault for five (5) additional cycles
5. trip the faulted facility and remove the fault

Transformer faults are typically modeled as three-phase faults, unless otherwise noted. The sequence of events for a transformer fault is as follows:

1. apply fault for five (5) cycles
2. clear the fault by tripping the affected transformer facility (unless otherwise noted there will be no re-closing into a transformer fault)



**Table 1 – Contingencies Evaluated**

Cont. No.	Contingency Name	Description
1	FLT_01_G1112tap_Hitchland_230kV_3PH	3 phase fault on the GEN-2013-001 Tap (562046) to Hitchland (523095) 230kV line, near GEN-2013-001 Tap. a. Apply fault at the GEN-2013-001 Tap 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
2	FLT_02_G1112tap_Hitchland_230kV_1PH	<i>Single phase fault and sequence like previous</i>
3	FLT_03_G1112tap_MooreCNTY_230kV_3PH	3 phase fault on the GEN-2013-001 Tap (562046) to Moore County (523309) 230kV line, near GEN-2013-001 Tap. a. Apply fault at the GEN-2013-001 Tap 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
4	FLT_04_G1112tap_MooreCNTY_230kV_1PH	<i>Single phase fault and sequence like previous</i>
5	FLT_05_MooreCNTY_PotterCo6_230kV_3PH	3 phase fault on the Moore County (523309) to Potter County (523959) 230kV line, near Moore County. a. Apply fault at the Moore County 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
6	FLT_06_MooreCNTY_PotterCo6_230kV_1PH	<i>Single phase fault and sequence like previous</i>
7	FLT_07_MooreCNTY_MooreE_230_115kV_3PH	3 phase fault on the Moore County 230kV (523309) / Moore County East 115kV (523308) / Moore County 13.2kV (523302) transformer, near Moore County 230kV. a. Apply fault at the Moore County 230kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
8	FLT_08_PotterCo6_HARRNGEST6_230kV_3PH	3 phase fault on the Harrington East (523979) to Potter County (523959) 230kV line, near Potter County. a. Apply fault at the Potter County 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
9	FLT_09_PotterCo6_HARRNGEST6_230kV_1PH	<i>Single phase fault and sequence like previous</i>
10	FLT_10_PotterCo6_Cherry6_230kV_3PH	3 phase fault on the Cherry (524010) to Potter County (523959) 230kV line, near Potter County. a. Apply fault at the Potter County 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
11	FLT_11_PotterCo6_Cherry6_230kV_1PH	<i>Single phase fault and sequence like previous</i>

**Table 1 – Contingencies Evaluated**

Cont. No.	Contingency Name	Description
12	FLT_12_PotterCo6_BUSHLA ND6_230kV_3PH	3 phase fault on the Bushland (524267) to Potter County (523959) 230kV line, near Potter County. a. Apply fault at the Potter County 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
13	FLT_13_PotterCo6_BUSHLA ND6_230kV_1PH	<i>Single phase fault and sequence like previous</i>
14	FLT_14_PotterCo6_PlantX_230kV_3PH	3 phase fault on the Potter County (523959) to Plant X (525481) 230kV line, near Potter County. a. Apply fault at the Potter County 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
15	FLT_156_PotterCo6_PlantX_230kV_1PH	<i>Single phase fault and sequence like previous</i>
16	FLT_16_PotterCo6_POTTERC O3_230_115kV_3PH	3 phase fault on the Potter County 230kV (523959) / 115kV (523951) / 13.2kV (523950) transformer, near Potter County 230kV. a. Apply fault at the Potter County 230kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
17	FLT_17_PotterCo6_POTTERC O7_230_345kV_3PH	3 phase fault on the Potter County 345kV (523961) / 230kV (523959) / 13.2kV (523957) transformer, near Potter County 230kV. a. Apply fault at the Potter County 230kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
18	FLT_18_HARRNGEST6_PRIN GLE6_230kV_3PH	3 phase fault on the Harrington East (523979) to Pringle (523267) 230kV line, near Harrington East. a. Apply fault at the Harrington East 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
19	FLT_19_HARRNGEST6_PRIN GLE6_230kV_1PH	<i>Single phase fault and sequence like previous</i>
20	FLT_20_HARRNGEST6_RAND ALL6_230kV_3PH	3 phase fault on the Harrington East (523979) to Randall County (524365) 230kV line, near Harrington East. a. Apply fault at the Harrington East 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
21	FLT_21_HARRNGEST6_RAND ALL6_230kV_1PH	<i>Single phase fault and sequence like previous</i>
22	FLT_22_HARRNGMID6_RAN DALL6_230kV_3PH	3 phase fault on the Harrington Mid. (523978) to Randall County (524365) 230kV line, near Harrington Mid. a. Apply fault at the Harrington Mid. 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
23	FLT_23_HARRNGMID6_RAN DALL6_230kV_1PH	<i>Single phase fault and sequence like previous</i>

**Table 1 – Contingencies Evaluated**

Cont. No.	Contingency Name	Description
24	FLT_24_HARRNGMID6_NICH OLS6_230kV_3PH	3 phase fault on the Harrington Mid. (523978) to Nichols (524044) 230kV line, near Harrington Mid. a. Apply fault at the Harrington Mid. 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
25	FLT_25_HARRNGMID6_NICH OLS6_230kV_1PH	<i>Single phase fault and sequence like previous</i>
26	FLT_26_HARRNGWST6_Cher ry6_230kV_3PH	3 phase fault on the Cherry (524010) to Harrington West (523977) 230kV line, near Harrington West. a. Apply fault at the Harrington West 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
27	FLT_27_HARRNGWST6_Cher ry6_230kV_1PH	<i>Single phase fault and sequence like previous</i>
28	FLT_28_HARRNGWST6_NIC HOLS6_230kV_3PH	3 phase fault on the Harrington West (523977) to Nichols (524044) 230kV line, near Harrington West. a. Apply fault at the Harrington West 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
29	FLT_29_HARRNGWST6_NIC HOLS6_230kV_1PH	<i>Single phase fault and sequence like previous</i>
30	FLT_30_Cherry6_HARRNGW ST6_230kV_3PH	3 phase fault on the Cherry (524010) to Harrington West (523977) 230kV line, near Cherry. a. Apply fault at the Cherry 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
31	FLT_31_Cherry6_HARRNGW ST6_230kV_1PH	<i>Single phase fault and sequence like previous</i>
32	FLT_32_Cherry6_Cherry3_23 0_115kV_3PH	3 phase fault on the Cherry 230kV (524010) / 115kV (524009) / 13.2kV (524008) transformer, near Cherry 230kV. a. Apply fault at the Cherry 230kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
33	FLT_33_BUSHLAND6_BUFFA LO_230kV_3PH	3 phase fault on the Buffalo (560009) to Bushland (524267) 230kV line, near Bushland. a. Apply fault at the Bushland 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
34	FLT_34_BUSHLAND6_BUFFA LO_230kV_1PH	<i>Single phase fault and sequence like previous</i>
35	FLT_35_BUSHLAND6_BUSHL AND3_230_115kV_3PH	3 phase fault on the Bushland 230kV (524267) / 115kV (524266) / 13.2kV (524263) transformer, near Bushland 230kV. a. Apply fault at the Bushland 230kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.

