

Aggregate Facility Study SPP-2006-AG3-AFS-2 For Transmission Service Requested by Aggregate Transmission Customers

SPP Engineering, SPP Tariff Studies

SPP AGGREGATE FACILITY STUDY (SPP-2006-AG3-AFS-2) February 23, 2007

Table of Contents

1. Executive Summary	3
2. Introduction	4
A. FINANCIAL ANALYSIS	7
B. THIRD PARTY UPGRADES	8
3. Study Methodology	10
A. DESCRIPTION	11
B. MODEL DEVELOPMENT	12
C. TRANSFER ANALYSIS	14
D. CURTAILMENT AND REDISPATCH EVALUATION	14
4. Study Results	15
A. STUDY ANALYSIS RESULTS	15
B. STUDY DEFINITIONS	15
5. Conclusion	19
Appandix	21

1. Executive Summary

Pursuant to Attachment Z of the Southwest Power Pool Open Access Transmission Tariff (OATT), 5894 MW of long-term transmission service requests have been restudied in this Aggregate Facility Study (AFS). The first phase of the AFS consisted of a revision of the impact study to reflect the withdrawal of requests for which an Aggregate Facility Study Agreement was not executed. The principal objective of the AFS is to identify system problems and potential modifications necessary to facilitate these transfers while maintaining or improving system reliability as well as summarizing the operating limits and determination of the financial characteristics associated with facility upgrades. Facility upgrade costs are allocated on a prorated basis to all requests positively impacting any individual overloaded facility. Further, Attachment Z provides for facility upgrade cost recovery by stating that "[a]ny charges paid by a customer in excess of the transmission access charges in compensation for the revenue requirements for allocated facility upgrade(s) shall be recovered by such customer from future transmission service revenues until the customer has been fully compensated."

The total assigned facility upgrade Engineering and Construction (E &C) cost determined by the AFS is \$284 Million. Additionally an indeterminate amount of assigned E & C cost for 3rd party facility upgrades are assignable to the customer. The total upgrade levelized revenue requirement for all transmission requests is \$903 Million. This is based on full allocation of levelized revenue requirements for upgrades to customers without consideration of base plan funding. AFS data table 3 reflects the allocation of upgrade costs to each request without potential base plan funding based on either the requested reservation period or the deferred reservation period if applicable. Total upgrade levelized revenue requirements for all transmission requests after consideration of potential base plan funding is \$168 Million.

Third-party facilities must be upgraded when it is determined they are constrained in order to accommodate the requested Transmission Service. These include both first-tier neighboring facilities outside SPP and Transmission Owner facilities within SPP that are not under the SPP OATT. In this AFS, third-party facilities were identified. Total engineering and construction cost estimates for required third-party facility upgrades are indeterminate.

The Transmission Provider will tender a Letter of Intent on February 23, 2007. This will open a 15-day window for Customer response. To remain in the Aggregate Transmission Service Study (ATSS), the Transmission Provider must receive from the Transmission Customer (Customer) by March 10th, 2007, an executed Letter of Intent. The Letter of Intent will list options the Customer must choose to clarify their commitment to remain in the ATSS. The only action required on OASIS is to WITHDRAW the request or leave the request in STUDY mode.

At the conclusion of the ATSS, Service Agreements for each request for service will be tendered identifying the terms and conditions of the confirmed service.

If customers withdraw from the ATSS after posting of this AFS, the AFS will be reperformed to determine final cost allocation and Available Transmission Capability (ATC) in consideration of the remaining ATSS participants. All allocated revenue requirements for facility upgrades are assigned to the customer in the AFS data tables. Potential base plan funding allowable is contingent upon validation of designated resources meeting Attachment J, Section III B criteria.

2. Introduction

On January 21, 2005, the Federal Energy Regulatory Commission accepted Southwest Power Pool's proposed aggregate transmission study procedures in Docket ER05-109 to become effective February 1, 2005. The proposed cost allocation and cost recovery provisions were accepted for filing and suspended to become effective the earlier of five months from the requested effective date (July 1, 2005) or a further order of the Commission in the proceeding subject to refund. Since that time, the cost allocation and cost recovery provisions have been accepted with modification. The following link can be used to access the SPP Regulatory/FERC webpage:

(http://www.spp.org/Objects/FERC_filings.cfm). The hyperlinks under the heading ER05-109 (Attach Z Filing) open Southwest Power Pool's October 29, 2004 filing containing Attachment Z to the SPP OATT and the Commission's January 21, 2005 Order. In compliance with this Order, the third open season of 2006 commenced on June 1, 2006. All requests for long-term transmission service received prior to October 1, 2006 with a signed study agreement were then included in this third Aggregate Transmission Service Study (ATSS) of 2006.

Approximately 5894 MW of long-term transmission service has been restudied in this Aggregate Facility Study (AFS) with over \$284 Million in transmission upgrades being proposed. The results of the AFS are detailed in Tables 1 through 7. A highly tangible benefit of studying transmission requests aggregately under the SPP OATT Attachment Z is the sharing of costs among customers using the same facility. The detailed results show individual upgrade costs by study as well as potential base plan allowances as determined by Attachments J and Z. The following link can be used to access the SPP OATT: (http://www.spp.org/Publications/SPP_Tariff.pdf). In order to understand the extent to which base plan upgrades may be applied to both point-to-point and network transmission services, it is necessary to highlight the definition of Designated Resource. Per Section 1.9a of the SPP OATT, a Designated Resource is "[a]ny designated

generation resource owned, purchased or leased by a Transmission Customer to serve load in the SPP Region. Designated Resources do not include any resource, or any portion thereof, that is committed for sale to third parties or otherwise cannot be called upon to meet the Transmission Customer's load on a non-interruptible basis." Therefore, not only network service, but also point-to-point service has potential for base plan funding if the conditions for classifying upgrades associated with designated resources as base plan upgrades as defined in Section III.B of Attachment J are met.

Pursuant to Attachment J, Section III B of the SPP OATT, the Transmission Customer must provide SPP information necessary to verify that the new or changed Designated Resource meets the following conditions:

- 1. Transmission Customer's commitment to the requested new or changed Designated Resource must have a duration of at least five years.
- 2. During the first year the Designated Resource is planned to be used by the Transmission Customer, the accredited capacity of the Transmission Customer's existing Designated Resources plus the lesser of (a) the planned maximum net dependable capacity applicable to the Transmission Customer or (b) the requested capacity; shall not exceed 125% of the Transmission Customer's projected system peak responsibility determined pursuant to SPP Criteria 2.

According to Attachment Z Section VI.A, Point-to-Point customers pay the higher of the monthly transmission access charge (base rate) or the monthly revenue requirement associated with the assigned facility upgrades including any prepayments for redispatch required during construction.

Network Integration Service customers pay the total monthly transmission access charges and the monthly revenue requirement associated with the facility upgrades including any prepayments for redispatch during construction.

Transmission Customers paying for a directly assigned network upgrade shall receive

credits for new transmission service using the facility as specified in Attachment Z

Section VII.

Facilities identified as limiting the requested Transmission Service have been reviewed to

determine the required in-service date of each Network Upgrade. The year that each

Network Upgrade is required to accommodate a request is determined by interpolating

between the applicable model years given the respective loading data. Both previously

assigned facilities and the facilities assigned to this request for Transmission Service

were evaluated.

In some instances due to lead times for engineering and construction, Network Upgrades

may not be available when required to accommodate a request for Transmission Service.

When this occurs, the ATC with available Network Upgrades will be less than the

capacity requested during either a portion of or all of the requested reservation period. As

a result, the lowest seasonal allocated ATC within the requested reservation period will

be offered to the Transmission Customer on an applicable annual basis as listed in Table

1. The ATC may be limited by transmission owner planned projects, expansion plan

projects, or customer assigned upgrades.

Some constraints identified in the AFS were not assigned to the Customer as the

Transmission Provider determined that upgrades are not required due to various reasons

or the Transmission Owner has construction plans pending for these upgrades. These

facilities are listed by reservation in Table 3. This table also includes constrained

facilities in the current planning horizon that limit the rollover rights of the Transmission

Customer. Table 6 lists possible redispatch pairs to allow start of service prior to

completion of assigned network upgrades. Table 7 (if applicable) lists deferment of

expansion plan projects with different upgrades with the new required in service date as a result of this AFS.

A. Financial Analysis

The AFS utilizes the allocated customer E & C cost in a present worth analysis to determine the monthly levelized revenue requirement of each facility upgrade over the term of the reservation. In some cases, network upgrades cannot be completed within the requested reservation period, thus deferred reservation periods will be utilized in the present worth analysis. If the Customer chose Option 3, Redispatch, in the Letter of Intent sent coincident with the initial AFS, the present worth analysis of revenue requirements will be based on the deferred term with redispatch in the subsequent AFS. The upgrade levelized revenue requirement includes interest, depreciation, and carrying costs.

Each request for Transmission Service is evaluated independently as the cost associated with each Network Upgrade is assigned to a request. When facilities are upgraded throughout the reservation period, the Transmission Customer shall 1) pay the total E & C costs and other annual operating costs associated with the new facilities, and 2) receive credits associated with the depreciated book value of removed usable facilities, salvage value of removed non-usable facilities, and the carrying charges, excluding depreciation, associated with all removed usable facilities based on their respective book values.

In the event that the engineering and construction of a previously assigned Network Upgrade may be expedited, with no additional upgrades, to accommodate a new request for Transmission Service, then the levelized present worth of only the incremental expenses though the reservation period of the new request, excluding depreciation, shall be assigned to the new request. These incremental expenses, excluding depreciation,

include 1) the levelized difference in present worth of the engineering and construction expenses given the change in date to complete construction to account for additional interest expense and reduced engineering and construction expense due to inflation, 2) the

levelized present worth of all expediting fees, and 3) the levelized present worth of the incremental annual carrying charges, excluding depreciation and interest, during the new reservation period taking into account both a) the reservation in which the project was originally assigned, and b) a reservation, if any, in which the project was previously expedited.

Achievable Base Plan Avoided Revenue Requirements in the case of a Base Plan upgrade being displaced or deferred by an earlier in service date for a Requested Upgrade shall be determined per Attachment J, Section VII.B methodology. A deferred Base Plan upgrade being defined as a different requested network upgrade needed at an earlier date that negates the need for the initial base plan upgrade within the planning horizon. A displaced Base Plan upgrade being defined as the same network upgrade being displaced by a requested upgrade needed at an earlier date. Assumption of a 40 year service life is utilized for Base Plan funded projects unless provided otherwise by the Transmission Owner. A present worth analysis of revenue requirements on a common year basis between the Base Plan and Requested Upgrades was performed to determine avoided Base Plan revenue requirements due to the displacement or deferral of the Base Plan upgrade by the Requested Upgrade. The difference in present worth between the Base Plan and Requested Upgrades is assigned to the transmission requests impacting this upgrade based on the displacement or deferral.

B. Third-Party Facilities

For third-party facilities listed in Table 3 and Table 5, the Transmission Customer is

responsible for funding the necessary upgrades of these facilities per Section 21.1 of the

Transmission Provider's OATT. In this AFS, third-party facilities were identified. Total

engineering and construction cost estimates for required third-party facility upgrades are

indeterminate. The Transmission Provider will undertake reasonable efforts to assist the

Transmission Customer in making arrangements for necessary engineering, permitting,

and construction of the third-party facilities. Third-party facility upgrade engineering

and construction cost estimates are not utilized to determine the present worth value of

levelized revenue requirements for SPP system network upgrades.

All modeled facilities within the Transmission Provider system were monitored during

the development of this Study as well as certain facilities in first-tier neighboring

systems. Third-party facilities must be upgraded when it is determined that they are

overloaded while accommodating the requested Transmission Service. These facilities

also include those owned by members of the Transmission Provider who have not placed

their facilities under the Transmission Provider's OATT. Upgrades on the Southwest

Power Administration network requires prepayment of the upgrade cost prior to

construction of the upgrade.

Third-party facilities are evaluated for only those requests whose load sinks within the

SPP footprint. The Customer must arrange for study of 3rd party facilities for load that

sinks outside the SPP footprint with the applicable Transmission Providers.

3. Study Methodology

A. Description

The system impact analysis was conducted to determine the steady-state impact of the requested service on the SPP and first tier Non - SPP control area systems. The steady-state analysis was done to ensure current SPP Criteria and NERC Reliability Standards requirements are fulfilled. The Southwest Power Pool conforms to the NERC Reliability Standards, which provide the strictest requirements, related to voltage violations and thermal overloads during normal conditions and during a contingency. It requires that all facilities be within normal operating ratings for normal system conditions and within emergency ratings after a contingency. Normal operating ratings and emergency operating ratings monitored are Rate A and B in the SPP MDWG models, respectively. The upper bound and lower bound of the normal voltage range monitored is 105% and 95%. The upper bound and lower bound of the emergency voltage range monitored is 110% and 90%. The SPS Tuco 230 kV bus voltage is monitored at 92.5% due to predetermined system stability limitations.

The contingency set includes all SPP control area branches and ties 69kV and above, first tier Non - SPP control area branches and ties 115 kV and above, any defined contingencies for these control areas, and generation unit outages for the control areas with SPP reserve share program redispatch. The monitor elements include all SPP control area branches, ties, and buses 69 kV and above, and all first tier Non – SPP control area branches and ties 69 kV and above. Voltage monitoring was performed for SPP control area buses 69 kV and above.

A 3 % transfer distribution factor (TDF) cutoff was applied to all SPP control area facilities. For first tier Non – SPP control area facilities, a 3 % TDF cutoff was applied to AECI, AMRN, and ENTR and a 2 % TDF cutoff was applied to MEC, NPPD, and

OPPD. For voltage monitoring, a 0.02 per unit change in voltage must occur due to the transfer or modeling upgrades to be considered a valid limit to the transfer.

B. Model Development

SPP used twelve seasonal models to study the aggregate transfers of 5894 MW over a variety of requested service periods. The SPP MDWG 2006 Series Cases Update 4 2006/07 Winter Peak (06WP), 2007 April Minimum (07AP), 2007 Spring Peak (07G), 2007 Summer Peak (07SP), 2007Summer Shoulder (07SH), 2007 Fall Peak (07FA), 2007/08 Winter Peak (07WP), 2008 Summer Peak (08SP), 2008/09 Winter Peak (08WP), 2011 Summer Peak (11SP), 2011/12 Winter Peak (11WP), and 2016 Summer Peak (16SP) were used to study the impact of the requested service on the transmission system. The Spring Peak models apply to April and May, the Summer Peak models apply to June through September, the Fall Peak models apply to October and November, and the Winter Peak models apply to December through March.

The chosen base case models were modified to reflect the most current modeling information. Five groups of requests were developed from the aggregate of 5894 MW in order to minimize counterflows among requested service. Each request was included in at least two of the four groups depending on the requested path. All requests were included in group five. From the twelve seasonal models, five system scenarios were developed. Scenario 1 includes SWPP OASIS transmission requests not already included in the SPP 2006 Series Cases flowing in a West to East direction with ERCOT exporting and SPS exporting to outside zones and exporting to the Lamar HVDC Tie. Scenario 2 includes transmission requests not already included in the SPP 2006 Series Cases flowing in an East to West direction with ERCOT net importing and SPS importing from an outside zone and exporting to the Lamar HVDC Tie. Scenario 3 includes transmission requests not already included in the SPP 2006 Series Cases flowing in a West to East

direction with ERCOT net importing and SPS exporting from an outside zone and exporting from the Lamar HVDC Tie. Scenario 4 includes transmission requests not already included in the SPP 2006 Series Cases flowing in a North to South direction with ERCOT importing and SPS importing from outside zones and importing from the Lamar HVDC tie. Scenario 5 include all transmission not already included in the SPP 2006 Series Cases with ERCOT importing and SPS net exporting to outside zones and exporting to the Lamar HVDC tie. The system scenarios were developed to minimize counter flows from previously confirmed, higher priority requests not included in the MDWG Base Case.

C. Transmission Request Modeling

Network Integration Transmission Service requests are modeled as Generation to Load transfers. The Generation to Load modeling is accomplished by developing a pretransfer case by redispatching the existing designated network resource(s) down by the new designated network resource request amount and scaling down the applicable network load by the same amount proportionally. The post-transfer case for comparison is developed by scaling the network load back to the forecasted amount and dispatching the new designated network resource being requested. Network Integration Transmission Service requests are modeled as Generation to Load transfers because the requested Network Integration Transmission Service is a request to serve network load with the new designated network resource and the impacts on transmission system are determined accordingly. If the Network Integration Transmission Service request application clearly documents that the existing designated network resource(s) is being replaced or undesignated by the new designated network resource then MW impact credits will be given to the request as is done for a redirect of existing transmission service. Point-To-Point Transmission Service requests are modeled as Generation to Generation transfers.

The Generation to Generation transfers are accomplished by developing a post-transfer case for comparison by dispatching the request source and redispatching the request sink.

D. Transfer Analysis

Using the selected cases both with and without the requested transfers modeled, the PSS/E Activity ACCC was run on the cases and compared to determine the facility overloads caused or impacted by the transfer. Transfer distribution factor cutoffs (SPP and 1st-Tier) and voltage threshold (0.02 change below 0.90 pu) were applied to determine the impacted facilities. The PSS/E options chosen to conduct the analysis can be found in Appendix A.

E. Curtailment and Redispatch Evaluation

During any period when SPP determines that a transmission constraint exists on the Transmission System, and such constraint may impair the reliability of the Transmission System, SPP will take whatever actions that are reasonably necessary to maintain the reliability of the Transmission System. To the extent SPP determines that the reliability of the Transmission System can be maintained by redispatching resources, SPP will evaluate interim curtailment of existing confirmed service or interim redispatch of units to provide service prior to completion of any assigned network upgrades. Any redispatch may not unduly discriminate between the Transmission Owners' use of the Transmission System on behalf of their Native Load Customers and any Transmission Customer's use of the Transmission System to serve its designated load. Redispatch was evaluated to provide only interim service during the time frame prior to completion of any assigned network upgrades. Curtailment of existing confirmed service is evaluated to provide only interim service. Curtailment of existing confirmed service is only evaluated at the request of the transmission customer.

SPP determined potential relief pairs to relieve the incremental MW impact on limiting facilities as identified in Table 6. Using the selected cases where the limiting facilities were identified, potential incremental and decremental units were identified by determining the generation amount available for increasing and decreasing from the units generation amount, maximum generation amount, and minimum generation amount. If the incremental or decremental amount was greater than 1 MW, the unit was considered as a potential incremental or decremental unit. Generation shift factors were calculated for the potential incremental and decremental units using Managing and Utilizing System Transmission (MUST). From the generation shift factors for the incremental and decremental units, top 100 relief pairs within a NERC certified control area with a greater than 3% TDF on limiting constraint were determined from the incremental units with the lowest generation shift factors and decremental units with highest generation shift factors. If the aggregate redispatch amount for the potential relief pair was determined to be three times greater than the lower of the increment or decrement then the pair was determined not to be feasible and is not included in the top 100 relief pairs. If transmission customer would like to see additional relief pairs beyond the top 100 relief pairs determined, the transmission customer can request SPP to provide the additional pairs. The potential relief pairs were not evaluated to determine impacts on limiting facilities in the SPP and 1st-Tier systems. The redispatch requirements would be called upon prior to implementing NERC TLR Level 5a.

4. Study Results

A. Study Analysis Results

Tables 1 through 6 contain the steady-state analysis results of the AFS. Table 1 identifies the participating long-term transmission service requests included in the AFS. This table lists deferred start and stop dates both with and without redispatch (based on customer selection of redispatch if available), the minimum annual allocated ATC without

upgrades and season of first impact. Table 2 identifies total E & C cost allocated to each Transmission Customer, letter of credit requirements, third party E & C cost assignments, potential base plan E & C funding (lower of allocated E & C or Attachment J Section III B criteria), total revenue requirements for assigned upgrades without consideration of potential base plan funding, point-to-point base rate charge, total revenue requirements for assigned upgrades with consideration of potential base plan funding, and final total cost allocation to the Transmission Customer. Table 3 provides additional details for each request including all assigned facility upgrades required, allocated E & C costs, allocated revenue requirements for upgrades, upgrades not assigned to customer but required for service to be confirmed, facilities limiting rollover rights, credits to be paid for previously assigned AFS facility upgrades, and any third party upgrades required. This includes the season in the planning horizon where rollover rights are limited. Table 4 lists all upgrade requirements with associated solutions needed to provide transmission service for the AFS, Minimum ATC per upgrade with season of impact, Earliest Date Upgrade is required (COD), Estimated Date of Upgrade Completion (EOC), and Estimated E & C cost. Table 5 lists identified Third-Party constrained facilities. Table 6 identifies potential redispatch pairs available to relieve the aggregate impacts on identified constraints to prevent deferral of start of service. Table 7 identifies deferred expansion plan projects that were replaced with requested upgrades at earlier dates.

The potential base plan funding allowable is contingent upon meeting each of the conditions for classifying upgrades associated with designated resources as base plan upgrades as defined in Section III.B of Attachment J. If the additional capacity of the new or changed designated resource exceeds the 125% resource to load forecast for the year of start of service, the requested resource is not eligible for base plan funding of required network upgrades and the full cost of the upgrades is assignable to the customer. If the 5 year term and 125% resource to load criteria are met, the lesser of the planned maximum net dependable capacity (NDC) or the requested capacity is multiplied by

\$180,000 to determine the potential base plan funding allowable. When calculating Base Plan Funding amounts that include a wind farm, the amount used is 10% of the requested amount of service, or the NDC. The Maximum Potential Base Plan Funding Allowable may be less than the potential base plan funding allowable due to the E & C Cost allocated to the customer being lower than the potential amount allowable to the customer. The customer is responsible for any assigned upgrade costs in excess of Potential Base Plan Engineering and Construction Funding Allowable.

Regarding application of base plan funding for PTP requests, if PTP base rate exceeds upgrade revenue requirements without taking into effect the reduction of revenue requirements by potential base plan funding, then the base rate revenue pays back the Transmission Owner for upgrades and no base plan funding is applicable as the access charge must be paid as it is the higher of "OR" pricing.

However, if initially the upgrade revenue requirements exceed the PTP base rate, then potential base plan funding would be applicable. The test of the higher of "OR" pricing would then be made against the remaining assignable revenue requirements versus PTP base rate. Examples are as follows:

Example A:

E & C allocated for upgrades is 74 million with revenue requirements of 140 million and PTP base rate of 101 million. Potential base plan funding is 47 million with the difference of 27 million E & C assignable to the customer. If the revenue requirements for the assignable portion is 54 million and the PTP base rate is 101 million, the customer will pay the higher "OR" pricing of 101 million base rate of which 54 million revenue requirements will be paid back to the Transmission Owners for the upgrades and the remaining revenue requirements of (140-54) or 86 million will be paid by base plan funding.

Example B:

E & C allocated for upgrades is 74 million with revenue requirements of 140 million and

PTP base rate of 101 million. Potential base plan funding is 10 million with the

difference of 64 million E & C assignable to the customer. If the revenue requirements

for this assignable portion is 128 million and the PTP base rate is 101 million the

customer will pay the higher "OR" pricing of 128 million revenue requirements to be

paid back to the Transmission Owners and the remaining revenue requirements of (140-

128) or 12 million will be paid by base plan funding.

Example C:

E & C allocated for upgrades is 25 million with revenue requirements of 50 million and

PTP base rate of 101 million. Potential base plan funding is 10 million. Base plan funding

is not applicable as the higher "OR" pricing of PTP base rate of 101 million must be paid

and the 50 million revenue requirements will be paid from this.

The 125% resource to load determination is performed on a per request basis and is not

based on a total of designated resource requests per Customer. A footnote will provide

the maximum resource designation allowable for base plan funding consideration per

Customer basis per year.

Base plan funding verification requires that each Transmission Customer with potential

for base plan funding provide SPP power supply contracts or agreements verifying that

the firm capacity of the requested designated resource is committed for a minimum five

year duration.

B. Study Definitions

The Commercial Operation Date (COD) is the earliest date the upgrade is required to alleviate a constraint considering all requests. End of Construction (EOC) is the estimated date the upgrade will be completed and in service. The Total Engineering and Construction Cost (E & C) is the upgrade solution cost as determined by the transmission owner. The Transmission Customer Allocation Cost is the estimated engineering and construction cost based upon the allocation of costs to all Transmission Customers in the AFS who positively impact facilities by at least 3% subsequently overloaded by the AFS. Minimum ATC is the portion of the requested capacity that can be accommodated with out upgrading facilities. Annual ATC allocated to the Transmission Customer is determined by the least amount of allocated seasonal ATC within each year of a reservation period.

5. Conclusion

The results of the AFS show that limiting constraints exist in many areas of the regional transmission system. Due to these constraints, transmission service cannot be granted unless noted in Table 3.

The Transmission Provider will tender a Letter of Intent on February 23, 2007. This will open a 15-day window for Customer response. To remain in the Aggregate Transmission Service Study (ATSS), the Transmission Provider must receive from the Transmission Customer (Customer) by March 10th, 2007, an executed Letter of Intent. The Letter of Intent will list options the Customer must choose to clarify their commitment to remain in the ATSS. The only action required on OASIS is to WITHDRAW the request or leave the request in STUDY mode.

The Transmission Provider must receive an unconditional and irrevocable letter of credit in the amount of the total allocated Engineering and Construction costs assigned to the Customer. This letter of credit is required regardless of base plan funding consideration. This amount is for all assignable Network Upgrades less pre-payment requirements. The amount of the letter of credit will be adjusted down on an annual basis to reflect amortization of these costs. The Transmission Provider will issue letters of authorization to construct facility upgrades to the constructing Transmission Owner. This date is determined by the engineering and construction lead time provided for each facility upgrade.

Appendix A

PSS/E CHOICES IN RUNNING LOAD FLOW PROGRAM AND ACCC

BASE CASES:

Solutions - Fixed slope decoupled Newton-Raphson solution (FDNS)

- 1. Tap adjustment Stepping
- 2. Area interchange control Tie lines and loads
- 3. Var limits Apply immediately
- 4. Solution options X Phase shift adjustment
 - _ Flat start
 - _ Lock DC taps
 - _ Lock switched shunts

ACCC CASES:

Solutions – AC contingency checking (ACCC)

- 1. MW mismatch tolerance -0.5
- 2. Contingency case rating Rate B
- 3. Percent of rating 100
- 4. Output code Summary
- 5. Min flow change in overload report 3mw
- 6. Excld cases w/ no overloads form report YES
- 7. Exclude interfaces from report NO
- 8. Perform voltage limit check YES
- 9. Elements in available capacity table 60000
- 10. Cutoff threshold for available capacity table 99999.0
- 11. Min. contng. case Vltg chng for report 0.02
- 12. Sorted output None

Newton Solution:

- 1. Tap adjustment Stepping
- 2. Area interchange control Tie lines and loads
- 3. Var limits Apply automatically
- 4. Solution options \underline{X} Phase shift adjustment
 - _ Flat start
 - Lock DC taps
 - _ Lock switched shunts

Table 1 - Long-Term Transmission Service Requests Included in Aggregate Facility Study

Customer	Study Number	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date without interim redispatch	Deferred Stop Date without interim redispatch	Start Date with interim redispatch	Stop Date with interim redispatch	Mimimum Allocated ATC (MW) within reservation period	Season of Minimum Allocated ATC within reservation period
AECC	AG3-2006-003	1161131	WR	EES	50	12/1/2007	12/1/2027	10/1/2008	10/1/2028	10/1/2008	10/1/2028	24	08SP
AECC	AG3-2006-002	1161136	WR	CSWS	50	12/1/2007	12/1/2027	3/1/2009	3/1/2029	3/1/2009	3/1/2029	0	07WP
AECC	AG3-2006-001	1161209	CSWS	CSWS	70	6/1/2011	6/1/2031					0	11SP
AEPM	AG3-2006-039	1158760	CSWS	CSWS	160	7/1/2007	7/1/2012	4/1/2009	4/1/2014	7/1/2007	7/1/2012	0	07SP
AEPM	AG3-2006-040	1158761	CSWS	CSWS	160	11/1/2007	11/1/2012	4/1/2009	4/1/2014	11/1/2007	11/1/2012	0	08SP
AEPM	AG3-2006-043	1162211	OKGE	CSWS	457	6/1/2011	6/1/2031					0	11SP
AEPM	AG3-2006-044	1162214	CSWS	CSWS	455	6/1/2011	6/1/2031					0	16SP
AEPM	AG3-2006-045	1162223	CSWS	WFEC	15	8/1/2007	8/1/2012					0	11SP
AEPM	AG3-2006-072	1162484	CSWS	EES	11	1/1/2009	1/1/2014					0	11SP
AEPM	AG3-2006-073	1162486	CSWS		25	1/1/2009	1/1/2014					0	11SP
AEPM	AG3-2006-074	1162487	CSWS	EES	20	1/1/2009	1/1/2014					0	11SP
AEPM	AG3-2006-075	1162491	CSWS	EES	19	1/1/2009	1/1/2014					0	11SP
AEPM	AG3-2006-076	1162492	CSWS	EES	9	1/1/2009	1/1/2014					0	11SP
AEPM	AG3-2006-077	1162494	CSWS	EES	17	1/1/2009	1/1/2014					0	11SP
AEPM	AG3-2006-092	1162763	CSWS	CSWS	100	6/1/2007	6/1/2008	6/1/2009	6/1/2010	6/1/2007	6/1/2008	12	07SP
AEPM	AG3-2006-091	1162766	CSWS	CSWS	100	6/1/2007	6/1/2008	6/1/2009	6/1/2010	6/1/2007	6/1/2008	12	07SP
AEPM	AG3-2006-095	1162768	OKGE		100	6/1/2007	6/1/2008					100	N/A
AEPM	AG3-2006-094	1163062	CSWS	CSWS	550	6/1/2010	6/1/2015					0	11SP
GRDX	AG3-2006-032	1161666	CSWS	GRDA	150	2/1/2007	2/1/2008	6/1/2009	6/1/2010	6/1/2009	6/1/2010	0	06WP
GRDX	AG3-2006-033	1161667	OKGE	GRDA	150	2/1/2007	2/1/2008	6/1/2009	6/1/2010	6/1/2009	6/1/2010	0	07AP
GSEC	AG3-2006-100	1162688	SPS	SPS	10	3/1/2007	3/1/2037	4/1/2009	4/1/2039	4/1/2009	4/1/2039	0	07SP
KCPS	AG3-2006-106	1162649	KCPL	KCPL	101	2/1/2007	2/1/2037	1/1/2010	1/1/2040	1/1/2009	1/1/2039	0	06WP
KCPS	AG3-2006-103	1162650	KCPL	CLEC	52	2/1/2007	2/1/2008	6/1/2008	6/1/2009	6/1/2007	6/1/2008	0	07SH
KCPS	AG3-2006-103	1162651	KCPL	CLEC	51	2/1/2007	2/1/2008	6/1/2008	6/1/2009	6/1/2007	6/1/2008	0	07SH
KCPS	AG3-2006-104	1162654	KCPL	SPA	16	2/1/2007	2/1/2008	6/1/2009	6/1/2010	6/1/2007	6/1/2008	0	07SH
KCPS	AG3-2006-101	1162685	AECI	KCPL	50	6/1/2007	6/1/2008	6/1/2008	6/1/2009	6/1/2007	6/1/2008	0	07SH
KCPS	AG3-2006-101	1162686	AECI	KCPL	50	6/1/2007	6/1/2008	6/1/2008	6/1/2009	6/1/2007	6/1/2008	0	07SH
MIDW	AG3-2006-086	1162102	WR	WR	25	6/1/2007	6/1/2017	7/1/2009	7/1/2019	7/1/2009	7/1/2019	0	07SH
MIDW	AG3-2006-087	1162109	WR	WR	10	6/1/2008	6/1/2018	7/1/2009	7/1/2019	7/1/2009	7/1/2019	0	08SP
MIDW	AG3-2006-087	1162122	WR	WR	10	6/1/2008	6/1/2018	7/1/2009	7/1/2019	7/1/2009	7/1/2019	0	08SP
MIDW	AG3-2006-087	1162123	WR	WR	19	6/1/2008	6/1/2018	7/1/2009	7/1/2019	7/1/2009	7/1/2019	0	08SP
MIDW	AG3-2006-087	1162130	WR	WR	6	6/1/2008	6/1/2018	7/1/2009	7/1/2019	7/1/2009	7/1/2019	0	08SP
MIDW	AG3-2006-058	1162131	WR	WR	40	6/1/2010	6/1/2020					0	11SP
MIDW	AG3-2006-058	1162136	WR	WR	10	6/1/2010	6/1/2020					0	11SP
MIDW	AG3-2006-062	1162137	WR	WR	20	6/1/2008	6/1/2038	7/1/2009	7/1/2039	7/1/2009	7/1/2039	0	11SP
MIDW	AG3-2006-062	1162141	WR	WR	5	6/1/2008	6/1/2038	7/1/2009	7/1/2039	7/1/2009	7/1/2039	0	08SP
MIDW	AG3-2006-062	1162142	WR	WR	40	6/1/2008	6/1/2038	7/1/2009	7/1/2039	7/1/2009	7/1/2039	0	11SP
MIDW	AG3-2006-062	1162143	WR	WR	10	6/1/2008	6/1/2038	7/1/2009	7/1/2039	7/1/2009	7/1/2039	0	11SP
MIDW	AG3-2006-058	1162175	WR	WR	68	6/1/2008	6/1/2038	7/1/2009	7/1/2039	7/1/2009	7/1/2039	0	08SP
MIDW	AG3-2006-058	1162176	WR	WR	16	6/1/2008	6/1/2038	7/1/2009	7/1/2039	7/1/2009	7/1/2039	0	08SP
MIDW	AG3-2006-058	1162183	WR	WR	40	6/1/2010	6/1/2030					0	11SP
MIDW	AG3-2006-058	1162190	WR	WR	10	6/1/2010	6/1/2030					0	11SP
MIDW	AG3-2006-058	1162191	WR	WR	40	6/1/2010	6/1/2030					0	11SP
MIDW	AG3-2006-058	1162192	WR	WR	10	6/1/2010	6/1/2030					0	11SP
MIDW	AG3-2006-058	1162193	WR	WR	20	6/1/2010	6/1/2030					0	11SP
MIDW	AG3-2006-058	1162194	WR	WR	5	6/1/2010	6/1/2030	7/4/0000	7/4/0011	7/4/0000	7/4/02/1	0	11SP
MIDW	AG3-2006-121	1167662	WR	WR	35	2/1/2007	2/1/2012	7/1/2009	7/1/2014	7/1/2009	7/1/2014	0	06WP
MIDW	AG3-2006-121	1167664	WR	WR	10	2/1/2007	2/1/2012	7/1/2009	7/1/2014	7/1/2009	7/1/2014	0	06WP

Table 1 - Long-Term Transmission Service Requests Included in Aggregate Facility Study