**Table 1 – Contingencies Evaluated**

Cont. No.	Contingency Name	Description
36	FLT_36_POTTERCO7_HITCHLAND7_345kV_3PH	3 phase fault on the Hitchland (523097) to Potter County (523961) 345kV line, near Potter County. a. Apply fault at the Potter County 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
37	FLT_37_POTTERCO7_HITCHLAND7_345kV_1PH	<i>Single phase fault and sequence like previous</i>
38	FLT_38_HITCHLAND7_FINNEY7_345kV_3PH	3 phase fault on the Finney (523853) to Hitchland (523097) 345kV line, near Hitchland. a. Apply fault at the Hitchland 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
39	FLT_39_HITCHLAND7_FINNEY7_345kV_1PH	<i>Single phase fault and sequence like previous</i>
40	FLT_40_HITCHLAND7_BEAVERCOUNTY_345kV_3PH	3 phase fault on the Beaver County (580500) to Hitchland (523097) 345kV Ckt 1, near Hitchland. a. Apply fault at the Hitchland 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
41	FLT_41_HITCHLAND7_BEAVERCOUNTY_345kV_1PH	<i>Single phase fault and sequence like previous</i>
42	FLT_42_HITCHLAND7_POTTERCO7_345kV_3PH	3 phase fault on the Hitchland (523097) to Potter County (523961) 345kV line, near Hitchland. a. Apply fault at the Hitchland 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
43	FLT_43_HITCHLAND7_POTTERCO7_345kV_1PH	<i>Single phase fault and sequence like previous</i>
44	FLT_44_Hitchland6_OCHILTREE6_230kV_3PH	3 phase fault on the Hitchland (523095) to Ochiltree (523155) 230kV line, near Hitchland. a. Apply fault at the Hitchland 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
45	FLT_45_Hitchland6_OCHILTREE6_230kV_3PH	<i>Single phase fault and sequence like previous</i>
46	FLT_46_Hitchland6_HITCHLAND7_230_115kV_3PH	3 phase fault on the Hitchland 230kV (523095) / 115kV (523093) / 13.2kV (523092) transformer, near Hitchland 230kV. a. Apply fault at the Hitchland 230kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
47	FLT_47_Hitchland6_HITCHLAND7_230_345kV_3PH	3 phase fault on the Hitchland 345kV (523097) / 230kV (523095) / 13.2kV (523091) transformer Ckt 1, near Hitchland 230kV. a. Apply fault at the Hitchland 230kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.

**Table 1 – Contingencies Evaluated**

Cont. No.	Contingency Name	Description
48	FLT_48_Hitchland6_HITCHLAND7_230_345kV_3PH	3 phase fault on the Hitchland 345kV (523097) / 230kV (523095) / 13.2kV (523091) transformer Ckt 2, near Hitchland 230kV. a. Apply fault at the Hitchland 230kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
49	FLT_49_OCHILTREE6_OCHILTREE3_230_115kV_3PH	3 phase fault on the Ochiltree 230kV (523155) / 115kV (523154) / 13.2kV (523151) transformer, near Ochiltree 230kV. a. Apply fault at the Ochiltree 230kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
50	FLT_50_FINNEY7_HOLCOMB_345kV_3PH	3 phase fault on the Finney (523853) to Holcomb (531449) 345kV line, near Finney. a. Apply fault at the Finney 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
51	FLT_51_FINNEY7_HOLCOMB_345kV_1PH	<i>Single phase fault and sequence like previous</i>
52	FLT_52_BEAVER_WWRDEHV7_345kV_3PH	3 phase fault on the Beaver County (580500) to Woodward (515375) 345kV Ckt 1, near Beaver County. a. Apply fault at the Beaver County 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
53	FLT_53_BEAVER_WWRDEHV7_345kV_1PH	<i>Single phase fault and sequence like previous</i>
54	FLT_54_BEAVER_BUCKNER7_345kV_3PH	3 phase fault on the Beaver County (580500) to Buckner (531501) 345kV line, near Beaver County. a. Apply fault at the Beaver County 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
55	FLT_55_BEAVER_BUCKNER7_345kV_1PH	<i>Single phase fault and sequence like previous</i>

**NOTE: For prior outage contingencies assume that the network is at steady state after the prior outage.**

## Power Factor Analysis

The power factor analysis was performed for this study and is designed to demonstrate the reactive power requirements at the point of interconnection. In order to perform the analysis the request and equivalent transmission lines and collectors systems were modeled using specifications provided by the Customer. Table 2 shows a summary of the power factor analysis at the POI, and Table 3 shows the contingencies and the resultant power factors at the POI.

**Table 2 – Summary of Power Factor Analysis at the POI**

Request	Capacity	POI	Fuel	Generator	Power Factor at POI Leading (absorbing vars)	Power Factor at POI Lagging (providing vars)
GEN-2013-001	200.0MW	Hitchland – Moore County 230kV transmission line	Wind	G.E. 1.6MW	0.99	0.97

**NOTE: As reactive power is required for all projects, the final requirement in the GIA will be the pro-forma 95% lagging to 95% leading at the point of interconnection.**