Customer	Study Number			POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date without interim redispatch	Deferred Stop Date without interim redispatch	Start Date with interim redispatch	Stop Date with interim redispatch	Mimimum Allocated ATC (MW) within reservation period	Season of Minimum Allocated ATC within reservation period
NTEC	AG3-2006-035			CSWS	52	6/1/2011	6/1/2031					0	11SP
OGE	AG3-2006-034	1161665	OKGE		20	2/1/2007	2/1/2012	6/1/2009	6/1/2014	6/1/2007	6/1/2012	0	08SP
OGE	AG3-2006-049	1162077	OKGE	OKGE	384	6/1/2011	6/1/2031					0	11SP
OMPA	AG3-2006-028	1159596	CSWS	CSWS	41	6/1/2011	6/1/2031					0	11SP
OMPA	AG3-2006-050	1162095	OKGE	OKGE	73	6/1/2011	6/1/2031					0	11SP
SEPC	AG3-2006-113	1162670	WR	SECI	51	12/1/2007	12/1/2027	7/1/2009	7/1/2029	7/1/2009	7/1/2029	0	07WP
SPSM	AG3-2006-115	1162675	OKGE	SPS	100	2/1/2007	2/1/2008	6/1/2010	6/1/2011	6/1/2010	6/1/2011	0	06WP
UCU	AG3-2006-025D	1152228	MPS	MPS	585	2/1/2007	2/1/2027	10/1/2008	10/1/2028	10/1/2008	10/1/2028	266	16SP
UCU	AG3-2006-052D	1162075	WR	MPS	51	1/1/2008	1/1/2028	7/1/2009	7/1/2029	7/1/2009	7/1/2029	0	08SP
UCU	AG3-2006-088D	1162678	WR	MPS	25	1/1/2008	1/1/2028	7/1/2009	7/1/2029	7/1/2009	7/1/2029	0	08SP
UCU	AG3-2006-088D	1162681	WR	MPS	25	1/1/2008	1/1/2028	7/1/2009	7/1/2029	7/1/2009	7/1/2029	0	08SP
WRGS	AG3-2006-025	1140120	WR	WR	360	5/1/2009	5/1/2015	7/1/2009	7/1/2015	5/1/2009	5/1/2015	0	11SP
WRGS	AG3-2006-024D	1161506	WR	WR	380	5/1/2008	5/1/2014	7/1/2009	7/1/2015	5/1/2008	5/1/2014	0	11SP
WRGS	AG3-2006-036D	1161997	MPS	WR	300	6/1/2007	6/1/2014	7/1/2009	7/1/2016	6/1/2007	6/1/2014	0	07SH
												·	·

Note 1: Disregard Redispatch shown in Table 6 for limitations identified earlier than the start date with redispatch with the exception of limitations identified in the 2007 Spring Peak, 2007 April Minimum, 2007 Summer Shoulder, and 2007 Fall Peak.

Note 2: Start and Stop Dates are determined based on customers choosing option to pursue redispatch to start service at Requested Start and Stop Dates or earliest date possible.

Table 2 - Total Revenue Requirements Associated with Long-Term Transmission Service Requests

Customer	Study Number	Reservation	^{11 12} Engineering and Construction Cost of Upgrades Allocated to Customer for Revenue Requirements	¹ Letter of Cre Amount Required	edit	² Potential Base Plan Engineering and Construction Funding Allowable	Notes	Engir Cor Co	dditional neering and nstruction est for 3rd y Upgrades	³ Total Revenue Requirements for Assigned Upgrades over term of reservation without potential base plan funding allocation	³⁷ Total Revenue Requirements for Assigned Upgrades over term of reservation WITH potential base plan funding allocation	Point-to-Point Base Rate over reservation period	⁴ Total Cost of Reservation Assignable to Customer contingent upon base plan funding
AECC	AG3-2006-003	1161131	\$ 1,193,934	\$ 1,193,9	934	\$ -		\$	-	\$ 4,023,653	\$ 4,023,653	\$ 10,800,000	\$ 10,800,000
AECC	AG3-2006-002	1161136	\$ 1,602,781	\$ 1,602,7	781	\$ 900,000		\$	-	\$ 5,324,318	\$ 2,334,586	\$ -	\$ 2,334,586
AECC	AG3-2006-001	1161209	\$ 16,025,758	\$ 16,025,7	758	\$ 12,600,000		Indet	terminate	\$ 48,715,776	\$ 10.413.764	\$ -	\$ 10.413.764
AEPM	AG3-2006-039	1158760	\$ 2,929,914		-	\$ 2,929,914		\$	-	\$ 4,970,982	\$ -	\$ -	Sch 9 charges
AEPM	AG3-2006-040	1158761	\$ 2,929,914		_	\$ 2,929,914		\$	-	\$ 5,110,868	\$ -	\$ -	Sch 9 charges
AEPM	AG3-2006-043	1162211	\$ 33,746,343	\$ 32,731,4	170	\$ 33,746,343		\$	-	\$ 142,923,595	\$ -	\$ -	Sch 9 charges
AEPM	AG3-2006-044	1162214	\$ 65,804,529	\$ 24,585,8		\$ 65,804,529			terminate	\$ 209,754,477	\$ -	\$ -	Sch 9 charges
AEPM	AG3-2006-045	1162223	\$ 12.753.734	\$ 12,747,8		\$ 2,700,000		\$	-	\$ 21.896.250	\$ 17.258.573	\$ -	\$ 17,258,573
AEPM	AG3-2006-043	1162484	\$ 94,131	\$ 12,747,6		\$ 94,131		\$	699,631	\$ 129,329	\$ 17,230,373	\$ -	\$ 699,631
AEPM	AG3-2006-072 AG3-2006-073	1162486	\$ 217.664	\$ 35.0		\$ 217,664		\$	1.648.402	\$ 297.164	\$ -	\$ -	\$ 1.648.402
												Ψ	T .,
AEPM	AG3-2006-074	1162487	\$ 164,867	\$ 25,8		\$ 164,867	<u> </u>	\$			-	\$ -	\$ 4,781,159
AEPM	AG3-2006-075	1162491	\$ 172,001	\$ 27,7		\$ 172,001	-	\$	368,115	\$ 234,732	\$ -	\$ -	\$ 368,115
AEPM	AG3-2006-076	1162492	\$ 74,619	\$ 12,0		\$ 74,619	-	\$	1,274,547	\$ 102,411	\$ -	\$ -	\$ 1,274,547
AEPM	AG3-2006-077	1162494	\$ 142,745	\$ 21,6		\$ 142,745		\$	923,922	\$ 194,375	\$ -	\$ -	\$ 923,922
AEPM	AG3-2006-092	1162763	\$ 412,771	\$ 423,4		\$ -		\$	9,695,776	\$ 796,369	\$ 626,271	\$ 1,260,000	\$ 10,955,776
AEPM	AG3-2006-091	1162766	\$ 708,552	\$ 369,0)57	\$ -		\$	-	\$ 1,440,734	\$ 1,067,727	\$ 1,260,000	\$ 1,260,000
AEPM	AG3-2006-095	1162768	-	\$	-	\$ -		\$	-	\$ -	\$ -	\$ 1,260,000	\$ 1,260,000
AEPM	AG3-2006-094	1163062	\$ 41,165,604	\$ 22,337,3	329	\$ 41,165,604		Indet	terminate	\$ 74,814,620	\$ -	\$ -	Sch 9 charges
GRDX	AG3-2006-032	1161666	\$ 2,100,194	\$ 939,4	142	\$ -		\$	-	\$ 3,865,348	\$ 3,412,176	\$ -	\$ 3,412,176
GRDX	AG3-2006-033	1161667	\$ 1,586,545	\$ 483,3	331	\$ -		\$	-	\$ 2,733,550	\$ 2,500,399	\$ -	\$ 2,500,399
GSEC	AG3-2006-100	1162688	\$ 245.825	\$ 315.8	325	\$ -		\$	200.000	\$ 1,197,200	\$ 1,197,200	\$ -	\$ 1.397.200
KCPS	AG3-2006-106	1162649	\$ 2,412,312	\$ 1,712,3	312	\$ 1,800,000		\$	-	\$ 10,671,157	\$ 2,708,637	\$ -	\$ 2,708,637
KCPS	AG3-2006-103	1162650	\$ -			\$ -		\$	-	\$ -	\$ -	\$ 655,200	\$ 655,200
KCPS	AG3-2006-103	1162651	\$ -	\$		\$ -		\$	-	\$ -	\$ -	\$ 642,600	\$ 642,600
KCPS	AG3-2006-104	1162654	\$ 60,661	\$ 62,2	237	\$ -			terminate	\$ 140,559	\$ 110,536	\$ 172,800	\$ 172,800
KCPS	AG3-2006-101	1162685	\$ -	\$	-	\$ -		\$	-	\$ -	\$ -	\$ -	Sch 9 charges
KCPS	AG3-2006-101	1162686	\$ -	\$		\$ -		\$	-	\$ -	\$ -	ψ -	Sch 9 charges
MIDW	AG3-2006-101	1162102	\$ 254.918	\$ 249.3	202	\$ -	_	\$		\$ 647.142	\$ 647.142	\$ -	\$ 647.142
MIDW	AG3-2006-087	1162102	\$ 101,982		772	\$ -		\$	-	\$ 258,894	\$ 258,894	\$ -	\$ 258,894
MIDW						•						Ψ	
	AG3-2006-087	1162122	\$ 101,982	\$ 99,7		\$ -	_	\$	-	\$ 258,894	\$ 258,894	\$ -	\$ 258,894
MIDW	AG3-2006-087	1162123	\$ 193,707	\$ 189,5		-		\$	-	\$ 491,749		\$ -	\$ 491,749
MIDW	AG3-2006-087	1162130	\$ 61,175	\$ 59,8		\$ -		\$	-	\$ 155,302	\$ 155,302	\$ -	\$ 155,302
MIDW	AG3-2006-058	1162131	\$ 109,856	\$ 103,2		\$ -		\$	-	\$ 319,684		\$ -	\$ 319,684
MIDW	AG3-2006-058	1162136	\$ 27,450	\$ 25,7		\$ -		\$	-	\$ 79,880	\$ 79,880	\$ -	\$ 79,880
MIDW	AG3-2006-062	1162137	\$ 41,184		125	\$ -		\$	-	\$ 193,952	\$ 193,952	\$ -	\$ 193,952
MIDW	AG3-2006-062	1162141	\$ 10,295		305	-		\$	-	\$ 48,483	\$ 48,483	\$ -	\$ 48,483
MIDW	AG3-2006-062	1162142	\$ 82,370		352	\$ -		\$	-	\$ 387,913		\$ -	\$ 387,913
MIDW	AG3-2006-062	1162143	\$ 20,598		218	•		\$	-	\$ 97,005		\$ -	\$ 97,005
MIDW	AG3-2006-058	1162175	\$ 188,374	\$ 175,		\$ -		\$	-	\$ 909,306	\$ 909,306	\$ -	\$ 909,306
MIDW	AG3-2006-058	1162176	\$ 44,330	\$ 41,3	301	\$ -	5	\$	-	\$ 213,987	\$ 213,987	\$ -	\$ 213,987
MIDW	AG3-2006-058	1162183	\$ 109,856	\$ 103,2	235	\$ -	6	\$	-	\$ 436,064	\$ 436,064	\$ -	\$ 436,064
MIDW	AG3-2006-058	1162190	\$ 27,450	\$ 25,7	795	\$ -	6	\$	-	\$ 108,960	\$ 108,960	\$ -	\$ 108,960
MIDW	AG3-2006-058	1162191	\$ 109,856	\$ 103,2		\$ -		\$	-	\$ 436,064		\$ -	\$ 436,064
MIDW	AG3-2006-058	1162192	\$ 27,450	\$ 25,7		\$ -	6	\$	-	\$ 108,960	\$ 108,960	\$ -	\$ 108,960
MIDW	AG3-2006-058	1162193	\$ 54,927	\$ 51,6		\$ -		\$	-	\$ 218,028	\$ 218,028	\$ -	\$ 218,028
MIDW	AG3-2006-058	1162194	\$ 13.724		397	\$ -		\$	_	\$ 54,476	\$ 54.476	\$ -	\$ 54.476
MIDW	AG3-2006-030	1167662	\$ 356.864	\$ 349.		\$ -		\$	-	\$ 742,589	\$ 742.589	\$ -	\$ 742.589
MIDW	AG3-2006-121	1167664	\$ 101,982	7	772	\$ -		\$		\$ 212,211		\$ -	\$ 212,211
IVIIDVV	AGG-2000-121	1107004	Ψ 101,902	Ψ 99,	14	Ψ -	ິ	Ψ	-	ا ا کرکا ا	ا ا ک,کا ک	Ψ -	Ψ ∠1∠,∠11

Table 2 - Total Revenue Requirements Associated with Long-Term Transmission Service Requests

Customar	Study Number	December	^{11 12} Engineering and Construction Cost of Upgrades Allocated to Customer for Revenue	Am	ount	Eng Cor	nstruction	Notes	⁴ Additional Engineering and Construction Cost for 3rd	Ass res	over term of servation without tential base plan	³⁷ Total Revenue Requirements for Assigned Upgrades over term of reservation WITH potential base plan	F B	ase Rate over	⁴ Total Cost of Reservation Assignable to Customer contingent upon base plan
Customer	Study Number	Reservation	Requirements	_	quired		nding Allowable	ű	Party Upgrades	tu	nding allocation	funding allocation	res	ervation period	_
NTEC OGE	AG3-2006-035 AG3-2006-034	1161974 1161665	\$ 6,121,447 \$ 223,609	\$	6,221,447	_	6,121,447	10	\$ -	\$	20,861,246	•	\$	4 000 000	Sch 9 charges \$ 1,638,304
OGE	AG3-2006-034 AG3-2006-049	1162077	\$ 223,609 \$ 37,225,529	_	201,071 996,162		37,225,529	10	\$ 558,304 \$ -	\$	286,391 157,102,841		φ	1,080,000	\$ 1,638,304 Sch 9 charges
OMPA				_					7	Đ.			φ		
OMPA	AG3-2006-028	1159596	* -,, -	\$	28,376,454		7,380,000		Indeterminate	96	111,895,825		Þ	-	\$ 82,794,543
	AG3-2006-050	1162095	+ -,,-		5,859,066		5,848,818		5 -	ð	24,947,918		Þ	-	Sch 9 charges
SEPC	AG3-2006-113	1162670	\$ 307,835		307,835		-	8	\$ -	\$	1,158,971		\$		\$ 1,158,971
SPSM	AG3-2006-115	1162675	\$ 9,809,510		1,041,803	_	-		\$ -	\$	20,360,375		\$	1,741,200	\$ 20,038,225
UCU	AG3-2006-025D	1152228	\$ 2,100,000		-	\$	-		\$ -	\$	7,147,508		\$	-	\$ 7,147,508
UCU	AG3-2006-052D	1162075	\$ 343,378		343,378		-	_	\$ -	\$	1,293,873		\$	19,718,640	\$ 19,718,640
UCU	AG3-2006-088D	1162678	\$ 168,314		168,314		-		\$ -	\$	634,220		\$	9,666,000	
UCU	AG3-2006-088D	1162681	\$ 168,314	\$	168,314		-	8	\$ -	\$	634,220		\$	9,666,000	
WRGS	AG3-2006-025	1140120	\$ 1,044,255	\$	209,792	\$	-	9	\$ -	\$	2,324,972	\$ 2,156,950	\$	-	\$ 2,156,950
WRGS	AG3-2006-024D	1161506	\$ 1,531,041	\$	216,788	\$	1,531,041	9	\$ -	\$	3,572,237	\$ -	\$	-	Sch 9 charges
WRGS	AG3-2006-036D	1161997	\$ 2,315,803	\$	642,483	\$	2,315,803	9	\$ -	\$	5,423,928	\$ -	\$	-	Sch 9 charges
Totals		72028207	\$ 284,170,035			\$	225,864,969			\$	903,586,091	\$ 168,163,879			

Note 1: Letter of Credit required for financial security for transmission owner for network upgrades is determined by allocated engineering and construction costsless engineering and construction costs for upgrades when network customer is the transmission owner less the E & C allocation of expedited projects plus network upgrades for assigned upgrades less that \$100,000 which are base plan funded but still require a letter of credit.

Note 2. If potential base plan funding is applicable, this value is the lesser of the Engineering and Construction costs of assignable upgrades or the value of base plan funding calculated pursuant to Attachment J, Section III B criteria. Allocation of base plan funding is contingent upon verification of customer agreements meeting Attachment J, Section II B criteria. Not applicable if PTP base rate exceeds revenue requirements. Note 3: Neverous Requirements (RR) are based upon deterred end dates if applicable. Deterred dates are based upon customer's choice to pursue redispatch. Achievable Base Plan Avoided RR in the case of a Base Plan upgrade being displaced or deferred by an earlier in service date for a Requested Upgrade shall be determined per Attachment J, Section VII.C methodology. Assumption of a 40 year service life is utilized for Base Plan funded projects. A present worth analysis of RR on a common year basis between the Base Plan and Requested Upgrades was performed to determine avoided Base Plan RR due to the displacement or deferral of the Base Plan upgrade by the Requested Upgrade. The incremental increase in present worth of a Requested Upgrade on a common year basis as a Base Plan upgrade is assigned to the transmission requests impacting the upgrade based on the displacement or deferral. If the displacement analysis results in lower RR due to the shorter amortization period of the requested upgrade when compared to a base plan amortization period, then no direct assignment of the upgrade cost is made due to the displacement to an earlier start date.

Note 4. For PTP requests, total cost is based on the higher of the base rate or assigned upgrade revenue requirements. For Network requests, the total cost is based on the assigned upgrade revenue requirement. Allocation of base plan funding will be determined after verification of designated resource meeting Attachment J, Section II B Criteria. Additionally E & C of 3rd Party upgrades is assignable to Customer. This includes prepayments required for any SWPA upgrades. Revenue requirements for 3rd Party facilities are not calculated. Total cost to customer is based on assumption of Revenue Requirements with confirmation of base plan funding. Customer is responsible for negotiating redispatch costs if applicable. Customer is also responsible to pay credits for previously assigned upgrades that are impacted by their request. Credits required will be determined at a later date.

Table 2 - Total Revenue Requirements Associated with Long-Term Transmission Service Requests

			^{11 12} Engineering and Construction Cost of Upgrades Allocated to Customer for Revenue	¹ Letter of Credit Amount	Construction	Note	Engineering and Construction Cost for 3rd	Requirements for Assigned Upgrades over term of reservation without potential base plan	potential base plan	Point-to-Point Base Rate over	⁴Total Cost of Reservation Assignable to Customer contingent upon base plan
Customer	Study Number	Reservation	Requirements	Required	Funding Allowable	es	Party Upgrades	funding allocation	funding allocation	reservation period	funding

Note 5: Midwest has a maximum of 385MW total resources for 2007 or 2008 for base plan funding consideration.

Note 6: Midwest has a maximum of 391MW total resources for 2010 for base plan funding consideration.

Note 7: RR with base plan funding may increase or decrease even if no base plan funding is applicable to a particular request if another request that shares the upgrade is now full base plan funded resulting in a different amortization period for the upgrade and thus different RR.

Note 8: Resource ratio exceeds 125% load criteria for base plan funding.

Note 9: Westar has a maximum of 7160MW total resources for 2009 base plan consideration. Thus a cap of 920MW new resouces eligible for base plan funding with no base funding for 1140120 if 1161506 and 1161997 confirmed.

Note 10: Requires a SWPA prepayment of \$2000 for the Jones-Jonesboro 161kV upgrade.

Note 11: E & C for an expedited project was assigned to previous AG customer or a Transmission Owner planned project thus not included in this total.

Note 12: E & C allocation for determination of allocated revenue requirements does not include those upgrades estimated at \$100,000 or less as these are base plan funded. Thus this number sets the cap for base plan funding allowable for remaining assigned upgrades. Allocated E & C in Table 3does include those upgrades less than \$100,000 in order to establish the allocation per request per upgrade detail which is required for Letter of Credit determination.

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

				Requested	Requested	Requested Stop		Deferred Stop Date Without	Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
AECC	1161209	CSWS	CSWS	70	6/1/2011	6/1/2031			\$ 12,600,000	\$ -	\$ 16,025,758	\$ 48,715,776
									\$ 12,600,000	\$ -	\$ 16.025.758	\$ 48,715,776

				Earliest Service	Redispatch	Alloca	ated E & C			Total	Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Tota	I E & C Cost	Requ	irements
1161209	DANVILLE (APL) - MAGAZINE REC 161KV CKT 1 AEPW	6/1/2011	6/1/2011			\$	1,355,299	\$	9,000,000	\$	4,898,495
	DYESS - ELM SPRINGS REC 161KV CKT 1	6/1/2011	6/1/2011			\$	281,517	\$	5,000,000	\$	981,288
	DYESS - TONTITOWN 161KV CKT 1	6/1/2011	6/1/2011			\$	28,152	\$	500,000	\$	98,130
	HEMPSTEAD - NW TEXARKANA 345 kV CKT 1	6/1/2011	6/1/2011			\$	5,742,721	\$	56,000,000	\$	20,099,552
	Hugo - SunnySide 345kV	6/1/2011	6/1/2011			\$	3,720,121	\$	50,000,000	\$	9,125,094
	SOUTH TEXARKANA REC - TEXARKANA PLANT 69KV CKT 1	6/1/2016	6/1/2016	1		\$	4,000,000	\$	4,000,000	\$	9,928,811
	SUGAR HILL (SUGAR HL) 138/69/12.47KV TRANSFORMER CKT 1	6/1/2011	6/1/2011			\$	330,480	\$	2,500,000	\$	1,150,614
	SUNNYSIDE 345/138KV TRANSFORMER CKT 2	6/1/2011	6/1/2011			\$	567,468	\$	6,500,000	\$	2,433,791
•	•				Total	\$	16,025,758	\$	133,500,000	\$	48,715,776

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1161209	BEN WHEELER - BARTONS CHAPEL	6/1/2016	6/1/2016		
	BONANZA - BONANZA TAP 161KV CKT 1 Displacement	6/1/2015	6/1/2015		
	BULL SHOALS - BULL SHOALS 161KV CKT 1	6/1/2010	6/1/2010		
	Siloam Springs - South Fayetteville 161 kV	6/1/2014	6/1/2014		
	WALDRON CAPACITOR	6/1/2016	6/1/2016		

Third Party Limitations.

Reservation	Upgrade Name	COD		Earliest Service Start Date	Redispatch Available
	5FLIPN - BULL SHOALS HES 161KV CKT 1	6/1/2011	6/1/2011		
	5HILLTOP 161 - 5ST_JOE 161 161KV CKT 1	6/1/2011	6/1/2011		
	5ST_JOE 161 - EVERTON 161KV CKT 1	6/1/2011	6/1/2011		
	ARKANSAS NUCLEAR ONE 161 - RUSSELLVILLE NORTH 161KV CKT 1	6/1/2007	6/1/2007		
	DANVILLE (APL) - MAGAZINE REC 161KV CKT 1 ENTR	6/1/2011	6/1/2011		
	EVERTON - HARRISON-EAST 161KV CKT 1	6/1/2011	6/1/2011		
	HARRISON-EAST - SUMMIT 161KV CKT 1	6/1/2016	6/1/2016		
	RUSSELLVILLE EAST - RUSSELLVILLE NORTH 161KV CKT 1	6/1/2011	6/1/2011	· · · · · · · · · · · · · · · · · · ·	

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

				Requested	Requested	Requested Stop			Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation		POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
AECC	1161136	WR	CSWS	50	12/1/2007	12/1/2027	3/1/2009	3/1/2029	\$ 900,000	\$ -	\$ 1,602,781	\$ 5,324,318
									\$ 900,000	٠.	\$ 1,602,781	\$ 5,324,318

		000		Earliest Service			ated E & C			Revenue
Reservation	Upgrade Name				Available	Cost			E & C Cost	
1161136	ARCADIA - SOONER 345kV CKT 1	6/1/2011	6/1/2011			\$	1,062,061	\$	65,000,000	\$ 3,697,315
	DYESS - ELM SPRINGS REC 161KV CKT 1	6/1/2011	6/1/2011			\$	202,594	\$	5,000,000	\$ 586,642
	DYESS - TONTITOWN 161KV CKT 1	6/1/2011	6/1/2011			\$	20,259	\$	500,000	\$ 58,663
	HEMPSTEAD - NW TEXARKANA 345 kV CKT 1	6/1/2011	6/1/2011			\$	251,992	\$	56,000,000	\$ 732,673
	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER Displacement	6/1/2007	6/1/2009	10/1/2008		\$	65,875	\$	1,132,688	\$ 249,025
					Total	\$	1,602,781	\$ 1:	27,632,688	\$ 5,324,318

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

Reservation	Upgrade Name	COD		Earliest Service Start Date	Redispatch Available
1161136	ALUMAX TAP - NORTHWEST TEXARKANA 138KV CKT 1	6/1/2008	6/1/2008		
	BONANZA - BONANZA TAP 161KV CKT 1 Displacement	6/1/2015	6/1/2015		
	BROKEN BOW - CRAIG JUNCTION 138KV CKT 1 AEPW	12/1/2007	3/1/2009		No
	Siloam Springs - South Fayetteville 161 kV	6/1/2014	6/1/2014		
	WALDRON CAPACITOR	6/1/2016	6/1/2016		

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

Reservation	Upgrade Name	COD		Earliest Service Start Date	Redispatch Available
1161136	HUGO POWER PLANT - VALLIANT 345 KV AEPW	5/1/2010	5/1/2010		
	HUGO POWER PLANT - VALLIANT 345 KV WFEC	5/1/2010	5/1/2010		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3 Displacement	6/1/2011	6/1/2011		

Construction Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

Reservation	Upgrade Name	COD		Earliest Service Start Date	Redispatch Available
1161136	CHAMBER SPRINGS - TONTITOWN 161KV CKT 1	12/1/2006	6/1/2007		No
	Chamber Springs - Tontitown 345 kV	6/1/2008	6/1/2008		
	Flint Creek - East Centerton 345 kV	6/1/2008	6/1/2008		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

Customer	Reservation	POR		Requested Amount		Requested Stop		Date Without	Potential Base Plan Funding Allowable	Point-to-Point	Allocated E & C	Total Revenue Requirements
AECC	1161131	WR	EES	50	12/1/2007	12/1/2027	10/1/2008	10/1/2028	\$ -	\$ 10,800,000	\$ 1,193,934	\$ 4,023,653
									S -	\$ 10.800.000	\$ 1,193,934	\$ 4.023.653

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Alloca	ated E & C	Total E & C Co		otal Revenue equirements
1161131	ARCADIA - SOONER 345kV CKT 1	6/1/2011	6/1/2011			\$	1,125,484	\$ 65,000,00	00 \$	3,772,545
	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER Displacement	6/1/2007	6/1/2009	10/1/2008	No	\$	68,450	\$ 1,132,68	38 \$	251,108
					Total	\$	1.193.934	\$ 66,132,68	38 \$	4.023.653

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1161131	BEN WHEELER - BARTONS CHAPEL	6/1/2016	6/1/2016		

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1161131	HUGO POWER PLANT - VALLIANT 345 KV AEPW	5/1/2010	5/1/2010		
	HUGO POWER PLANT - VALLIANT 345 KV WFEC	5/1/2010	5/1/2010		
	IATAN - NASHUA 345KV CKT 1	6/1/2010	6/1/2010		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3 Displacement	6/1/2011	6/1/2011		

Construction Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1161131	WICHITA - RENO 345KV	2/1/2007	7/1/2009		Nο

Customer	Reservation	POR	POD			Requested Stop	Date Without	Date Without			Allocated E & C	Total Revenue
AEPM	1158760	CSWS	CSWS	160	7/1/2007	7/1/2012	4/1/2009	4/1/2014	4 \$ 2,929,914	\$ -	\$ 2,931,360	\$ 4,970,982
									\$ 2,929,914	\$ -	\$ 2,931,360	\$ 4,970,982

				Earliest Service	Redispatch	Allocate	ed E & C		Tot	al Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total E & C Cos	Re	quirements
1158760	ARSENAL HILL - FORT HUMBUG 138KV CKT 1	6/1/2011	6/1/2011			\$	39,774	\$ 2,750,00) \$	60,295
	ARSENAL HILL - MCWILLIE STREET 138KV CKT 1	6/1/2011	6/1/2011			\$	1,446	\$ 100,00) \$	-
	ARSENAL HILL - WATERWORKS 69KV CKT 1	6/1/2011	6/1/2011			\$	28,926	\$ 2,000,00) \$	43,611
	DYESS - ELM SPRINGS REC 161KV CKT 1	6/1/2011	6/1/2011			\$	2,257,944	\$ 5,000,000) \$	3,407,358
	DYESS - TONTITOWN 161KV CKT 1	6/1/2011	6/1/2011			\$	225,794	\$ 500,00	\$	340,735
	SOUTHWEST SHREVEPORT - SOUTHWEST SHREVEPORT TAP 138KV CKT 1	6/1/2009	6/1/2009			\$	377,476	\$ 2,500,00) \$	657,076
	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1 Expedite	6/1/2008	4/1/2009		Yes	\$	-	\$ 1,500,00) \$	230,954
	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 2 Expedite	6/1/2008	4/1/2009		Yes	\$	-	\$ 1,500,000	\$	230,954
					Total	\$	2,931,360	\$ 15,850,00) \$	4,970,982

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

Γ										
									Earliest Service	Redispatch
ı	Reservation	Upgrade Name					COD	EOC	Start Date	Available
Γ	1158760	LINWOOD - MCWILLIE STREET	T 138KV	CKT 1			6/1/2007	1/1/2008		Yes

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1158760	HUGO POWER PLANT - VALLIANT 345 KV AEPW	5/1/2010	5/1/2010		
	HUGO POWER PLANT - VALLIANT 345 KV WFEC	5/1/2010	5/1/2010		
	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2010	6/1/2010		
	SOUTHWEST SHREVEPORT (SW SHV 2) 345/138/13 8KV TRANSFORMER CKT 2	6/1/2010	6/1/2010		

Customer Study Number AEPM AG3-2006-040

				Requested	Requested	Requested Stop			Potential Base Plan Funding		Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
AEPM	1158761	CSWS	CSWS	160	11/1/2007	11/1/2012	4/1/2009	4/1/2014	\$ 2,929,914	\$ -	\$ 2,931,360	\$ 5,110,868
									\$ 2,929,914	\$	\$ 2,931,360	\$ 5,110,868

				Earliest Service	Redispatch	Alloca	ited E & C			Total F	Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Tota	E & C Cost	Requir	ements
1158761	ARSENAL HILL - FORT HUMBUG 138KV CKT 1	6/1/2011	6/1/2011			\$	39,774	\$	2,750,000	\$	61,991
	ARSENAL HILL - MCWILLIE STREET 138KV CKT 1	6/1/2011	6/1/2011			\$	1,446	\$	100,000	\$	-
	ARSENAL HILL - WATERWORKS 69KV CKT 1	6/1/2011	6/1/2011			\$	28,926	\$	2,000,000	\$	44,838
	DYESS - ELM SPRINGS REC 161KV CKT 1	6/1/2011	6/1/2011			\$	2,257,944	\$	5,000,000	\$	3,503,242
	DYESS - TONTITOWN 161KV CKT 1	6/1/2011	6/1/2011			\$	225,794	\$	500,000	\$	350,324
	SOUTHWEST SHREVEPORT - SOUTHWEST SHREVEPORT TAP 138KV CKT 1	6/1/2009	6/1/2009			\$	377,476	\$	2,500,000	\$	675,566
	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1 Expedite	6/1/2008	4/1/2009		Yes	\$	-	\$	1,500,000	\$	237,453
	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 2 Expedite	6/1/2008	4/1/2009		Yes	\$	-	\$	1,500,000	\$	237,453
					Total	\$	2,931,360	\$	15,850,000	\$	5,110,868

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1158761	LINWOOD - MCWILLIE STREET 138KV CKT 1	6/1/2007	1/1/2008		

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1158761	HUGO POWER PLANT - VALLIANT 345 KV AEPW	5/1/2010	5/1/2010		
	HUGO POWER PLANT - VALLIANT 345 KV WFEC	5/1/2010	5/1/2010		
	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2010	6/1/2010		
	SOUTHWEST SHREVEPORT (SW SHV 2) 345/138/13.8KV TRANSFORMER CKT 2	6/1/2010	6/1/2010		

				Requested	Requested	Requested Stop	Deferred Start Date Without	Deferred Stop Date Without	Potential Base Plan Funding		Allocated E & C	Total Revenue
Customer	Reservation			Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
AEPM	1162211	OKGE	CSWS	457	6/1/2011	6/1/2031			\$ 33,746,343	\$ -	\$ 33,956,125	\$ 142,923,595
									\$ 33,746,343	\$ -	\$ 33,956,125	\$ 142,923,595

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Alloc	ated E & C	Total		Total Revenu Requirements	
1162211	ARCADIA - SOONER 345kV CKT 1	6/1/2011	6/1/2011			\$	27,983,186	\$	65,000,000	\$ 119,712	2,416
	ARSENAL HILL - FORT HUMBUG 138KV CKT 1	6/1/2011	6/1/2011			\$	112,124	\$	2,750,000	\$ 392	2,613
	ARSENAL HILL - MCWILLIE STREET 138KV CKT 1	6/1/2011	6/1/2011			\$	4,077	\$	100,000	\$	-
	ARSENAL HILL - WATERWORKS 69KV CKT 1	6/1/2011	6/1/2011			\$	81,544		2,000,000		3,981
	FRANKLIN SW - MIDWEST TAP 138KV CKT 1 OKGE Displacement	6/1/2014	6/1/2014			\$	12,503	\$	14,588	\$ 42	2,669
	FRANKLIN SW - MIDWEST TAP 138KV CKT 1 WFEC Displacement	6/1/2014	6/1/2014			\$	85,705	\$	100,000	\$	-
	MILLER - WHITE EAGLE 138KV CKT 1	6/1/2011	6/1/2011			\$	107,417	\$	300,000	\$ 462	2,165
	ROSEHILL - SOONER 345KV CKT 1 OKGE Displacement	6/1/2011	6/1/2011			\$	2,796,310	\$	6,322,628		
	ROSEHILL - SOONER 345KV CKT 1 WERE Displacement	6/1/2011	6/1/2011			\$	1,626,349	\$	3,677,275	\$ 5,835	5,903
	RUSSETT - RUSSETT 138KV CKT 1 OKGE	6/1/2016	6/1/2016	i		\$	45,000	\$	45,000	\$	-
	RUSSETT - RUSSETT 138KV CKT 1 WFEC	6/1/2016	6/1/2016			\$	75,000	\$	75,000	\$	-
	SOUTHWEST SHREVEPORT - SOUTHWEST SHREVEPORT TAP 138KV CKT 1	6/1/2009	6/1/2009			\$	1,026,910	\$	2,500,000	\$ 4,129	9,010
					Total	\$	33.956.125	\$	82.884.491	\$ 142,923	3.595

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162211	ALUMAX TAP - NORTHWEST TEXARKANA 138KV CKT 1	6/1/2008	6/1/2008		
	BROKEN BOW - CRAIG JUNCTION 138KV CKT 1 AEPW	12/1/2007	3/1/2009		
	LINWOOD - MCWILLIE STREET 138KV CKT 1	6/1/2007	1/1/2008		

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162211	HUGO POWER PLANT - VALLIANT 345 KV AEPW	5/1/2010	5/1/2010		
	HUGO POWER PLANT - VALLIANT 345 KV WFEC	5/1/2010	5/1/2010		
	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2010	6/1/2010		
	SOUTHWEST SHREVEPORT (SW SHV 2) 345/138/13.8KV TRANSFORMER CKT 2	6/1/2010	6/1/2010		

Customer Study Number AEPM AG3-2006-044

				Requested	Requested	Requested Stop			Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch			Cost	Requirements
AEPM	1162214	CSWS	CSWS	455	6/1/2011	6/1/2031			\$ 65,804,529	\$ -	\$ 65,804,529	\$ 209,754,477
			•		•				\$ 65,804,529	\$ -	\$ 65,804,529	\$ 209,754,477

				Earliest Service	Redispatch	Alloc	ated E & C			Tota	I Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Tota	al E & C Cost	Req	uirements
1162214	HEMPSTEAD - NW TEXARKANA 345 kV CKT 1	6/1/2011	6/1/2011			\$	39,367,878	\$	56,000,000	\$	137,787,769
	Hugo - SunnySide 345kV	6/1/2011	6/1/2011			\$	21,744,724	\$	50,000,000	\$	53,337,689
	SUGAR HILL (SUGAR HL) 138/69/12.47KV TRANSFORMER CKT 1	6/1/2011	6/1/2011			\$	1,850,806	\$	2,500,000	\$	6,443,849
	SUNNYSIDE 345/138KV TRANSFORMER CKT 2	6/1/2011	6/1/2011			\$	2,841,121	\$	6,500,000	\$	12,185,169
					Total	\$	65,804,529	\$	115,000,000	\$	209,754,477

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162214	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2010	6/1/2010		
	SOUTHWEST SHREVEPORT (SW SHV 2) 345/138/13.8KV TRANSFORMER CKT 2	6/1/2010	6/1/2010		

Third Party Limitations.