**Table 3 – Power Factor Analysis at the POI**

PISIS-2013-001 Group 2 POI – Pantex South 115kV (523945)		2014 Summer Voltage = 1.008 pu				2014 Winter Voltage = 1.008 pu				2023 Summer Voltage = 1.007 pu			
Cont. No.	Contingency Name	Power @ POI	VARS @ POI	Power Factor		Power @ POI	VARS @ POI	Power Factor		Power @ POI	VARS @ POI	Power Factor	
0	No Fault	200.0	31	0.9882	LAG	200.0	5.7	0.9996	LAG	200.0	13.8	0.9976	LAG
1	FLT_01_G1112TAP_HITCHLAND_230kV	200.0	21.8	0.9941	LAG	200.0	2.3	0.9999	LAG	200.0	6.2	0.9995	LAG
3	FLT_03_G1112TAP_MOORECNTY_230kV	200.0	21.3	0.9944	LAG	200.0	13.7	0.9977	LAG	200.0	17.5	0.9962	LAG
5	FLT_05_MOORECNTY_POTTERCO6_230kV	200.0	48.1	0.9723	LAG	200.0	12.4	0.9981	LAG	200.0	21.7	0.9942	LAG
7	FLT_07_MOORECNTY_MOOREE_230_115kV	200.0	6.2	0.9995	LAG	200.0	-1.4	0.9999	LEAD	200.0	4.5	0.9997	LAG
8	FLT_08_POTTERCO6_HARRNGEST6_230kV	200.0	31.8	0.9876	LAG	200.0	6.2	0.9995	LAG	200.0	14.8	0.9973	LAG
10	FLT_10_POTTERCO6_CHERRY6_230kV	200.0	29.7	0.9892	LAG	200.0	4.7	0.9997	LAG	200.0	12.8	0.9980	LAG
12	FLT_12_POTTERCO6_BUSHLAND6_230kV	200.0	32.4	0.9871	LAG	200.0	6.6	0.9995	LAG	200.0	14.3	0.9975	LAG
14	FLT_14_POTTERCO6_PLANTX_230kV	200.0	31.6	0.9877	LAG	200.0	7.1	0.9994	LAG	200.0	13.8	0.9976	LAG
16	FLT_16_POTTERCO6_POTTERCO3_230_115kV	200.0	33.3	0.9864	LAG	200.0	6.4	0.9995	LAG	200.0	24	0.9929	LAG
17	FLT_17_POTTERCO6_POTTERCO7_230_345kV	200.0	38.1	0.9823	LAG	200.0	14.2	0.9975	LAG	200.0	24	0.9929	LAG
18	FLT_18_HARRNGEST6_PRINGLE6_230kV	200.0	31.1	0.9881	LAG	200.0	5.6	0.9996	LAG	200.0	14.9	0.9972	LAG
20	FLT_20_HARRNGEST6_RANDALL6_230kV	200.0	31	0.9882	LAG	200.0	5.8	0.9996	LAG	200.0	13.9	0.9976	LAG
22	FLT_22_HARRNGMID6_RANDALL6_230kV	200.0	31.2	0.9880	LAG	200.0	5.9	0.9996	LAG	200.0	14	0.9976	LAG
24	FLT_24_HARRNGMID6_NICHOLS6_230kV	200.0	31	0.9882	LAG	200.0	5.7	0.9996	LAG	200.0	13.8	0.9976	LAG
26	FLT_26_HARRNGWST6_CHERRY6_230kV	200.0	33.7	0.9861	LAG	200.0	7.7	0.9993	LAG	200.0	17.1	0.9964	LAG
28	FLT_28_HARRNGWST6_NICHOLS6_230kV	200.0	31	0.9882	LAG	200.0	5.8	0.9996	LAG	200.0	13.9	0.9976	LAG
30	FLT_30_CHERRY6_HARRNGWST6_230kV	200.0	33.7	0.9861	LAG	200.0	7.7	0.9993	LAG	200.0	17.1	0.9964	LAG
32	FLT_32_CHERRY6_CHERRY3_230_115kV	200.0	30.4	0.9886	LAG	200.0	4.8	0.9997	LAG	200.0	13.2	0.9978	LAG
33	FLT_33_BUSHLAND6_BUFFALO_230kV	200.0	30.4	0.9886	LAG	200.0	7.3	0.9993	LAG	200.0	12.6	0.9980	LAG
35	FLT_35_BUSHLAND6_BUSHLAND3_230_115kV	200.0	29.7	0.9892	LAG	200.0	5.1	0.9997	LAG	200.0	12.4	0.9981	LAG
36	FLT_36_POTTERCO7_HITCHLAND7_345kV	200.0	40.5	0.9801	LAG	200.0	15.9	0.9969	LAG	200.0	25.7	0.9918	LAG
38	FLT_38_HITCHLAND7_FINNEY7_345kV	200.0	49	0.9713	LAG	200.0	26.5	0.9913	LAG	200.0	30.1	0.9889	LAG

**Table 3 – Power Factor Analysis at the POI**

PISIS-2013-001 Group 2 POI – Pantex South 115kV (523945)		2014 Summer Voltage = 1.008 pu				2014 Winter Voltage = 1.008 pu				2023 Summer Voltage = 1.007 pu			
Cont. No.	Contingency Name	Power @ POI	VARs @ POI	Power Factor		Power @ POI	VARs @ POI	Power Factor		Power @ POI	VARs @ POI	Power Factor	
40	FLT_40_HITCHLAND7_BEAVER_345kV	200.0	30.2	0.9888	LAG	200.0	5	0.9997	LAG	200.0	14.2	0.9975	LAG
42	FLT_42_HITCHLAND7_POTTERCO7_345kV	200.0	40.5	0.9801	LAG	200.0	15.9	0.9969	LAG	200.0	25.7	0.9918	LAG
44	FLT_44_Hitchland6_OCHILTREE6_230kV	200.0	34.1	0.9858	LAG	200.0	8.7	0.9991	LAG	200.0	17.8	0.9961	LAG
46	FLT_46_Hitchland6_HITCHLAND3_230_115kV	200.0	30.3	0.9887	LAG	200.0	4	0.9998	LAG	200.0	9.5	0.9989	LAG
47	FLT_47_Hitchland6_HITCHLAND7_230_345kV	200.0	28.5	0.9900	LAG	200.0	4.2	0.9998	LAG	200.0	15.4	0.9970	LAG
48	FLT_48_Hitchland6_HITCHLAND7_230_345kV	200.0	28.5	0.9900	LAG	200.0	4.2	0.9998	LAG	200.0	15.4	0.9970	LAG
49	FLT_49_OCHILTREE6_OCHILTREE3_230_115kV	200.0	31.6	0.9877	LAG	200.0	6.3	0.9995	LAG	200.0	15.4	0.9970	LAG
50	FLT_50_FINNEY7_HOLCOMB_345kV	200.0	31	0.9882	LAG	200.0	5.7	0.9996	LAG	200.0	13.8	0.9976	LAG
52	FLT_52_BEAVER_WWRDEHV7_345kV	200.0	48.6	0.9717	LAG	200.0	23.5	0.9932	LAG	200.0	30.7	0.9884	LAG
54	FLT_54_BEAVER_BUCKNER7_345kV	200.0	46.3	0.9742	LAG	200.0	21.8	0.9941	LAG	200.0	26	0.9917	LAG



## Results

The stability analysis was performed and the results are summarized in **Error! Reference source not found.4**. The results indicate that the transmission system remained stable for all contingencies studied. The plots will be available upon request.