Γ						
					Earliest Service	Redispatch
	Reservation	Upgrade Name	COD	EOC	Start Date	Available
ı	1162214	ARKANSAS NUCLEAR ONE 161 - RUSSELLVILLE NORTH 161KV CKT 1	6/1/2007	6/1/2007		
Г		RUSSELLVILLE FAST - RUSSELLVILLE NORTH 161KV CKT 1	6/1/2011	6/1/2011		

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

				Requested	Requested	Requested Stop	Deferred Start Date Without	Deferred Stop Date Without	Potential Base Plan Funding		Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
AEPM	1162223	CSWS	WFEC	15	8/1/2007	8/1/2012			\$ 2,700,000	\$ -	\$ 12,753,859	\$ 21,896,250
									\$ 2,700,000	\$ -	\$ 12,753,859	\$ 21,896,250

				Earliest Service		Alloca	ted E & C			Total Re	
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Tota	I E & C Cost	Require	ments
1162223	ARCADIA - SOONER 345kV CKT 1	6/1/2011	6/1/2011			\$	309,975	\$	65,000,000	\$	533,562
	ARSENAL HILL - FORT HUMBUG 138KV CKT 1	6/1/2011	6/1/2011			\$	3,430	\$	2,750,000	\$	5,236
	ARSENAL HILL - MCWILLIE STREET 138KV CKT 1	6/1/2011	6/1/2011			\$	125	\$	100,000	\$	-
	ARSENAL HILL - WATERWORKS 69KV CKT 1	6/1/2011	6/1/2011			\$	2,495	\$	2,000,000	\$	3,788
	CANEY CREEK 345/138 kV	6/1/2011	6/1/2011			\$	11,294,125	\$	31,000,000	\$ 1	9,552,053
	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacement	6/1/2007	6/1/2010			\$	6,099	\$	344,362	\$	11,902
	Hugo - SunnySide 345kV	6/1/2011	6/1/2011			\$	1,033,108	\$	50,000,000	\$	1,600,156
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010)		\$	41,040	\$	10,372,158	\$	80,038
	SUNNYSIDE 345/138KV TRANSFORMER CKT 2	6/1/2011	6/1/2011			\$	63,462	\$	6,500,000	\$	109,515
					Total	\$	12,753,859	\$	168,066,520	\$ 2	1,896,250

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD			Available
1162223	ANADARKO - CYRIL 69KV CKT 1	6/1/2011	6/1/2011		
	ANADARKO - GEORGIA 138KV CKT 1	6/1/2011	6/1/2011		
	CYRIL - MEDICINE PARK JCT 69KV CKT 1	6/1/2011	6/1/2011		
	DUNCAN (DUNCAN) 138/69/13.8KV TRANSFORMER CKT 1	6/1/2011	6/1/2011		
	FLETCHER - MEDICINE PARK JCT 69KV CKT 1	6/1/2011	6/1/2011		
	FRANKLIN SW 138/69KV TRANSFORMER CKT 1	6/1/2011	6/1/2011		
	LINWOOD - MCWILLIE STREET 138KV CKT 1	6/1/2007	1/1/2008		
	Savre interconnect	6/1/2011	6/1/2011		

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

Reservation	Upgrade Name	COD		Earliest Service Start Date	Redispatch Available
1162223	ANADARKO 138/69KV TRANSFORMER CKT 1	6/1/2011	6/1/2011		
	ARCADIA - REDBUD 345 KV CKT 1	6/1/2006	6/1/2006		
	ARCADIA - REDBUD 345 KV CKT 2	6/1/2006	6/1/2006		
	BEELINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009		
	BROWN - EXPLORER TAP 138KV CKT 1	6/1/2008	6/1/2008		
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009		
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009		
	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2010	6/1/2010		
	SOUTHWEST SHREVEPORT (SW SHV 2) 345/138/13.8KV TRANSFORMER CKT 2	6/1/2010	6/1/2010		

Potential reservation deferral and redispatch requirement on the following upgrades due to positive MW Impact on limitations that require upgrade. No cost assignment due to negative MW impact on defined upgrade.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD			Available
1162223	ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2010		

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

				Requested	Requested	Requested Stop	Deferred Start	Deferred Stop Date Without	Potential Base		Allocated E & C	C Total Revenue
Customer	Reservation	POR	POD		Start Date		Redispatch	Redispatch	Allowable		Cost	Requirements
AEPM	1162484	CSWS	EES	11	1/1/2009	1/1/2014			\$ 94,131	\$ -	\$ 794,332	\$ 129,329
									\$ 94,131	S -	\$ 794,332	\$ 129,329

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated		Total E & C Cost	Total Revenue
	5 TRIBES - HANCOCK 161KV CKT 1 Displacement	6/1/2007	6/1/2009		Available	\$	394		
	5 TRIBES - PECAN CREEK 161KV CKT 1 Displacement	6/1/2007	6/1/2009)		\$	1,840	\$ 466,473	\$ 4,913
	ARSENAL HILL - FORT HUMBUG 138KV CKT 1	6/1/2011	6/1/2011			\$	4,848	\$ 2,750,000	\$ 8,319
	ARSENAL HILL - MCWILLIE STREET 138KV CKT 1	6/1/2011	6/1/2011			\$	176	\$ 100,000	\$ -
	ARSENAL HILL - WATERWORKS 69KV CKT 1	6/1/2011	6/1/2011			\$	3,526	\$ 2,000,000	\$ 6,018
	BEAVER - EUREKA SPRINGS 161KV CKT 1 AEPW	6/1/2013	6/1/2013	3		\$	70,579	\$ 850,000	\$ 74,662
	BEAVER - EUREKA SPRINGS 161KV CKT 1 SWPA	6/1/2013	6/1/2013	3		\$ 1	99,283	\$ 2,400,000	\$ -
	COCODRIE 230/138KV TRANSFORMER CKT 1	12/1/2011	12/1/2011			\$ 5	00,348	\$ 6,000,000	\$ -
	PECAN CREEK (PECANCK1) 345/161/13.8KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2009)		\$	13,338	\$ 3,381,928	\$ 35,417
					Total	\$ 7	94,332	\$ 18,048,401	\$ 129,329

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162484	LINWOOD - MCWILLIE STREET 138KV CKT 1	6/1/2007	1/1/2008		

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162484	BEELINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009		ĺ
	COFFEYVILLE TAP - DEARING 138KV CKT 1 AEPW Displacement	6/1/2011	6/1/2011		
	COFFEYVILLE TAP - DEARING 138KV CKT 1 WERE Displacement	6/1/2011	6/1/2011		
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009		
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009		
	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2010	6/1/2010		
	SOUTHWEST SHREVEPORT (SW SHV 2) 345/138/13.8KV TRANSFORMER CKT 2	6/1/2010	6/1/2010		

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

Customer	Reservation	POR		Requested Amount		Requested Stop	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point	Allocated E & C	Requirements
AEPM	1162486	CSWS	EES	25	1/1/2009	1/1/2014		\$ 217,664	\$ -	\$ 1,867,349	\$ 297,164
							•	\$ 217,664	s -	\$ 1.867.349	\$ 297.164

				Earliest Service	Redispatch	Allocate	dE&C		Total	Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total E & C Cost	Requ	irements
1162486	5 TRIBES - HANCOCK 161KV CKT 1 Displacement	6/1/2007	6/1/2009			\$	888	\$ 100,000	\$	-
	5 TRIBES - PECAN CREEK 161KV CKT 1 Displacement	6/1/2007	6/1/2009			\$	4,140	\$ 466,473	\$	11,053
	ARSENAL HILL - FORT HUMBUG 138KV CKT 1	6/1/2011	6/1/2011			\$	10,870	\$ 2,750,000	\$	18,653
	ARSENAL HILL - MCWILLIE STREET 138KV CKT 1	6/1/2011	6/1/2011			\$	395	\$ 100,000	\$	-
	ARSENAL HILL - WATERWORKS 69KV CKT 1	6/1/2011	6/1/2011			\$	7,906	\$ 2,000,000	\$	13,493
	BEAVER - EUREKA SPRINGS 161KV CKT 1 AEPW	6/1/2013	6/1/2013			\$	164,733	\$ 850,000	\$	174,263
	BEAVER - EUREKA SPRINGS 161KV CKT 1 SWPA	6/1/2013	6/1/2013			\$	465,127	\$ 2,400,000	\$	-
	COCODRIE 230/138KV TRANSFORMER CKT 1	12/1/2011	12/1/2011			\$ 1	,183,275	\$ 6,000,000	\$	-
	PECAN CREEK (PECANCK1) 345/161/13.8KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2009			\$	30,015	\$ 3,381,928	\$	79,701
		•		•	Total	\$ 1	,867,349	\$ 18,048,401	\$	297,164

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162486	LINWOOD - MCWILLIE STREET 138KV CKT 1	6/1/2007	1/1/2008		

	Reservation	Upgrade Name	COD		Earliest Service Start Date	Redispatch Available
İ	1162486	BEELINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009		
Ī		COFFEYVILLE TAP - DEARING 138KV CKT 1 AEPW Displacement	6/1/2011	6/1/2011		
ſ		COFFEYVILLE TAP - DEARING 138KV CKT 1 WERE Displacement	6/1/2011	6/1/2011		
		EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009		
ſ		EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009		
Ī		SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2010	6/1/2010		
		SOUTHWEST SHREVEPORT (SW SHV 2) 345/138/13.8KV TRANSFORMER CKT 2	6/1/2010	6/1/2010		

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

Customer	Reservation	POR				Requested Stop	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point	Allocated E & C	Total Revenue Requirements
AEPM	1162487	CSWS	EES	20	1/1/2009	1/1/2014		\$ 164,867	\$ -	\$ 4,946,997	\$ 224,559
								\$ 164.867	S -	\$ 4.946.997	\$ 224.559

				Earliest Service		Allocat	ed E & C		Total R	
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total E & C Cost	Require	ements
1162487	5 TRIBES - HANCOCK 161KV CKT 1 Displacement	6/1/2007	6/1/2009			\$	656	\$ 100,000	\$	-
	5 TRIBES - PECAN CREEK 161KV CKT 1 Displacement	6/1/2007	6/1/2009			\$	3,059	\$ 466,473	\$	8,167
	ARSENAL HILL - FORT HUMBUG 138KV CKT 1	6/1/2011	6/1/2011			\$	8,663	\$ 2,750,000	\$	14,866
	ARSENAL HILL - MCWILLIE STREET 138KV CKT 1	6/1/2011	6/1/2011			\$	315	\$ 100,000	\$	-
	ARSENAL HILL - WATERWORKS 69KV CKT 1	6/1/2011	6/1/2011			\$	6,300	\$ 2,000,000	\$	10,752
	BAYOU RAPIDES - TWIN BRIDGES 138KV CKT 1	6/1/2011	6/1/2011			\$	1,230,000	\$ 1,230,000	\$	-
	BEAVER - EUREKA SPRINGS 161KV CKT 1 AEPW	6/1/2013	6/1/2013			\$	124,665	\$ 850,000	\$	131,877
	BEAVER - EUREKA SPRINGS 161KV CKT 1 SWPA	6/1/2013	6/1/2013			\$	351,995	\$ 2,400,000	\$	-
	COCODRIE 230/138KV TRANSFORMER CKT 1	12/1/2011	12/1/2011			\$	3,199,164	\$ 6,000,000	\$	-
	PECAN CREEK (PECANCK1) 345/161/13.8KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2009			\$	22,180	\$ 3,381,928	\$	58,896
		•		•	Total	\$	4,946,997	\$ 19,278,401	\$	224,559

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

					Earliest Service	Redispatch
Resen	vation	Upgrade Name	COD	EOC	Start Date	Available
	1162487	LINWOOD - MCWILLIE STREET 138KV CKT 1	6/1/2007	1/1/2008		

				Earliest Service	
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162487	BEELINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009		
	COFFEYVILLE TAP - DEARING 138KV CKT 1 AEPW Displacement	6/1/2011	6/1/2011		
	COFFEYVILLE TAP - DEARING 138KV CKT 1 WERE Displacement	6/1/2011	6/1/2011		
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009		
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	5/1/2010	5/1/2010		
	HUGO POWER PLANT - VALLIANT 345 KV WFEC	5/1/2010	5/1/2010		
	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2010	6/1/2010		
	SOUTHWEST SHREVEPORT (SW SHV 2) 345/138/13.8KV TRANSFORMER CKT 2	6/1/2010	6/1/2010		

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

				Requested	Requested	Requested Stop	Deferred Start Date Without	Deferred Stop Date Without	Potential Base Plan Funding		Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
AEPM	1162491	CSWS	EES	19	1/1/2009	1/1/2014			\$ 172,001	\$ -	\$ 541,125	\$ 234,732
									\$ 172,001	\$ -	\$ 541,125	\$ 234,732

				Earliest Service	Redispatch	Allocated E & 0			Total Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost	1	Total E & C Cost	Requirements
1162491	5 TRIBES - HANCOCK 161KV CKT 1 Displacement	6/1/2007	6/1/2009			\$ 7	02	\$ 100,000	\$ -
	5 TRIBES - PECAN CREEK 161KV CKT 1 Displacement	6/1/2007	6/1/2009			\$ 3,2	77	\$ 466,473	\$ 8,749
	ARSENAL HILL - FORT HUMBUG 138KV CKT 1	6/1/2011	6/1/2011			\$ 8,4	50	\$ 2,750,000	\$ 14,500
	ARSENAL HILL - MCWILLIE STREET 138KV CKT 1	6/1/2011	6/1/2011			\$ 3	07	\$ 100,000	\$
	ARSENAL HILL - WATERWORKS 69KV CKT 1	6/1/2011	6/1/2011			\$ 6,1	45	\$ 2,000,000	\$ 10,488
	BEAVER - EUREKA SPRINGS 161KV CKT 1 AEPW	6/1/2013	6/1/2013			\$ 130,3	74	\$ 850,000	\$ 137,917
	BEAVER - EUREKA SPRINGS 161KV CKT 1 SWPA	6/1/2013	6/1/2013			\$ 368,1	15	\$ 2,400,000	\$
	PECAN CREEK (PECANCK1) 345/161/13.8KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2009			\$ 23,7	55	\$ 3,381,928	\$ 63,078
					Total	\$ 541,1	25	\$ 12,048,401	\$ 234,732

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162491	LINWOOD - MCWILLIE STREET 138KV CKT 1	6/1/2007	1/1/2008		

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162491	BEELINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009		
	COFFEYVILLE TAP - DEARING 138KV CKT 1 AEPW Displacement	6/1/2011	6/1/2011		
	COFFEYVILLE TAP - DEARING 138KV CKT 1 WERE Displacement	6/1/2011	6/1/2011		
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009		
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009		
	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2010	6/1/2010		
	COLITHWEST SUBSYCHOOD (SWIGHT) 2) 245/429/42 9KV TRANSCORMED CKT 2	6/1/2010	6/4/2040		

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

				Requested	Requested	Requested Stop	Deferred Start Date Without	Deferred Stop Date Without	Potential Base Plan Funding		Allocated E & C	Total Revenue
Customer	Reservation		POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
AEPM	1162492	CSWS	EES	9	1/1/2009	1/1/2014			\$ 74,619	\$ -	\$ 1,349,622	\$ 102,411
									\$ 74,619	\$ -	\$ 1,349,622	\$ 102,411

				Earliest Service	Redispatch	Allocated	E&C		Total Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total E & C Cost	Requirements
1162492	5 TRIBES - HANCOCK 161KV CKT 1 Displacement	6/1/2007	6/1/2009			\$	306	\$ 100,000	\$ -
	5 TRIBES - PECAN CREEK 161KV CKT 1 Displacement	6/1/2007	6/1/2009			\$	1,425	\$ 466,473	\$ 3,805
	ARSENAL HILL - FORT HUMBUG 138KV CKT 1	6/1/2011	6/1/2011			\$	4,132	\$ 2,750,000	\$ 7,091
	ARSENAL HILL - MCWILLIE STREET 138KV CKT 1	6/1/2011	6/1/2011			\$	150	\$ 100,000	\$ -
	ARSENAL HILL - WATERWORKS 69KV CKT 1	6/1/2011	6/1/2011			\$	3,005	\$ 2,000,000	\$ 5,129
	BEAVER - EUREKA SPRINGS 161KV CKT 1 AEPW	6/1/2013	6/1/2013			\$	55,723	\$ 850,000	\$ 58,947
	BEAVER - EUREKA SPRINGS 161KV CKT 1 SWPA	6/1/2013	6/1/2013			\$	157,334	\$ 2,400,000	\$ -
	COCODRIE 230/138KV TRANSFORMER CKT 1	12/1/2011	12/1/2011			\$ 1,	117,213	\$ 6,000,000	\$ -
	PECAN CREEK (PECANCK1) 345/161/13.8KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2009			\$	10,334	\$ 3,381,928	\$ 27,441
		•	•	•	Total	\$ 1,	349,622	\$ 18,048,401	\$ 102,411

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162492	LINWOOD - MCWILLIE STREET 138KV CKT 1	6/1/2007	1/1/2008		

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162492	BEELINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009		
	COFFEYVILLE TAP - DEARING 138KV CKT 1 AEPW Displacement	6/1/2011	6/1/2011		
	COFFEYVILLE TAP - DEARING 138KV CKT 1 WERE Displacement	6/1/2011	6/1/2011		
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009		
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	5/1/2010	5/1/2010		
	HUGO POWER PLANT - VALLIANT 345 KV WFEC	5/1/2010	5/1/2010		
	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2010	6/1/2010		
	SOUTHWEST SHREVEPORT (SW SHV 2) 345/138/13.8KV TRANSFORMER CKT 2	6/1/2010	6/1/2010		

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

				Requested	Requested	Requested Stop	Deferred Start Date Without	Deferred Stop Date Without	Potential Base		Allocated E & C	Total Revenue
Customer	Reservation	POR			Start Date		Redispatch	Redispatch	Allowable		Cost	Requirements
AEPM	1162494	CSWS	EES	17	1/1/2009	1/1/2014			\$ 142,745	\$ -	\$ 1,067,526	\$ 194,375
									\$ 142,745	\$ -	\$ 1,067,526	\$ 194.375

				Earliest Service	Redispatch	Allocated	E&C		Total Revenue	
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total E & C Cost	Requirements	
1162494	5 TRIBES - HANCOCK 161KV CKT 1 Displacement	6/1/2007	6/1/2009			\$	548	\$ 100,000	\$	-
	5 TRIBES - PECAN CREEK 161KV CKT 1 Displacement	6/1/2007	6/1/2009			\$	2,555	\$ 466,473	\$ 6,8	822
	ARSENAL HILL - FORT HUMBUG 138KV CKT 1	6/1/2011	6/1/2011			\$	8,547	\$ 2,750,000	\$ 14,6	667
	ARSENAL HILL - MCWILLIE STREET 138KV CKT 1	6/1/2011	6/1/2011			\$	311	\$ 100,000	\$	-
	ARSENAL HILL - WATERWORKS 69KV CKT 1	6/1/2011	6/1/2011			\$	6,216	\$ 2,000,000		
	BEAVER - EUREKA SPRINGS 161KV CKT 1 AEPW	6/1/2013	6/1/2013			\$	106,902	\$ 850,000	\$ 113,0	087
	BEAVER - EUREKA SPRINGS 161KV CKT 1 SWPA	6/1/2013	6/1/2013			\$	301,842	\$ 2,400,000	\$	-
	Natchitoches Capacitor	6/1/2011	6/1/2011			\$	622,080	\$ 622,080	\$	-
	PECAN CREEK (PECANCK1) 345/161/13.8KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2009			\$	18,525	\$ 3,381,928	\$ 49,1	191
		•	•	•	Total	\$ 1,	067,526	\$ 12,670,481	\$ 194,3	375

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162494	LINWOOD - MCWILLIE STREET 138KV CKT 1	6/1/2007	1/1/2008		

				Earliest Service	
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162494	BEELINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009		
	COFFEYVILLE TAP - DEARING 138KV CKT 1 AEPW Displacement	6/1/2011	6/1/2011		
	COFFEYVILLE TAP - DEARING 138KV CKT 1 WERE Displacement	6/1/2011	6/1/2011		
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009		
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	5/1/2010	5/1/2010		
	HUGO POWER PLANT - VALLIANT 345 KV WFEC	5/1/2010	5/1/2010		
	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2010	6/1/2010		
	SOLITHWEST SHREVEPORT (SWISHV 2) 345/138/13 8KV TRANSFORMER CKT 2	6/1/2010	6/1/2010		

				Requested	Requested	Requested Stop			Potential Base Plan Funding	Point-to-Point	Allocated E & 0	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
AEPM	1162766	CSWS	CSWS	100	6/1/2007	6/1/2008	6/1/2009	6/1/2010	\$ -	\$ 1,260,000	\$ 717,899	\$ 1,440,734
		•	•						\$ -	\$ 1,260,000	\$ 717,899	\$ 1,440,734

				Earliest Service	Redispatch	Allocat	ted E & C		Total	Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total E & C Cost	Requ	irements
1162766	5 TRIBES - HANCOCK 161KV CKT 1 Displacement	6/1/2007	6/1/2009		Yes	\$	9,347	\$ 100,000	\$	-
	5 TRIBES - PECAN CREEK 161KV CKT 1 Displacement	6/1/2007	6/1/2009		Yes	\$	43,601	\$ 466,473	\$	101,514
	PECAN CREEK (PECANCK1) 345/161/13.8KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2009		Yes	\$	316,109	\$ 3,381,928	\$	731,976
	SOUTHWEST SHREVEPORT - SOUTHWEST SHREVEPORT TAP 138KV CKT 1	6/1/2009	6/1/2009			\$	348,842	\$ 2,500,000) \$	607,244
					Total	S	717 899	\$ 6.448.401	S	1 440 734

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162766	BROKEN BOW - CRAIG JUNCTION 138KV CKT 1 AEPW	12/1/2007	3/1/2009		
	LINWOOD - MCWILLIE STREET 138KV CKT 1	6/1/2007	1/1/2008		

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162766	ARCADIA - REDBUD 345 KV CKT 1	6/1/2006	6/1/2006		
	ARCADIA - REDBUD 345 KV CKT 2	6/1/2006	6/1/2006		

Customer Study Number AEPM AG3-2006-092

Customer	Reservation	POR	POD			Requested Stop	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable		Allocated E & C	Total Revenue Requirements
AEPM	1162763	CSWS	CSWS	100	6/1/2007	6/1/2008	6/1/2009	6/1/2010	\$ -	\$ 1,260,000	\$ 423,497	\$ 796,369
	*	•	•						6	\$ 1.260,000	\$ 423,497	\$ 796.369

Reservation	Upgrade Name	COD		Earliest Service Start Date	Redispatch Available	Allocated E		Total	E & C Cost	evenue
	5 TRIBES - HANCOCK 161KV CKT 1 Displacement	6/1/2007			Yes		10,726		100,000	\$ -
	5 TRIBES - PECAN CREEK 161KV CKT 1 Displacement	6/1/2007	6/1/2009		Yes	\$ 5	50,033	\$	466,473	\$ 96,994
	PECAN CREEK (PECANCK1) 345/161/13.8KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2009		Yes	\$ 36	32,738	\$	3,381,928	\$ 699,376
					Total	\$ 42	23,497	\$	3.948.401	\$ 796,369

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162763	BROKEN BOW - CRAIG JUNCTION 138KV CKT 1 AEPW	12/1/2007	3/1/2009		
	LINWOOD - MCWILLIE STREET 138KV CKT 1	6/1/2007	1/1/2008		

		000		Earliest Service	
					Available
1162763	ARCADIA - REDBUD 345 KV CKT 1	6/1/2006	6/1/2006		
	ARCADIA - REDBUD 345 KV CKT 2	6/1/2006	6/1/2006		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	5/1/2010	5/1/2010		
	HUGO POWER PLANT - VALLIANT 345 KV WFEC	5/1/2010	5/1/2010		
	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2010	6/1/2010		
	SOUTHWEST SHREVEPORT (SW SHV 2) 345/138/13.8KV TRANSFORMER CKT 2	6/1/2010	6/1/2010		

Customer	Reservation	POR	POD	. toquootou		Requested Stop	Date Without	Date Without			Allocated E & C	Total Revenue Requirements
AEPM	1163062	CSWS	CSWS	550	6/1/2010	6/1/2015			\$ 41,165,604	\$ -	\$ 41,256,854	\$ 74,814,620
		•							\$ 41,165,604	\$ -	\$ 41,256,854	\$ 74,814,620

				Earliest Service	Redispatch	Alloca	ated E & C		Tota	I Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total E & C Cost	Req	uirements
1163062	ARSENAL HILL - FORT HUMBUG 138KV CKT 1	6/1/2011	6/1/2011			\$	2,509,388	\$ 2,750,000	\$	4,837,880
	ARSENAL HILL - MCWILLIE STREET 138KV CKT 1	6/1/2011	6/1/2011			\$	91,250	\$ 100,000	\$	-
	ARSENAL HILL - WATERWORKS 69KV CKT 1	6/1/2011	6/1/2011			\$	1,825,009	\$ 2,000,000	\$	3,499,319
	ARSENAL HILL (ARSHILL1) 138/69/12.47KV TRANSFORMER CKT 1	6/1/2011	6/1/2011			\$	2,500,000	\$ 2,500,000	\$	3,702,088
	ARSENAL HILL (ARSHILL2) 138/69/14.5KV TRANSFORMER CKT 2	6/1/2011	6/1/2011			\$	2,500,000	\$ 2,500,000	\$	3,702,088
	DANVILLE (APL) - MAGAZINE REC 161KV CKT 1 AEPW	6/1/2011	6/1/2011			\$	7,102,862	\$ 9,000,000	\$	14,134,555
	HEMPSTEAD - NW TEXARKANA 345 kV CKT 1	6/1/2011	6/1/2011			\$	2,391,016	\$ 56,000,000	\$	4,607,575
	Hugo - SunnySide 345kV	6/1/2011	6/1/2011			\$	19,790,467	\$ 50,000,000	\$	34,634,577
	SUNNYSIDE 345/138KV TRANSFORMER CKT 2	6/1/2011	6/1/2011			\$	2,546,862	\$ 6,500,000	\$	5,696,538
					Total	\$	41.256.854	\$ 131,350,000	\$	74.814.620

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1163062	ARSENAL HILL - NORTH MARKET 69KV CKT 1	6/1/2011	6/1/2011		
	LINWOOD - MCWILLIE STREET 138KV CKT 1	6/1/2007	1/1/2008		
	PORT ROBSON - REDPOINT 138kV	6/1/2011	6/1/2011		

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1163062	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2010	6/1/2010		
	SOUTHWEST SHREVEPORT (SW SHV 2) 345/138/13.8KV TRANSFORMER CKT 2	6/1/2010	6/1/2010		

Third Party Limitations.

					Earliest Service	Redispatch
Res	servation	Upgrade Name	COD	EOC	Start Date	Available
	1163062	ARKANSAS NUCLEAR ONE 161 - RUSSELLVILLE NORTH 161KV CKT 1	6/1/2007	6/1/2007		
		DANVILLE (APL) - MAGAZINE REC 161KV CKT 1 ENTR	6/1/2011	6/1/2011		
		RUSSELLVILLE EAST - RUSSELLVILLE NORTH 161KV CKT 1	6/1/2011	6/1/2011		

Customer Study Number AEPM AG3-2006-095

0	Reservation	POR	POD			Requested Stop	Date Without	Date Without				Total Revenue
Customer				Amount		Date	Redispatch	Redispatch	Allowable		Cost	Requirements
AEPM	1162768	OKGE	CSWS	100	6/1/2007	6/1/2008			\$ -	\$ 1,260,000	\$	\$ -
<u> </u>									\$ -	\$ 1,260,000	\$ -	\$ -

Reservation	Upgrade Name	COD		Earliest Service Start Date		Allocated E & C Cost		Total Revenue Requirements
1162768		OOD	LOO	Otali Date	Available	\$ -	\$ -	\$ -
•			•		Total	\$ -	\$ -	\$ -

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162768	ARCADIA - REDBUD 345 KV CKT 1	6/1/2006	6/1/2006		
	ARCADIA - REDBUD 345 KV CKT 2	6/1/2006	6/1/2006		

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

Customer Study Number GRDX AG3-2006-032

Customer	Reservation	POR				Requested Stop	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point	Allocated E & C	Total Revenue Requirements
GRDX	1161666	CSWS	GRDA	150	2/1/2007	2/1/2008	6/1/2009	6/1/2010	\$ -	\$ -	\$ 2,123,987	\$ 3,865,348
									S -	S -	\$ 2,123,987	\$ 3.865.348

				Earliest Service	Redispatch	Alloca	ited E & C			Total Re	evenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total	E & C Cost	Require	ments
1161666	5 TRIBES - HANCOCK 161KV CKT 1 Displacement	6/1/2007	6/1/2009		No	\$	23,793	\$	100,000	\$	-
	5 TRIBES - PECAN CREEK 161KV CKT 1 Displacement	6/1/2007	6/1/2009		No	\$	110,988	\$	466,473	\$	258,407
	CLAREMORE (CLRAUTO3) 161/69/13.8KV TRANSFORMER CKT 3	6/1/2007	6/1/2009		No	\$	1,184,545	\$	2,300,000	\$	1,743,681
	PECAN CREEK (PECANCK1) 345/161/13.8KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2009		No	\$	804,661	\$	3,381,928	\$	1,863,259
		•			Total	S	2 123 987	\$	6 248 401	\$	3 865 348

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

					Earliest Service	Redispatch
R	Reservation	Upgrade Name	COD	EOC	Start Date	Available
F	1161666	Kansas 7.2MVAR Cap	6/1/2007	6/1/2009		No
Г		SCoffeyville Capacitor	6/1/2008	6/1/2008		
Г		Turkey Ford 7.2MVAR Cap	6/1/2007	6/1/2009		No

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1161666	ARCADIA - REDBUD 345 KV CKT 1	6/1/2006	6/1/2006		
	ARCADIA - REDBUD 345 KV CKT 2	6/1/2006	6/1/2006		

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1161666	CHAMBER SPRINGS - TONTITOWN 161KV CKT 1	12/1/2006	6/1/2007		No
	TALLANT - RAMONA 161kV CKT 1	4/1/2007	10/1/2008		Nο

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

Customer Study Number GRDX AG3-2006-033

Customer	Reservation	POR			Requested Start Date	Requested Stop		Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point	Allocated E & C	Total Revenue Requirements
GRDX	1161667	OKGE	GRDA	150	2/1/2007	2/1/2008	6/1/2009	6/1/2010	\$ -	\$ -	\$ 1,598,786	\$ 2,733,550
									\$ -	S -	\$ 1,598,786	\$ 2.733.550

				Earliest Service	Redispatch	Allocat	ed E & C			Total F	Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total	E & C Cost	Requir	rements
1161667	5 TRIBES - HANCOCK 161KV CKT 1 Displacement	6/1/2007	6/1/2009		No	\$	12,241	\$	100,000	\$	
	5 TRIBES - PECAN CREEK 161KV CKT 1 Displacement	6/1/2007	6/1/2009		No	\$	57,102	\$	466,473	\$	132,948
	CLAREMORE (CLRAUTO3) 161/69/13.8KV TRANSFORMER CKT 3	6/1/2007	6/1/2009		No	\$	1,115,455	\$	2,300,000	\$	1,641,979
	PECAN CREEK (PECANCK1) 345/161/13.8KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2009		No	\$	413,988	\$	3,381,928	\$	958,623
					Total	\$	1 598 786	\$	6 248 401	S	2 733 550

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1161667	Kansas 7.2MVAR Cap	6/1/2007	6/1/2009		No
	SCoffeyville Capacitor	6/1/2008	6/1/2008		
	Turkey Ford 7.2MVAR Cap	6/1/2007	6/1/2009		No

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1161667	ARCADIA - REDBUD 345 KV CKT 1	6/1/2006	6/1/2006		
	ARCADIA - REDBUD 345 KV CKT 2	6/1/2006	6/1/2006		

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1161667	TALLANT - RAMONA 161kV CKT 1	4/1/2007	10/1/2008		No

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

Customer Study Number GSEC AG3-2006-100

				Requested	Requested	Requested Stop	Deferred Start Date Without		Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date		Redispatch	Allowable	Base Rate	Cost	Requirements
GSEC	1162688	SPS	SPS	10	3/1/2007	3/1/2037	4/1/2009	4/1/2039	\$ -	\$ -	\$ 515,825	\$ 1,197,200
									\$ -	\$ -	\$ 515.825	\$ 1.197.200