**Table 4 – Stability Analysis Results**

Contingency Number and Name		2014SP	2014WP	2023SP
1	FLT_01_G1112tap_Hitchland_230kV_3PH	Stable	Stable	Stable
2	FLT_02_G1112tap_Hitchland_230kV_1PH	Stable	Stable	Stable
3	FLT_03_G1112tap_MooreCNTY_230kV_3PH	Stable	Stable	Stable
4	FLT_04_G1112tap_MooreCNTY_230kV_1PH	Stable	Stable	Stable
5	FLT_05_MooreCNTY_PotterCo6_230kV_3PH	Stable	Stable	Stable
6	FLT_06_MooreCNTY_PotterCo6_230kV_1PH	Stable	Stable	Stable
7	FLT_07_MooreCNTY_MooreE_230_115kV_3PH	Stable	Stable	Stable
8	FLT_08_PotterCo6_HARRNGEST6_230kV_3PH	Stable	Stable	Stable
9	FLT_09_PotterCo6_HARRNGEST6_230kV_1PH	Stable	Stable	Stable
10	FLT_10_PotterCo6_Cherry6_230kV_3PH	Stable	Stable	Stable
11	FLT_11_PotterCo6_Cherry6_230kV_1PH	Stable	Stable	Stable
12	FLT_12_PotterCo6_BUSHLAND6_230kV_3PH	Stable	Stable	Stable
13	FLT_13_PotterCo6_BUSHLAND6_230kV_1PH	Stable	Stable	Stable
14	FLT_14_PotterCo6_PlantX_230kV_3PH	Stable	Stable	Stable
15	FLT_156_PotterCo6_PlantX_230kV_1PH	Stable	Stable	Stable
16	FLT_16_PotterCo6_POTTERCO3_230_115kV_3PH	Stable	Stable	Stable
17	FLT_17_PotterCo6_POTTERCO7_230_345kV_3PH	Stable	Stable	Stable
18	FLT_18_HARRNGEST6_PRINGLE6_230kV_3PH	Stable	Stable	Stable
19	FLT_19_HARRNGEST6_PRINGLE6_230kV_1PH	Stable	Stable	Stable
20	FLT_20_HARRNGEST6_RANDALL6_230kV_3PH	Stable	Stable	Stable
21	FLT_21_HARRNGEST6_RANDALL6_230kV_1PH	Stable	Stable	Stable
22	FLT_22_HARRNGMID6_RANDALL6_230kV_3PH	Stable	Stable	Stable
23	FLT_23_HARRNGMID6_RANDALL6_230kV_1PH	Stable	Stable	Stable
24	FLT_24_HARRNGMID6_NICHOLS6_230kV_3PH	Stable	Stable	Stable
25	FLT_25_HARRNGMID6_NICHOLS6_230kV_1PH	Stable	Stable	Stable
26	FLT_26_HARRNGWST6_Cherry6_230kV_3PH	Stable	Stable	Stable
27	FLT_27_HARRNGWST6_Cherry6_230kV_1PH	Stable	Stable	Stable
28	FLT_28_HARRNGWST6_NICHOLS6_230kV_3PH	Stable	Stable	Stable
29	FLT_29_HARRNGWST6_NICHOLS6_230kV_1PH	Stable	Stable	Stable
30	FLT_30_Cherry6_HARRNGWST6_230kV_3PH	Stable	Stable	Stable
31	FLT_31_Cherry6_HARRNGWST6_230kV_1PH	Stable	Stable	Stable
32	FLT_32_Cherry6_Cherry3_230_115kV_3PH	Stable	Stable	Stable
33	FLT_33_BUSHLAND6_BUFFALO_230kV_3PH	Stable	Stable	Stable
34	FLT_34_BUSHLAND6_BUFFALO_230kV_1PH	Stable	Stable	Stable
35	FLT_35_BUSHLAND6_BUSHLAND3_230_115kV_3PH	Stable	Stable	Stable
36	FLT_36_POTTERCO7_HITCHLAND7_345kV_3PH	Stable	Stable	Stable
37	FLT_37_POTTERCO7_HITCHLAND7_345kV_1PH	Stable	Stable	Stable
38	FLT_38_HITCHLAND7_FINNEY7_345kV_3PH	Stable	Stable	Stable
39	FLT_39_HITCHLAND7_FINNEY7_345kV_1PH	Stable	Stable	Stable
40	FLT_40_HITCHLAND7_BEAVER_345kV_3PH	Stable	Stable	Stable
41	FLT_41_HITCHLAND7_BEAVER_345kV_1PH	Stable	Stable	Stable
42	FLT_42_HITCHLAND7_POTTERCO7_345kV_3PH	Stable	Stable	Stable
43	FLT_43_HITCHLAND7_POTTERCO7_345kV_1PH	Stable	Stable	Stable
44	FLT_44_Hitchland6_OCHILTREE6_230kV_3PH	Stable	Stable	Stable

**Table 4 – Stability Analysis Results**

Contingency Number and Name		2014SP	2014WP	2023SP
45	FLT_45_Hitchland6_OCHILTREE6_230kV_3PH	Stable	Stable	Stable
46	FLT_46_Hitchland6_HITCHLAND3_230_115kV_3PH	Stable	Stable	Stable
47	FLT_47_Hitchland6_HITCHLAND7_230_345kV_3PH	Stable	Stable	Stable
48	FLT_48_Hitchland6_HITCHLAND7_230_345kV_3PH	Stable	Stable	Stable
49	FLT_49_OCHILTREE6_OCHILTREE3_230_115kV_3PH	Stable	Stable	Stable
50	FLT_50_FINNEY7_HOLCOMB_345kV_3PH	Stable	Stable	Stable
51	FLT_51_FINNEY7_HOLCOMB_345kV_1PH	Stable	Stable	Stable
52	FLT_52_BEAVER_WWRDEHV7_345kV_3PH	Stable	Stable	Stable
53	FLT_53_BEAVER_WWRDEHV7_345kV_1PH	Stable	Stable	Stable
54	FLT_54_BEAVER_BUCKNER7_345kV_3PH	Stable	Stable	Stable
55	FLT_55_BEAVER_BUCKNER7_345kV_1PH	Stable	Stable	Stable

**FERC LVRT Compliance**

FERC Order #661A places specific requirements on wind farms through its Low Voltage Ride Through (LVRT) provisions. For Interconnection Agreements signed after December 31, 2006, wind farms shall stay on line for faults at the POI that draw the voltage down at the POI to 0.0 pu.

Fault contingencies were developed to verify that wind farms remain on line when the POI voltage is drawn down to 0.0 pu. These contingencies are shown in Table 5.

**Table 5 – LVRT Contingencies**

Contingency Number and Name		Description
1	FLT_01_G1112tap_Hitchland_230kV_3PH	3 phase fault on the GEN-2013-001 Tap (562046) to Hitchland (523095) 230kV line, near GEN-2013-001 Tap.
2	FLT_03_G1112tap_MooreCNTY_230kV_3PH	3 phase fault on the GEN-2013-001 Tap (562046) to Moore County (523309) 230kV line, near GEN-2013-001 Tap.

The required prior queued project wind farms remained online for the fault contingencies described in this section as well as the fault contingencies described in the Disturbances section of this report. GEN-2013-001 was found to be in compliance with FERC Order #661A.

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## Conclusion

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PISIS-2013-001 Interconnection Customers have requested an Impact Study to determine the impacts of interconnecting generation to the SPP Transmission System.

With all Base Case and previously assigned Network Upgrades in service, GEN-2013-001 was found to remain on line, and the transmission system was found to remain stable for all conditions studied. The wind turbine generators in GEN-2013-001 have the capability of pre-contingency voltage recovery, and the post fault voltage recovery was found to be within the criterion of 0.7 pu to 1.2 pu.

The power factor analysis showed that GEN-2013-001 required a power factor range of 0.99 leading (absorbing) to 0.97 lagging (supplying) for the three study cases, 2014 summer, 2014 winter, and 2023 summer peak conditions. GEN-2013-001 will be required to provide the pro-forma standard 0.95 leading (absorbing) to 0.95 lagging (supplying) at the Point of Interconnection.

Low Voltage Ride Through (LVRT) analysis showed no generators tripping offline due to low voltage.

All generators in the monitored areas remained stable for all of the modeled disturbances.

Any changes to the assumptions made in this study, for example, one or more of the previously queued requests withdraw, may require a re-study at the expense of the Customer.

Nothing in this System Impact Study constitutes a request for transmission service or confers upon the Interconnection Customer any right to receive transmission service.

## **K: Group 6 Dynamic Stability Analysis Report**

See report on next page



# Group 6 Impact Study

## PISIS-2013-001

**August 2013**  
**Generator Interconnection**



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## Executive Summary

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PISIS-2013-001 Interconnection Customers have requested a Definitive Interconnection System Impact Study detailing the impacts of interconnecting the generation projects shown below.