				Earliest Service	Redispatch	Alloca	ted E & C		Total Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total E & C Cost	Requirements
1162688	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacemen	6/1/2007	6/1/2010		No	\$	10,545	\$ 344,362	\$ 51,323
	GSEC Midway Interconnection #1	6/1/2007	6/1/2007		No	\$	70,000	\$ 70,000	\$ -
	GSEC Midway Interconnection #2	6/1/2011	6/1/2011		No	\$	200,000	\$ 200,000	\$ -
	ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2010		No	\$	235,280	\$ 858,753	\$ 1,145,877
					Total	S	515.825	\$ 1,473,115	\$ 1.197.200

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

		000		Earliest Service	
					Available
1162688	ELK CITY - ELK CITY 69KV CKT 1 AEPW	12/1/2008			No
	Hitchland 345 and 115 kV Interchange	6/1/2010	6/1/2010		
	Mooreland - Potter 345 kV SPS	6/1/2016	6/1/2016		
	Mooreland - Potter 345 kV WFEC	6/1/2016	6/1/2016		
	Mooreland 345/138 kV Transformer	6/1/2016	6/1/2016		
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2016	6/1/2016		
	Pringle - Etter 115 kV	6/1/2010	6/1/2010		
	Sayre interconnect	6/1/2011	6/1/2011		
	SNYDER - SNYDER INTERCONNECTION	6/1/2016	6/1/2016		
	Spearville - Mooreland 345 kV SUNC	6/1/2016	6/1/2016		
	Spearville - Mooreland 345 kV WFEC	6/1/2016	6/1/2016		
	Tex-Hitchland-Sherman Tap 115 kV ckt	6/1/2010	6/1/2010		
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2016	6/1/2016		

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162688	CACHE - SNYDER 138KV CKT 1	6/1/2008	6/1/2008		

Construction Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162688	ALTUS JCT TAP - RUSSELL 138KV CKT 1	6/1/2015	6/1/2008		

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162688	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010		No

				Requested	Requested	Requested Stop			Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KCPS	1162685	AECI	KCPL	50	6/1/2007	6/1/2008	6/1/2008	6/1/2009	\$ -	\$ -	\$ -	\$ -
KCPS	1162686	AECI	KCPL	50	6/1/2007	6/1/2008	6/1/2008	6/1/2009	\$ -	\$ -	\$ -	\$ -
			•	•	•			•	\$ -	\$ -	\$ -	\$ -

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date		Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1162685	None					\$ -	\$ -	\$ -
					Total	\$ -	\$ -	\$ -
1162686	None					\$ -	\$ -	\$ -
				•	Total	\$ -	\$ -	S -

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Fadinas Onnia	Dadianatah
				Earliest Service	
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162685	ARCADIA - REDBUD 345 KV CKT 1	6/1/2006	6/1/2006		
	ARCADIA - REDBUD 345 KV CKT 2	6/1/2006	6/1/2006		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
1162686	ARCADIA - REDBUD 345 KV CKT 1	6/1/2006	6/1/2006		
	ARCADIA - REDBUD 345 KV CKT 2	6/1/2006	6/1/2006		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		

Construction Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

Г						
					Earliest Service	Redispatch
R	teservation	Upgrade Name	COD	EOC	Start Date	Available
	1162685	LACYGNE-PAOLA-WEST GARDER 345KV	6/1/2007	6/1/2008		Yes
	1162686	LACYGNE-PAOLA-WEST GARDER 345KV	6/1/2007	6/1/2008		Yes

Customer Study Number KCPS AG3-2006-103

				Requested	Requested	Requested Stop			Potential Base Plan Funding		Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KCPS	1162650	KCPL	CLEC	52	2/1/2007	2/1/2008	6/1/2008	6/1/2009	\$ -	\$ 655,200	\$ -	\$ -
KCPS	1162651	KCPL	CLEC	51	2/1/2007	2/1/2008	6/1/2008	6/1/2009	\$ -	\$ 642,600	\$ -	\$ -
			•	•	•	•	•	•	\$ -	\$ 1,297,800	\$ -	\$ -

				Earliest Service		Allocated E & C		Total Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost	Total E & C Cost	Requirements
1162650	None					\$ -	\$ -	\$ -
					Total	\$ -	\$ -	\$ -
1162651	None					\$	\$ -	\$ -
					Total	\$ -	\$ -	\$ -

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

					Earliest Service	Redispatch
	Reservation	Upgrade Name	COD			Available
	1162650	BROKEN BOW - CRAIG JUNCTION 138KV CKT 1 AEPW	12/1/2007	3/1/2009		
Γ	1162651	BROKEN BOW - CRAIG JUNCTION 138KV CKT 1 AEPW	12/1/2007	3/1/2009		

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162650	LACYGNE-PAOLA-WEST GARDER 345KV	6/1/2007	6/1/2008		Yes
1162651	LACYGNE-PAOLA-WEST GARDER 345KV	6/1/2007	6/1/2008		Yes

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

				Requested	Requested	Requested Stop	Deferred Start Date Without		Potential Base Plan Funding		Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KCPS	1162654	KCPL	SPA	16	2/1/2007	2/1/2008	6/1/2009	6/1/2010	\$ -	\$ 172,800	\$ 62,237	\$ 140,559
		•		•	•		•		\$ -	\$ 172,800	\$ 62,237	\$ 140,559

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E &		Total Revenue Requirements
1162654	5 TRIBES - HANCOCK 161KV CKT 1 Displacement	6/1/2007	6/1/2009		Yes	\$ 1,57	3 \$	100,000	\$ -
	5 TRIBES - PECAN CREEK 161KV CKT 1 Displacement	6/1/2007	6/1/2009		Yes	\$ 7,35	3 \$ 4	166,473	\$ 17,120
	PECAN CREEK (PECANCK1) 345/161/13.8KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2009		Yes	\$ 53,30	3 \$ 3,0	381,928	\$ 123,439
			•		Total	\$ 62,23	7 \$ 3.9	948,401	\$ 140,559

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162654	IATAN - NASHUA 345KV CKT 1	6/1/2010	6/1/2010		

Construction Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162654	LACYGNE-PAOLA-WEST GARDER 345KV	6/1/2007	6/1/2008		Yes

Third Party Limitations.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162654	ARKANSAS NUCLEAR ONE 161 - RUSSELLVILLE NORTH 161KV CKT 1	6/1/2007	6/1/2007		

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

Customer Study Number KCPS AG3-2006-106

Customer	Reservation	POR				Requested Stop			Potential Base Plan Funding Allowable	Point-to-Point	Allocated E & C	Total Revenue Requirements
KCPS	1162649	WPEK	KCPL	101	2/1/2007	2/1/2037	1/1/2010	1/1/2040	\$ 1,800,000	\$ -	\$ 2,412,312	\$ 10,671,157

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Alloca Cost	ted E & C	Total F & C.C		Total Revenue Requirements
	COLLEGE - CRAIG 161KV CKT 1	6/1/2016	6/1/2016		, tranabio	\$	700,000	\$ 700,		\$ 2,415,302
	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacemen	6/1/2007	6/1/2010			\$	101,791	\$ 344,	362	\$ 485,705
	MEDICINE LODGE - SUN CITY 115KV CKT 1	6/1/2007	1/1/2008		Yes	\$	150,000	\$ 150,	000	\$ 822,788
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010)		\$	1,441,958	\$ 10,372,	158	\$ 6,875,843
	SPS MUST RUN GENERATION #1	4/1/2007	4/1/2007			\$	-	\$	-	\$ -
	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$	18,563	\$ 114,	189	\$ 71,519
					Total	\$	2.412.312	\$ 11.680.	709	\$ 10.671.157

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162649	AVONDALE - GLADSTONE 161KV CKT 1	6/1/2016	6/1/2016		
	CROSSTOWN - NEAST 161KV CKT 1	6/1/2015	6/1/2015		
	GREENSBURG - JUDSON LARGE 115KV CKT 1	12/1/2006	9/1/2007		Yes
	KINSLEY CAPACITOR	6/1/2007	1/1/2009		No
	MARTIN CITY - TURNER ROAD SUBSTATION 161KV CKT 1	12/1/2006	1/1/2010		Yes
	Sayre interconnect	6/1/2011	6/1/2011		

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162649	IATAN - NASHUA 345KV CKT 1	6/1/2010	6/1/2010		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		

Construction Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162649	LACYGNE-PAOLA-WEST GARDER 345KV	6/1/2007	6/1/2008		Yes
	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		

				Earliest Service	Redispatch	
Reservation	Upgrade Name	COD	EOC	Start Date	Available	
1162649	ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2010			

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

Customer	Reservation	POR		Requested Amount	Requested Start Date	Requested Stop	Deferred Start Date Without Redispatch	Date Without	Potential Base Plan Funding Allowable	Point-to-Point	Alloc	ated E & C	Total Rev	
MIDW	1162131	WR	WR	40	6/1/2010		Redispaten	Redispaton	\$ -	S -	S	109,856	\$	319,684
MIDW	1162136	WR	WR	10	6/1/2010				š -	\$ -	\$	27,450	\$	79,880
MIDW	1162175	WR	WR	68	6/1/2008			7/1/2039	\$ -	\$ -	\$	188,374		909,306
MIDW	1162176	WR	WR	16	6/1/2008				\$ -	\$ -	\$	44,330		213,987
MIDW	1162183	WR	WR	40	6/1/2010	6/1/2030			\$ -	\$ -	\$	109,856	\$	436,064
MIDW	1162190	WR	WR	10	6/1/2010	6/1/2030			\$ -	\$ -	\$	27,450	\$	108,960
MIDW	1162191	WR	WR	40	6/1/2010	6/1/2030			\$ -	\$ -	\$	109,856	\$	436,064
MIDW	1162192	WR	WR	10	6/1/2010	6/1/2030			\$ -	\$ -	\$	27,450	\$	108,960
MIDW	1162193	WR	WR	20	6/1/2010	6/1/2030			\$ -	\$ -	\$	54,927	\$	218,028
MIDW	1162194	WR	WR	5	6/1/2010	6/1/2030			\$ -	\$ -	\$	13,724	\$	54,476
									\$	\$ -	\$	713,273	\$	2,885,408

11923 EXIDE JUNCTION - HORITH AMERICAN PHILIPS 119KV CRT 1	D	Harris Name	COD	EOC	Earliest Service	Redispatch Available	Alloca	ted E & C	T-1-	I F 0 0 0	Total Revenue
EXIDE JUNCTION - SUMMIT 115VC (XFT 1 15/1200 16/12001 18 4.0,000 18 13.225 13.114 19.115 15/1201 15/1201 18.0,000 18 13.225 15/1201 18.0,000		Upgrade Name			Start Date	Available		7.510			
RODSEVELT COUNTY INTERCHANGE 239/15KV TRANSFORMER CKT 1 Displacement	1162131										
ST JOHN CAPACITOR Deplacement											
Total \$ 108.86 \$ 3.272.442 \$ 318.68 \$ 3.272.442 \$ 318.68 \$ 3.272.442 \$ 318.68 \$ 3.272.442 \$ 318.68 \$ 3.272.442 \$ 3.00.000 \$ 1.868 \$ 3.272.442 \$ 3.00.000 \$ 5.67 \$ 2.00.000 \$ 3.00											
119215 EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1		31 JOHN CAFACITOR Displacement	0/1/2000	0/1/2008		Total					
EXIDE JUNCTION - SUMMITT 15KV CKT 1 ST 2000,000 \$ 11,267 \$ 2,000,000 \$ 12,000 \$ 12,000 \$ 33,00 \$ 33,00 \$ 15,000 \$ 12,000	4400400	EVIDE ILINGTION NODTH AMEDICAN DUBLING ALERA OKT A	0/4/0000	0/4/0000		TOTAL					
ROOSEVELT COUNTY INTERCHANGE 230115KV TRANSFORMER CKT 1 Displacement	1162136									300,000	\$ 5,071
ST JOHN CAPACITOR Displacement											
Total \$ 27,450 \$ 3,272,942 \$ 79,88											
1162176 EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1		31 JOHN CAPACITOR Displacement	0/1/2000	0/1/2006		Total					
EXIDE JUNCTION - SUMMIT 115KV CKT 1 ROOSEVELT COUNTY INTERCHANDE 230/115KV TRANSFORMER CKT 1 Displacement 61/2007 61/2010 \$ 86.035 \$ 76.637 \$ 2,000.000 \$ 367.31 \$ 13.41 \$ 14.14 \$ 15.	4400475	EVIDE HUNOTION MODELL AMEDICAN DUBLIDO 44510/ OVT 4	0.14.100000	0/4/0000		rotai					
ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	11621/5										
ST JOHN CAPACITOR Displacement											
1162176 EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1											
1162/176 EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1 61/2009 6/1/2009 \$ 1,000 \$		51 JOHN CAPACITOR Displacement	6/1/2008	6/1/2008		-					
EXIDE JUNCTION - SUMMIT 115KV CKT 1	4400470	EVIDE HUNOTION MODELL AMEDICAN DUBLIDO 44510/ OVT 4	0.14.100000	0/4/0000		Total					
ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	1162176										
ST JOHN CAPACITOR Displacement											
Total \$ 4.4.330 \$ 3.272.942 \$ 213.98											
1162183 EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1		51 JOHN CAPACITOR Displacement	6/1/2008	6/1/2008		-					
EXIDE JUNCTION - SUMMIT 115KV CKT 1 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 6/1/2008 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 6/1/2008 ROOSEVELT COUNTY INTERCHANGE 230/115KV CKT 1 ROOSEVELT COUNTY INTERCHANGE 230/115KV CKT 1 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 6/1/2009 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2007 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2007 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2007 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2007 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2008 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2008 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2009 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2009 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2009 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2009 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2009 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2009 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2009 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2009 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2009 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2009 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2009 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2009 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2009 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 8/1/2009 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT	4400400	EVIDE HUNOTION MODELL AMEDICAN DUBLIDO 44510/ OVT 4	0.44/0.000	0/4/0000		Total					
ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 6/1/2008 6/1/2008 5, 6621 114,189 5 22,177	1162183	EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1									
ST_JOHN CAPACITOR Displacement											
1162190 EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1											
1162190 EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1		ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008							
EXIDE_JUNCTION - SUMMIT 115KV CKT 1	4400400	EVIDE ILINOTION, MODELL AMEDICAN DITH IDO 44510/ OVT 4	0/4/0000	0/4/0000		lotal					
ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement											
ST JOHN CAPACITOR Displacement 6/1/2008 6/1/2008 \$ 1,655 \$ 114,189 \$ 5,44											
Total \$ 27,450 \$ 3,272,942 \$ 108,96											
1162191 EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1		31 JOHN CAPACITOR Displacement	0/1/2000	0/1/2006		Tetal					
EXIDE_JUNCTION - SUMMIT 116KV CKT 1	4400404	EVIDE HINGTION NODTH AMEDICAN DUBLING AASIA OKT A	0/4/0000	0/4/0000		rotai					
ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	1162191										
ST JOHN CAPACITOR Displacement 6/1/2008 6/1/2008 \$ 6,621 \$ 114,189 \$ 21,77											
Total \$ 109,856 \$ 3,272,942 \$ 436,06											
1162192 EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1		ST JOHN CAPACITOR DISPLACEMENT	0/1/2000	0/1/2006							
EXIDE_JUNCTION - SUMMIT 115KV CKT 1	4400400	EVIDE ILINOTION, MODELL AMEDICAN DITH IDO 44510/ OVT 4	0/4/0000	0/4/0000		lotal					
ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 6/1/2007 6/1/2010 \$ 12,642 \$ 858,753 \$ 51,32 ST JOHN CAPACITOR Displacement 6/1/2008 6/1/2008 \$ 1,655 \$ 114,189 \$ 5,44 Total \$ 27,450 \$ 3,272,942 \$ 108,96 St DEJ JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1 6/1/2009 6/1/2009 \$ 3,774 \$ 300,000 \$ 15,29 EXIDE JUNCTION - SUMMIT 115KV CKT 1 6/1/2009 6/1/2009 \$ 22,540 \$ 2,000,000 \$ 15,29 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 6/1/2007 6/1/2010 \$ 25,303 \$ 858,753 \$ 102,72 ST JOHN CAPACITOR Displacement 6/1/2008 6/1/2009 \$ 3,310 \$ 114,189 \$ 10,88 ST JOHN CAPACITOR DISPLACEMENT 6/1/2009 6/1/2009 \$ 3,310 \$ 114,189 \$ 10,88 ST JOHN CAPACITOR DISPLACEMENT 6/1/2009 6/1/2009 \$ 3,372,942 \$ 218,02 ST JOHN CAPACITOR DISPLACEMENT 6/1/2009 6/1/2009 \$ 5,633 \$ 300,000 \$ 3,22 ST JOHN CAPACITOR DISPLACEMENT 6/1/2009 6/1/2009 \$ 5,633 \$ 300,000 \$ 3,22 ST JOHN CAPACITOR DISPLACEMENT 6/1/2009 6/1/2009 \$ 5,633 \$ 300,000 \$ 3,22 ST JOHN CAPACITOR DISPLACEMENT 6/1/2009 6/1/2009 \$ 5,633 \$ 300,000 \$ 3,22 ST JOHN CAPACITOR DISPLACEMENT 6/1/2009 6/1/2009 \$ 5,633 \$ 300,000 \$ 3,22 ST JOHN CAPACITOR DISPLACEMENT 6/1/2009 6/1/2009 \$ 5,633 \$ 300,000 \$ 3,22 ST JOHN CAPACITOR DISPLACEMENT 6/1/2009 6/1/2009 \$ 5,633 \$ 2,506 ST JOHN CAPACITOR DISPLACEMENT 6/1/2009 6/1/2009 \$ 5,633 \$ 2,506 ST JOHN CAPACITOR DISPLACEMENT 6/1/2009 6/1/2009 \$ 2,27 \$ 114,189 \$ 2,71 ST JOHN CAPACITOR DISPLACEMENT 6/1/2009 6/1/2009 \$ 2,27 \$ 114,189 \$ 2,71 ST JOHN CAPACITOR DISPLACEMENT 6/1/2009 6/1/2009 \$ 2,27 \$ 114,189 \$ 2,71 ST JOHN CAPACITOR DISPLACEMENT 6/1/2009 6/1/2009 \$ 2,27 \$ 114,189 \$ 2,71 ST JOHN CAPACITOR DISPLACEMENT 6/1/2009 6/1/2009 \$ 2,27 \$ 114,189 \$ 2,71 ST JOHN CAPACITOR DISPLACEMENT 6/1/2009 6/1/2009 \$ 2,27 \$											
ST JOHN CAPACITOR Displacement 6/1/2008 6/1/2008 \$ 1.655 \$ 114,189 \$ 5.44											
Total \$ 27,450 \$ 3,272,942 \$ 108,98											
1162193 EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1		ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008							
EXIDE_JUNCTION - SUMMIT 116KV CKT 1	4400400		0/4/0000	0/4/0000		Total					
ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 6/1/2007 6/1/2010 \$ 25,303 \$ 858,753 \$ 102,72											
ST JOHN CAPACITOR Displacement 6/1/2008 6/1/2008 \$ 3,310 \$ 114,189 \$ 10,88		EXIDE JUNCTION - SUMMIT 115KV CKT 1									
Total \$ 54,927 \$ 3,272,942 \$ 218,02		ROUSEVELT COUNTY INTERCHANGE 230/T15KV TRANSFORMER CKT 1 Displacement									
1162194 EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1 6/1/2009 6/1/2009 \$ 943 \$ 300,000 \$ 3,82 EXIDE JUNCTION - SUMMIT 115KV CKT 1 6/1/2009 6/1/2009 \$ 5,633 \$ 2,000,000 \$ 22,27 ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 6/1/2007 6/1/2010 \$ 6,321 \$ 858,753 \$ 25,66 ST JOHN CAPACITOR Displacement 6/1/2008 6/1/2008 \$ 827 \$ 11,4189 \$ 2,71		3 I JUNIA CAPACITUR DISpiacement	6/1/2008	6/1/2008							
EXIDE JUNCTION - SUMMIT 115KV CKT 1 6/1/2009 6/1/2009 \$ 5,633 \$ 2,000,000 \$ 22,27	4400:01	EVIDE HINOTION, NODTH AMEDICAN DUBLIDO 445/07/O/T 4	0/4/0000	0/4/0000		ıotai					
ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement 6/1/2007 6/1/2010 \$ 6,321 \$ 858,753 \$ 25,66 ST JOHN CAPACITOR Displacement 6/1/2008 6/1/2008 \$ 827 \$ 114,189 \$ 2,71	1162194										
ST JOHN CAPACITOR Displacement 6/1/2008 6/1/2008 \$ 827 \$ 114,189 \$ 2,71											
		3 I JOHN CAPACITOR DISpiacement	6/1/2008	6/1/2008	l .	Total	\$				