- GEN-2012-043 – 153.0MW wind farm using G.E. 1.5MW generators connected to a 345kV substation along the Eddy County – Tolk 345kV transmission line on the Southwestern Public Service (SPS) Transmission System.

There are thirty-six (36) previously queued generation projects in the Group 6 area.

A stability analysis and power factor analysis were performed for the addition of the generation project in Group 6. The analyses were performed on three seasonal models, the modified versions of the 2014 summer peak, the 2014 winter peak, and the 2023 summer peak cases. A total of thirty-four (34) contingencies were evaluated for each season.

With all Base Case and previously assigned Network Upgrades in service, GEN-2012-043 was found to remain on line, and the transmission system was found to remain stable for all conditions studied. The wind turbine generators in GEN-2012-043 have the capability of pre-contingency voltage recovery, and the post fault voltage recovery was found to be within the criterion of 0.7 pu to 1.2 pu.

The power factor analysis showed that GEN-2012-043 required a power factor range of 1 to 0.71 lagging (supplying) for the three study cases, 2014 summer, 2014 winter, and 2023 summer peak conditions. GEN-2012-043 will be required to provide the pro-forma standard 0.95 leading (absorbing) to 0.95 lagging (supplying) at the Point of Interconnection.

Low Voltage Ride Through (LVRT) analysis showed no generators tripping offline due to low voltage.

All generators in the monitored areas remained stable for all of the modeled disturbances.

Nothing in this study should be construed as a guarantee of delivery or transmission service. If the customer wishes to sell power from the facility, a separate request for transmission service must be requested on Southwest Power Pool's OASIS by the Customer.

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## Introduction

PISIS-2013-001 Interconnection Customers have requested a Definitive Interconnection System Impact Study detailing the impacts of interconnecting the generation projects shown below.

Request	Capacity (MW)	Generator Model	Point of Interconnection
GEN-2012-043	153	G.E. 1.5MW	Tap on Eddy County – Tolk 345kV line (560726)

There are thirty-six (36) previously queued generation projects in the Group 6 area. These Interconnection Requests are listed below.

Request	Capacity (MW)	Generator Model	Point of Interconnection
GEN-2001-033	180	Mitsubishi 1000	San Juan Mesa 230kV (524885)
GEN-2001-036	80	CIMTR	Norton 115kV (524502)
GEN-2006-018	170	GENSAL	TUCO 230kV (525830)
GEN-2008-008	60	G.E. 1.5MW	Graham 69kV (526693)
GEN-2008-009	60	G.E. 1.5MW	San Juan Mesa 230kV (524885)
GEN-2008-022	300	G.E. 2.5MW	Tap on Eddy County – Tolk 345kV line (GEN-2008-022-POI, 560007)
GEN-2010-006	180 Summer 205 Winter	GENROU	Jones 230kV(526337)
ASGI-2010-010	42	GENSAL	Lovington 115kV (528334)
ASGI-2010-020	30	Nordex 2.5MW	Tap LE-Tatum – LE-Crossroads 69kV (ASGI-2010-020-POI, 560360)
GEN-2010-020	20	Emerson 0.5MW	Roswell 69kV (527563)
ASGI-2010-021	15	Mitsubishi MPS-1000A 1.0MW	Tap LE-Saunder Tap – LE-Anderson 69kV (ASGI-2010-021 POI, 560364)
GEN-2010-046	56	GENSAL	TUCO 230kV (525830)
GEN-2010-058	20	Emerson 0.5MW	Chaves County 115kV (527482)
ASGI-2011-003	10	Sany 2.0MW	Hendricks 69kV (525943)
ASGI-2011-001	27.3	Suzlon 2.1MW	Lovington 115kV (528334)
GEN-2011-025	80	G.E. 1.6MW	Tap on Floyd County – Crosby County 115kV line (GEN-2011-025 POI, 562004)
GEN-2011-045	180 Summer 205 Winter	GENROU	Jones 230kV (526337)
GEN-2011-046	23 Summer 27 Winter	GENROU	Quay County 115kV (524472)
GEN-2011-048	165 Summer 175 Winter	GENROU	Mustang 230kV (527151)
ASGI-2011-004	19.2	G.E. 1.6MW	Crosby 69kV (525915)
GEN-2012-001	61.2	CCWE 3.6MW (WT4)	Tap Grassland – Borden 230kV (GEN-2012-001 POI, 562089)
GEN-2012-008	40 MW increase	GENROU	Mustang 115kV (527146)
GEN-2012-009	15 MW increase	GENROU	Mustang 230kV (527151)
GEN-2012-010	15 MW increase	GENROU	Mustang 230kV (527151)



Request	Capacity (MW)	Generator Model	Point of Interconnection
GEN-2012-020	478	G.E. 1.68MW	TUCO 230kV (525830)
GEN-2012-034	7 MW increase	GENROU	Mustang 230kV (527151)
GEN-2012-035	7 MW increase	GENROU	Mustang 230kV (527151)
GEN-2012-036	7 MW increase	GENROU	Mustang 230kV (527151)
GEN-2012-037	196 Summer 203 Winter	GENROU	TUCO 345kV (525832)
ASGI-2012-002	18	Vestas 1.65MW V82	Clovis 115kV (524808)
GEN-2013-013	248.4	Siemens 2.3MW	Tap Eddy County – Tolk 345kV (GEN-2013-013 POI, 560726)
GEN-2013-016	191 Summer 203 Winter	GENROU	TUCO 345kV (525832)
GEN-2013-017	199.5	G.E. 1.7MW	Tap TUCO – O.K.U 345kV (GEN-2013-017 POI, 560700)
ASGI-2013-001	11.5	Siemens 2.3MW VS	PanTex South 115kV (523945)
ASGI-2013-002	18.4	Siemens 2.3MW VS	Tucumcari 115kV (524509)
ASGI-2013-003	18.4	Siemens 2.3MW VS	Clovis 115kV (524808)

A stability analysis and a power factor analysis were performed for the addition of the generation project in Group 6. The analyses were performed on three seasonal models, the modified versions of the 2014 summer peak, the 2014 winter peak, and the 2023 summer peak cases.

The stability analysis determines the impacts of the new interconnecting project on the stability and voltage recovery of the nearby systems and the ability of the interconnecting project to meet FERC Order 661A. If problems with stability or voltage recovery are identified, the need for reactive compensation or system upgrades is investigated. The three-phase faults and the single line-to-ground faults listed in Table 1 were used in the stability analysis.

The power factor analysis determines the power factor at the point of interconnection for the wind interconnection project for pre-contingency and post-contingency conditions. The contingencies used in the power factor analysis (Table 3) are a subset of the stability analysis contingencies shown in Table 1.

Nothing in this System Impact Study constitutes a request for transmission service or grants the Interconnection Customer any rights to transmission service.

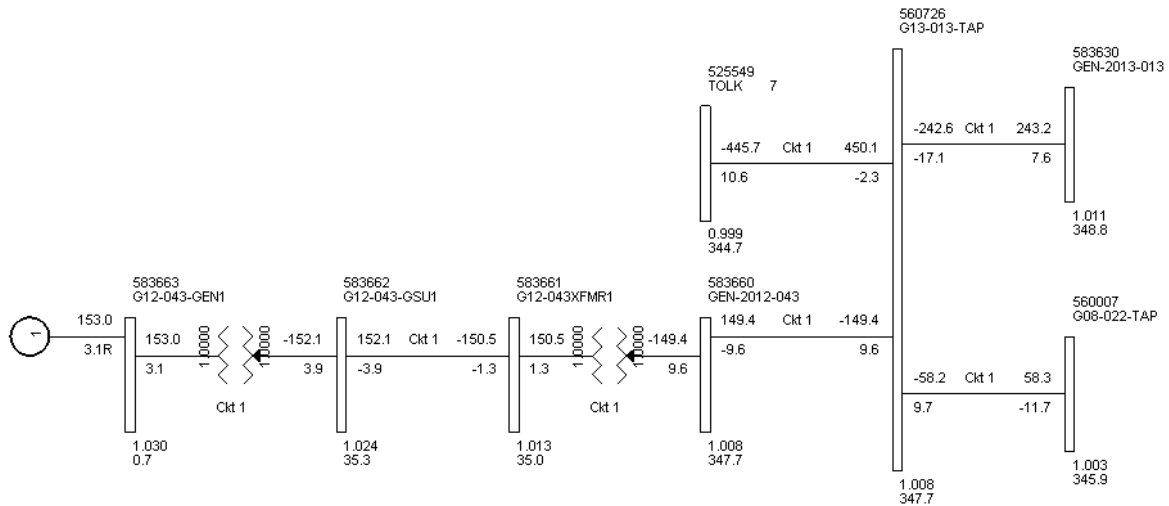
# Facilities

## Generating Facility

GEN-2012-043 Interconnection Customer’s request to interconnect a total of 153.0MW is comprised of one-hundred-two (102) G.E. 1.5MW wind turbine generators and associated interconnection facilities.

## Interconnection Facilities

The Point of Interconnection for GEN-2012-043 Interconnection Customer is a 345kV substation along the Eddy County – Tolk 345kV transmission line in Roosevelt County, Texas. Figure 1 depicts the one-line diagram of the local transmission system including the POI as well as the power flow model representing the request.



**Figure 1: Proposed POI Configuration and Request Power Flow Model**

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## Stability Analysis

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Transient stability analysis is used to determine if the transmission system can maintain angular stability and ensure bus voltages stay within planning criteria bandwidth during and after a disturbance while considering the addition of a generator interconnection request.

### Model Preparation

Transient stability analysis was performed using modified versions of the 2012 series of Model Development Working Group (MDWG) dynamic study models including the 2014 summer peak, 2014 winter peak, and the 2023 summer peak seasonal models. The cases are then loaded with prior queued interconnection requests and network upgrades assigned to those interconnection requests. Finally the prior queued and study generation are dispatched into the SPP footprint. Initial simulations are then carried out for a no-disturbance run of twenty (20) seconds to verify the numerical stability of the model.

### Disturbances

Twenty-six (26) contingencies were identified for use in this study and are listed in Table 1. These contingencies included three-phase faults and single-phase line faults at locations defined by SPP. Single-phase line faults were simulated by applying fault impedance to the positive sequence network at the fault location to represent the effect of the negative and zero sequence networks on the positive sequence network. The fault impedance was computed to give a positive sequence voltage at the specified fault location of approximately 60% of pre-fault voltage. This method is in agreement with SPP current practice.

Except for transformer faults, the typical sequence of events for a three-phase and a single-phase fault is as follows:

1. apply fault at particular location
2. continue fault for five (5) cycles, clear the fault by tripping the faulted facility
3. after an additional twenty (20) cycles, re-close the previous facility back into the fault
4. continue fault for five (5) additional cycles
5. trip the faulted facility and remove the fault

Transformer faults are typically modeled as three-phase faults, unless otherwise noted. The sequence of events for a transformer fault is as follows:

1. apply fault for five (5) cycles
2. clear the fault by tripping the affected transformer facility (unless otherwise noted there will be no re-closing into a transformer fault)

**Table 1 – Contingencies Evaluated**

Cont. No.	Contingency Name	Description
1	FLT_01_G13013T_TOLK7_34 5kV_3PH	3 phase fault on the GEN 2013-013 tap (560726) to Tolk (525549) 345kV line, near GEN 2013-013 tap. a. Apply fault at the GEN 2013-013 tap 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
2	FLT_02_G13013T_TOLK7_34 5kV_1PH	<i>Single phase fault and sequence like previous</i>
3	FLT_03_G13013T_CHAVESCO_345kV_3PH	3 phase fault on the GEN 2013-013 tap (560726) to Chaves (560007) 345kV line, near GEN 2013-013 tap. a. Apply fault at the GEN 2013-013 tap 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
4	FLT_04_G13013T_CHAVESCO_345kV_1PH	<i>Single phase fault and sequence like previous</i>
5	FLT_05_TOLK7_TOLKTAP_34 5_230kV_3PH	3 phase fault on the Tolk 7 (525549) to Tolk tap (525543) 345/230/13.2kV autotransformer, near Tolk 7. a. Apply fault at the Tolk 7 345kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
6	FLT_06_EDDYCNTY_EDDYNO RTH_345_230kV_3PH	3 phase fault on the Eddy County (527802) to Eddy North (527799) 345/230/13.2kV autotransformer, near Eddy County. a. Apply fault at the Tolk 7 345kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
7	FLT_07_CHAVESCO_EDDYCN TY_345kV_3PH	3 phase fault on the Chaves (560007) to Eddy County (527802) 345kV line, near Chaves 345kV bus. a. Apply fault at the Chaves 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
8	FLT_08_CHAVESCO_EDDYCN TY_345kV_1PH	<i>Single phase fault and sequence like previous</i>
9	FLT_09_EDDYNORTH_CHAV ESCNTY_230kV_3PH	3 phase fault on the Eddy North (527799) to Chaves (527483) 230kV line, near Eddy North 230kV bus. a. Apply fault at the Eddy North 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
10	FLT_10_EDDYNORTH_CHAV ESCNTY_230kV_1PH	<i>Single phase fault and sequence like previous</i>
11	FLT_11_EDDYNORTH_EDDYS OUTH_230kV_3PH	3 phase fault on the Eddy North (527799) to Eddy South (527800) 230kV line, near Eddy North 230kV bus. a. Apply fault at the Eddy North 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
12	FLT_12_EDDYNORTH_EDDYS OUTH_230kV_1PH	<i>Single phase fault and sequence like previous</i>

**Table 1 – Contingencies Evaluated**

Cont. No.	Contingency Name	Description
13	FLT_13_PRIOR_OUTAGE_CHAVES_230-115kV_XFMR_EDDYNORTH_EDDYSOUTH_230kV_3PH	Prior outage on the Chaves 230/115/13.2kV autotransformer 3 phase fault on the Eddy North (527799) to Eddy South (527800) 230kV line, near Eddy North 230kV bus. a. Apply fault at the Eddy North 230kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
14	FLT_14_PRIOR_OUTAGE_EDDY_230-115kV_XFMR_EDDYNORTH_CHAVESCNTY_230kV_3PH	Prior outage on the Eddy South 230/115/13.2kV autotransformer 3 phase fault on the Eddy North (527799) to Chaves (527483) 230kV line, near Eddy North 230kV bus. a. Apply fault at the Eddy North 230kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
15	FLT_15_TOLKTAP_TOLKEAST_230kV_3PH	3 phase fault on the Tolk Tap (525543) to Tolk East (525524) 230kV line, near Tolk Tap 230kV bus. a. Apply fault at the Tolk Tap 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
16	FLT_16_TOLKTAP_TOLKEAST_230kV_1PH	<i>Single phase fault and sequence like previous</i>
17	FLT_17_TOLKTAP_TOLKWES T_230kV_3PH	3 phase fault on the Tolk Tap (525543) to Tolk West (525531) 230kV line, near Tolk Tap 230kV bus. a. Apply fault at the Tolk Tap 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
18	FLT_18_TOLKTAP_TOLKWES T_230kV_1PH	<i>Single phase fault and sequence like previous</i>
19	FLT_19_TOLKEAST_PLANTX_230kV_3PH	3 phase fault on the Tolk East (525524) to Plant X (525481) 230kV line, near Tolk East 230kV bus. a. Apply fault at the Tolk East 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
20	FLT_20_TOLKEAST_PLANTX_230kV_1PH	<i>Single phase fault and sequence like previous</i>
21	FLT_21_TOLKEAST_TUCOINT_230kV_3PH	3 phase fault on the Tolk East (525524) to Tuco (525830) 230kV line, near Tolk East 230kV bus. a. Apply fault at the Tolk East 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
22	FLT_22_TOLKEAST_TUCOINT_230kV_1PH	<i>Single phase fault and sequence like previous</i>
23	FLT_23_PRIOR_OUTAGE_TUCO_TOLKEAST_230kV_TOLKEAST_PLANTX_230kV_3PH	Prior outage on the Tuco (525830) to Tolk East (525524) 230kV line 3 phase fault on the Tolk East (525524) to Plant X (525481) 230kV line, near Tolk East 230kV bus. a. Apply fault at the Tolk East 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.

**Table 1 – Contingencies Evaluated**

Cont. No.	Contingency Name	Description
24	FLT_24_PRIOR_OUTAGE_TO_LKWEST_ROOSEVELT_230kV_TOLKWEST_PLANTX_230kV_3PH	Prior outage on the Tolk West (525531) to Roosevelt (524909) 230kV line 3 phase fault on the Tolk West (525531) to Plant X (525481) 230kV line, near Tolk West 230kV bus. a. Apply fault at the Tolk West 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
25	FLT_25_PRIOR_OUTAGE_TO_LKEAST_PLANTX_230kV_TOLKWEST_PLANTX_230kV_3PH	Prior outage on the Tolk East (525531) to Plant X (525481) 230kV line 3 phase fault on the Tolk West (525531) to Plant X (525481) 230kV line, near Tolk West 230kV bus. a. Apply fault at the Tolk West 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
26	FLT_26_PRIOR_OUTAGE_TUCO_TOLKEAST_230kV_SUNDOWN_WOLFFORTH_230kV_3PH	Prior outage on the Tuco (525830) to Tolk East (525524) 230kV line 3 phase fault on the Sundown (526435) to Wolfforth (526525) 230kV line, near Sundown 230kV bus. a. Apply fault at the Sundown 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.

**NOTE: For prior outage contingencies assume that the network is at steady state after the prior outage.**

### Power Factor Analysis

The power factor analysis was performed for this study and is designed to demonstrate the reactive power requirements at the point of interconnection. In order to perform the analysis the request and equivalent transmission lines and collectors systems were modeled using specifications provided by the Customer. Table 2 shows a summary of the power factor analysis at the POI, and Table 3 shows the contingencies and the resultant power factors at the POI.

**Table 2 – Summary of Power Factor Analysis at the POI**

Request	Capacity	POI	Fuel	Generator	Power Factor at POI Leading (absorbing vars)	Power Factor at POI Lagging (providing vars)
GEN-2012-043	153.0MW	Eddy County – Tolk 345kV transmission line	Wind	G.E. 1.5MW	1	.72

**NOTE: As reactive power is required for all projects, the final requirement in the GIA will be the pro-forma 95% lagging to 95% leading at the point of interconnection.**



**Table 3 – Power Factor Analysis at the POI**

PISIS-2013-001 Group 6 POI – Tap Eddy – TolK 345kV		2014 Summer Voltage = 1.008 pu				2014 Winter Voltage = 1.008 pu				2023 Summer Voltage = 1.007 pu			
Cont. No.	Contingency Name	Power @ POI	VARS @ POI	Power Factor		Power @ POI	VARS @ POI	Power Factor		Power @ POI	VARS @ POI	Power Factor	
0	No Fault	153	5.8	0.9993	LAG	153	56.5	0.9381	LAG	153	52.1	0.9466	LAG
1	FLT_01_G13013T_TOLK7_345kV_3PH	153	143.1	0.7303	LAG	153	148.2	0.7183	LAG	153	134.9	0.7501	LAG
3	FLT_03_G13013T_CHAVESCO_345kV_3PH	153	1.5	1.0000	LAG	153	45.2	0.9590	LAG	153	30.3	0.9809	LAG
5	FLT_05_TOLK7_TOLKTAP_345_230kV_3PH	153	5.8	0.9993	LAG	153	56.5	0.9381	LAG	153	52.1	0.9466	LAG
6	FLT_06_EDDYCNTY_EDDYNORTH_345_230kV_3PH	153	5.8	0.9993	LAG	153	56.5	0.9381	LAG	153	52.1	0.9466	LAG
7	FLT_07_CHAVESCO_EDDYCNTY_345kV_3PH	153	70.5	0.9082	LAG	153	125.4	0.7734	LAG	153	116.4	0.7959	LAG
9	FLT_09_EDDYNORTH_CHAVESCNTY_230kV_3PH	153	9.2	0.9982	LAG	153	57	0.9371	LAG	153	52.6	0.9457	LAG
11	FLT_11_EDDYNORTH_EDDYSOUTH_230kV_3PH	153	29.5	0.9819	LAG	153	81.8	0.8819	LAG	153	69.5	0.9105	LAG
13	FLT_13_PRIOR_OUTAGE_CHAVES_230-115kV_XFMR_EDDYNORTH_EDDYSOUTH_230kV_3PH	153	87.9	0.8671	LAG	153	89.4	0.8634	LAG	153	66.7	0.9167	LAG
14	FLT_14_PRIOR_OUTAGE_EDDY_230-115kV_XFMR_EDDYNORTH_CHAVESCNTY_230kV_3PH	153	75.4	0.8970	LAG	153	57.8	0.9355	LAG	153	60	0.9310	LAG
15	FLT_15_TOLKTAP_TOLKEAST_230kV_3PH	153	5.8	0.9993	LAG	153	57.2	0.9367	LAG	153	52.3	0.9462	LAG
17	FLT_17_TOLKTAP_TOLKWEST_230kV_3PH	153	4.3	0.9996	LAG	153	55.6	0.9399	LAG	153	52.2	0.9464	LAG
19	FLT_19_TOLKEAST_PLANTX_230kV_3PH	153	5.3	0.9994	LAG	153	56.3	0.9385	LAG	153	52.1	0.9466	LAG
21	FLT_21_TOLKEAST_TUCOINT_230kV_3PH	153	2.4	0.9999	LAG	153	55.1	0.9408	LAG	153	52.2	0.9464	LAG
23	FLT_23_PRIOR_OUTAGE_TUCO_TOLKEAST_230kV_TOLKEAST_PLANTX_230kV_3PH	153	66.7	0.9167	LAG	153	54.8	0.9414	LAG	153	52.5	0.9459	LAG
24	FLT_24_PRIOR_OUTAGE_TOLKWEST_ROOSEVELT_230kV_TOLKWEST_PLANTX_230kV_3PH	153	69.4	0.9107	LAG	153	55.9	0.9393	LAG	153	51.3	0.9481	LAG
25	FLT_25_PRIOR_OUTAGE_TOLKEAST_PLANTX_230kV_TOLKWEST_PLANTX_230kV_3PH	153	69.2	0.9111	LAG	153	55.9	0.9393	LAG	153	52.2	0.9464	LAG
26	FLT_26_PRIOR_OUTAGE_TUCO_TOLKEAST_230kV_SUNDOWN_WOLFFORTH_230kV_3PH	153	68.7	0.9123	LAG	153	55.7	0.9397	LAG	153	52.4	0.9461	LAG



## Results

The stability analysis was performed and the results are summarized in **Error! Reference source not found.4**. The results indicate that the transmission system remained stable for all contingencies studied. The plots will be available upon request.

**Table 4 – Stability Analysis Results**

Contingency Number and Name		2014SP	2014WP	2023SP
1	FLT_01_G13013T_TOLK7_345kV_3PH	Stable	Stable	Stable
2	FLT_02_G13013T_TOLK7_345kV_1PH	Stable	Stable	Stable
3	FLT_03_G13013T_CHAVESCO_345kV_3PH	Stable	Stable	Stable
4	FLT_04_G13013T_CHAVESCO_345kV_1PH	Stable	Stable	Stable
5	FLT_05_TOLK7_TOLKTAP_345_230kV_3PH	Stable	Stable	Stable
6	FLT_06_EDDYCNTY_EDDYNORTH_345_230kV_3PH	Stable	Stable	Stable
7	FLT_07_CHAVESCO_EDDYCNTY_345kV_3PH	Stable	Stable	Stable
8	FLT_08_CHAVESCO_EDDYCNTY_345kV_1PH	Stable	Stable	Stable
9	FLT_09_EDDYNORTH_CHAVESCNTY_230kV_3PH	Stable	Stable	Stable
10	FLT_10_EDDYNORTH_CHAVESCNTY_230kV_1PH	Stable	Stable	Stable
11	FLT_11_EDDYNORTH_EDDYSOUTH_230kV_3PH	Stable	Stable	Stable
12	FLT_12_EDDYNORTH_EDDYSOUTH_230kV_1PH	Stable	Stable	Stable
13	FLT_13_PRIOR_OUTAGE_CHAVES_230-115kV_XFMR_EDDYNORTH_EDDYSOUTH_230kV_3PH	Stable	Stable	Stable
14	FLT_14_PRIOR_OUTAGE_EDDY_230-115kV_XFMR_EDDYNORTH_CHAVESCNTY_230kV_3PH	Stable	Stable	Stable
15	FLT_15_TOLKTAP_TOLKEAST_230kV_3PH	Stable	Stable	Stable
16	FLT_16_TOLKTAP_TOLKEAST_230kV_1PH	Stable	Stable	Stable
17	FLT_17_TOLKTAP_TOLKWEST_230kV_3PH	Stable	Stable	Stable
18	FLT_18_TOLKTAP_TOLKWEST_230kV_1PH	Stable	Stable	Stable
19	FLT_19_TOLKEAST_PLANTX_230kV_3PH	Stable	Stable	Stable
20	FLT_20_TOLKEAST_PLANTX_230kV_1PH	Stable	Stable	Stable
21	FLT_21_TOLKEAST_TUPOINT_230kV_3PH	Stable	Stable	Stable
22	FLT_22_TOLKEAST_TUPOINT_230kV_1PH	Stable	Stable	Stable
23	FLT_23_PRIOR_OUTAGE_TUCO_TOLKEAST_230kV_TOLKEAST_PLANTX_230kV_3PH	Stable	Stable	Stable
24	FLT_24_PRIOR_OUTAGE_TOLKWEST_ROOSEVELT_230kV_TOLKWEST_PLANTX_230kV_3PH	Stable	Stable	Stable
25	FLT_25_PRIOR_OUTAGE_TOLKEAST_PLANTX_230kV_TOLKWEST_PLANTX_230kV_3PH	Stable	Stable	Stable
26	FLT_26_PRIOR_OUTAGE_TUCO_TOLKEAST_230kV_SUNDOWN_WOLFFORTH_230kV_3PH	Stable	Stable	Stable

## FERC LVRT Compliance

FERC Order #661A places specific requirements on wind farms through its Low Voltage Ride Through (LVRT) provisions. For Interconnection Agreements signed after December 31, 2006, wind farms shall stay on line for faults at the POI that draw the voltage down at the POI to 0.0 pu.

Fault contingencies were developed to verify that wind farms remain on line when the POI voltage is drawn down to 0.0 pu. These contingencies are shown in Table 5.

**Table 5 – LVRT Contingencies**

Contingency Number and Name		Description
1	FLT_01_G13013T_TOLK7_345kV_3PH	3 phase fault on the GEN 2013-013 tap (560726) to Tolk (525549) 345kV line, near GEN 2013-013 tap. a. Apply fault at the GEN 2013-013 tap 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
3	FLT_03_G13013T_CHAVESCO_345kV_3PH	3 phase fault on the GEN 2013-013 tap (560726) to Chaves (560007) 345kV line, near GEN 2013-013 tap. a. Apply fault at the GEN 2013-013 tap 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.

The required prior queued project wind farms remained online for the fault contingencies described in this section as well as the fault contingencies described in the Disturbances section of this report. GEN-2012-043 was found to be in compliance with FERC Order #661A.

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## Conclusion

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PISIS-2013-001 Interconnection Customers have requested an Impact Study to determine the impacts of interconnecting generation to the SPP Transmission System.

With all Base Case and previously assigned Network Upgrades in service, GEN-2012-043 was found to remain on line, and the transmission system was found to remain stable for all conditions studied. The wind turbine generators in GEN-2012-043 have the capability of pre-contingency voltage recovery, and the post fault voltage recovery was found to be within the criterion of 0.7 pu to 1.2 pu.

The power factor analysis showed that GEN-2012-043 required a power factor range of 1 leading (absorbing) to .72 lagging (supplying) for the three study cases, 2014 summer, 2014 winter, and 2023 summer peak conditions. GEN-2012-043 will be required to provide the pro-forma standard 0.95 leading (absorbing) to 0.95 lagging (supplying) at the Point of Interconnection.

Low Voltage Ride Through (LVRT) analysis showed no generators tripping offline due to low voltage.

All generators in the monitored areas remained stable for all of the modeled disturbances.

Any changes to the assumptions made in this study, for example, one or more of the previously queued requests withdraw, may require a re-study at the expense of the Customer.

Nothing in this System Impact Study constitutes a request for transmission service or confers upon the Interconnection Customer any right to receive transmission service.