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

				Earliest Service	Redispatch
servation	Upgrade Name	COD	EOC	Start Date	Available
	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009		No
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008			No
	HEIZER 115/69KV TRANSFORMER CKT 1	6/1/2016	6/1/2016		
	HEIZER 115/69KV TRANSFORMER CKT 2	6/1/2016			
	KINSLEY CAPACITOR	6/1/2007	1/1/2009		No
	Mooreland - Potter 345 kV SPS	6/1/2016	6/1/2016		
	Mooreland - Potter 345 kV WFEC	6/1/2016			
	Mooreland 345/138 kV Transformer	6/1/2016			
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2016			
	Spearville - Mooreland 345 kV SUNC	6/1/2016			
	Spearville - Mooreland 345 kV WFEC	6/1/2016			
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2016			
1162136	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008			No
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008			No
	HEIZER 115/69KV TRANSFORMER CKT 1	6/1/2016			140
	HEIZER 115/69KV TRANSFORMER CKT 2	6/1/2016			
	KINSLEY CAPACITOR	6/1/2007	1/1/2009		No
	Mooreland - Potter 345 kV SPS	6/1/2016			INO
	Mooreland - Potter 345 kV WFEC	6/1/2016			
	Mooreland 345/138 kV Transformer	6/1/2016			
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2016			
	Spearville - Mooreland 345 kV SUNC	6/1/2016			
	Spearville - Mooreland 345 kV WFEC	6/1/2016			
		6/1/2016			
4400475	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1				
1162175	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008			No
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008			No
	HEIZER 115/69KV TRANSFORMER CKT 1	6/1/2016			
	HEIZER 115/69KV TRANSFORMER CKT 2	6/1/2016			
	KINSLEY CAPACITOR	6/1/2007	1/1/2009		No
	Mooreland - Potter 345 kV SPS	6/1/2016			
	Mooreland - Potter 345 kV WFEC	6/1/2016			
	Mooreland 345/138 kV Transformer	6/1/2016			
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2016			
	Spearville - Mooreland 345 kV SUNC	6/1/2016			
	Spearville - Mooreland 345 kV WFEC	6/1/2016			
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2016			
1162176	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008			No
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008			No
	HEIZER 115/69KV TRANSFORMER CKT 1	6/1/2016	6/1/2016		
	HEIZER 115/69KV TRANSFORMER CKT 2	6/1/2016			
	KINSLEY CAPACITOR	6/1/2007	1/1/2009		No
	Mooreland - Potter 345 kV SPS	6/1/2016	6/1/2016		
	Mooreland - Potter 345 kV WFEC	6/1/2016	6/1/2016		
	Mooreland 345/138 kV Transformer	6/1/2016	6/1/2016		
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2016			
	Spearville - Mooreland 345 kV SUNC	6/1/2016			
	Spearville - Mooreland 345 kV WFEC	6/1/2016			
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2016			l

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009	No
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009	No
	HEIZER 115/69KV TRANSFORMER CKT 1	6/1/2016	6/1/2016	
	HEIZER 115/69KV TRANSFORMER CKT 2	6/1/2016	6/1/2016	
	KINSLEY CAPACITOR	6/1/2007	1/1/2009	No
	Mooreland - Potter 345 kV SPS	6/1/2016	6/1/2016	
	Mooreland - Potter 345 kV WFEC	6/1/2016	6/1/2016	
	Mooreland 345/138 kV Transformer	6/1/2016	6/1/2016	
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2016	6/1/2016	
	Spearville - Mooreland 345 kV SUNC	6/1/2016	6/1/2016	
	Spearville - Mooreland 345 kV WFEC	6/1/2016	6/1/2016	
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2016	6/1/2016	
1162190	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009	No
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009	No
	HEIZER 115/69KV TRANSFORMER CKT 1	6/1/2016	6/1/2016	
	HEIZER 115/69KV TRANSFORMER CKT 2	6/1/2016	6/1/2016	
	KINSLEY CAPACITOR	6/1/2007	1/1/2009	No
	Mooreland - Potter 345 kV SPS	6/1/2016	6/1/2016	
	Mooreland - Potter 345 kV WFEC	6/1/2016	6/1/2016	
	Mooreland 345/138 kV Transformer	6/1/2016	6/1/2016	
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2016	6/1/2016	
	Spearville - Mooreland 345 kV SUNC	6/1/2016	6/1/2016	
	Spearville - Mooreland 345 kV WFEC	6/1/2016	6/1/2016	
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2016	6/1/2016	
1162191	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009	No
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009	No
	HEIZER 115/69KV TRANSFORMER CKT 1	6/1/2016	6/1/2016	
	HEIZER 115/69KV TRANSFORMER CKT 2	6/1/2016	6/1/2016	
	KINSLEY CAPACITOR	6/1/2007	1/1/2009	No
	Mooreland - Potter 345 kV SPS	6/1/2016	6/1/2016	
	Mooreland - Potter 345 kV WFEC	6/1/2016	6/1/2016	
	Mooreland 345/138 kV Transformer	6/1/2016	6/1/2016	
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2016	6/1/2016	
	Spearville - Mooreland 345 kV SUNC	6/1/2016	6/1/2016	
	Spearville - Mooreland 345 kV WFEC	6/1/2016	6/1/2016	
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2016	6/1/2016	
1162192	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009	No
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009	No
	HEIZER 115/69KV TRANSFORMER CKT 1	6/1/2016	6/1/2016	
	HEIZER 115/69KV TRANSFORMER CKT 2	6/1/2016	6/1/2016	
	KINSLEY CAPACITOR	6/1/2007	1/1/2009	No
	Mooreland - Potter 345 kV SPS	6/1/2016	6/1/2016	
	Mooreland - Potter 345 kV WFEC	6/1/2016	6/1/2016	
	Mooreland 345/138 kV Transformer	6/1/2016	6/1/2016	
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2016	6/1/2016	
	Spearville - Mooreland 345 kV SUNC	6/1/2016	6/1/2016	
	Spearville - Mooreland 345 kV WFEC	6/1/2016	6/1/2016	
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2016	6/1/2016	

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

1162193 HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009	No
HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009	No
HEIZER 115/69KV TRANSFORMER CKT 1	6/1/2016	6/1/2016	
HEIZER 115/69KV TRANSFORMER CKT 2	6/1/2016	6/1/2016	
KINSLEY CAPACITOR	6/1/2007	1/1/2009	No
Mooreland - Potter 345 kV SPS	6/1/2016	6/1/2016	
Mooreland - Potter 345 kV WFEC	6/1/2016	6/1/2016	
Mooreland 345/138 kV Transformer	6/1/2016	6/1/2016	
POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2016	6/1/2016	
Spearville - Mooreland 345 kV SUNC	6/1/2016	6/1/2016	
Spearville - Mooreland 345 kV WFEC	6/1/2016	6/1/2016	
TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2016	6/1/2016	
1162194 HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009	No
HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009	No
HEIZER 115/69KV TRANSFORMER CKT 1	6/1/2016	6/1/2016	
HEIZER 115/69KV TRANSFORMER CKT 2	6/1/2016	6/1/2016	
KINSLEY CAPACITOR	6/1/2007	1/1/2009	No
Mooreland - Potter 345 kV SPS	6/1/2016	6/1/2016	
Mooreland - Potter 345 kV WFEC	6/1/2016	6/1/2016	
Mooreland 345/138 kV Transformer	6/1/2016	6/1/2016	
POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2016	6/1/2016	
Spearville - Mooreland 345 kV SUNC	6/1/2016	6/1/2016	
Spearville - Mooreland 345 kV WFEC	6/1/2016	6/1/2016	
TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2016	6/1/2016	

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162131	IATAN - NASHUA 345KV CKT 1	6/1/2010	6/1/2010		
1162136	IATAN - NASHUA 345KV CKT 1	6/1/2010	6/1/2010		
1162175	IATAN - NASHUA 345KV CKT 1	6/1/2010	6/1/2010		
1162176	IATAN - NASHUA 345KV CKT 1	6/1/2010	6/1/2010		
1162183	IATAN - NASHUA 345KV CKT 1	6/1/2010	6/1/2010		
1162190	IATAN - NASHUA 345KV CKT 1	6/1/2010	6/1/2010		
1162191	IATAN - NASHUA 345KV CKT 1	6/1/2010	6/1/2010		
1162192	IATAN - NASHUA 345KV CKT 1	6/1/2010	6/1/2010		
1162193	IATAN - NASHUA 345KV CKT 1	6/1/2010	6/1/2010		
1162194	IATAN - NASHUA 345KV CKT 1	6/1/2010	6/1/2010		

				Earliest Service	
				Start Date	Available
	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No
1162136	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No
1162175	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No
1162176	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No
1162183	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No
1162190	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No
1162191	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No
1162192	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No
1162193	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No
1162194	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

Reservation	Upgrade Name	COD	EOC	Earliest Service	Redispatch Ava	ailab
1162131	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacement	6/1/2007	6/1/2010			Ī
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010			Ī
1162136	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacemen	6/1/2007	6/1/2010			
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010			Ι
1162175	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacemen	6/1/2007	6/1/2010			
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010			Ī
1162176	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacement	6/1/2007	6/1/2010			Ι
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010			
1162183	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacement	6/1/2007	6/1/2010			Ī
	Potter - Roosevelt 345KV Displacement	6/1/2007				
1162190	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacemen	6/1/2007	6/1/2010			
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010			Ι
1162191	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacement	6/1/2007	6/1/2010			Ι
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010			
1162192	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacement	6/1/2007	6/1/2010			Ī
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010			Ι
1162193	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacemen	6/1/2007	6/1/2010			
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010			Ī
1162194	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacemen	6/1/2007	6/1/2010			
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010			Ĩ

				Requested		Requested Stop	Date Without	Date Without	Potential Base Plan Funding		Allocated E & C	
Customer	Reservation	POR	POD	Amount	Start Date	Date			Allowable	Base Rate	Cost	Requirements
MIDW	1162137	WR	WR	20	6/1/2008			7/1/2039	\$ -	\$ -	\$ 41,184	\$ 193,952
MIDW	1162141	WR	WR	5	6/1/2008	6/1/2038	7/1/2009	7/1/2039	\$ -	\$ -	\$ 10,295	\$ 48,483
MIDW	1162142	WR	WR	40	6/1/2008	6/1/2038	7/1/2009	7/1/2039	\$ -	\$ -	\$ 82,370	\$ 387,913
MIDW	1162143	WR	WR	10	6/1/2008	6/1/2038	7/1/2009	7/1/2039	\$ -	\$ -	\$ 20,598	\$ 97,005
					•				\$ -	\$ -	\$ 154,447	\$ 727,352

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E Cost		Total E & C Cost	Total Revenue Requirements
1162137	EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1	6/1/2009	6/1/2009			\$	4,090	\$ 300,000	\$ 20,091
	EXIDE JUNCTION - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$ 2	24,430	\$ 2,000,000	\$ 117,091
	NORTHVIEW - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$	5,905	\$ 610,000	\$ 29,740
	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$	6,759	\$ 114,189	\$ 27,030
					Total	\$ 4	11,184	\$ 3,024,189	\$ 193,952
1162141	EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1	6/1/2009	6/1/2009			\$	1,022	\$ 300,000	\$ 5,020
	EXIDE JUNCTION - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$	6,106	\$ 2,000,000	\$ 29,266
	NORTHVIEW - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$	1,477	\$ 610,000	
	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$	1,690	\$ 114,189	\$ 6,758
					Total	\$ 1	10,295	\$ 3,024,189	\$ 48,483
1162142	EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1	6/1/2009	6/1/2009			\$	8,181	\$ 300,000	\$ 40,188
	EXIDE JUNCTION - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$ 4	18,861	\$ 2,000,000	\$ 234,186
	NORTHVIEW - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$ 1	11,810	\$ 610,000	\$ 59,479
	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$ 1	13,518	\$ 114,189	\$ 54,059
					Total	\$ 8	32,370	\$ 3,024,189	\$ 387,913
1162143	EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1	6/1/2009	6/1/2009			\$	2,046	\$ 300,000	\$ 10,051
	EXIDE JUNCTION - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$ 1	12,218	\$ 2,000,000	\$ 58,560
	NORTHVIEW - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$	2,954	\$ 610,000	\$ 14,877
	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$	3,380	\$ 114,189	\$ 13,517
		•		•	Total	\$ 2	20,598	\$ 3,024,189	\$ 97,005

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162137	HEIZER 115/69KV TRANSFORMER CKT 1	6/1/2016	6/1/2016		
	HEIZER 115/69KV TRANSFORMER CKT 2	6/1/2016	6/1/2016		
	KINSLEY CAPACITOR	6/1/2007	1/1/2009		No
1162141	HEIZER 115/69KV TRANSFORMER CKT 1	6/1/2016	6/1/2016		
	HEIZER 115/69KV TRANSFORMER CKT 2	6/1/2016	6/1/2016		
	KINSLEY CAPACITOR	6/1/2007	1/1/2009		No
1162142	HEIZER 115/69KV TRANSFORMER CKT 1	6/1/2016	6/1/2016		
	HEIZER 115/69KV TRANSFORMER CKT 2	6/1/2016	6/1/2016		
	KINSLEY CAPACITOR	6/1/2007	1/1/2009		No
1162143	HEIZER 115/69KV TRANSFORMER CKT 1	6/1/2016	6/1/2016		
	HEIZER 115/69KV TRANSFORMER CKT 2	6/1/2016	6/1/2016		
	KINSLEY CAPACITOR	6/1/2007	1/1/2009		Nο

Reservation	Upgrade Name	COD		Earliest Service Start Date	Redispatch Available
1162137	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No
1162141	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No
1162142	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No
1162143	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No

Study Number Customer MIDW AG3-2006-086

Customer	Reservation	POR			Requested Start Date	Requested Stop	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point	Allocated E & 0	C Total Revenue Requirements
MIDW	1162102	WR	WR	25	6/1/2007	6/1/2017	7/1/2009	7/1/2019	\$ -	\$ -	\$ 254,918	3 \$ 647,142
		•							\$ -	\$ -	\$ 254,918	3 \$ 647.142

				Earliest Service	Redispatch	Allocate	ed E & C		Total R	tevenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total E & C Cost	Require	ements
1162102	ARCADIA - SOONER 345kV CKT 1	6/1/2011	6/1/2011			\$	212,521	\$ 65,000,000	\$	534,028
	ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2010			\$	36,872	\$ 858,753	\$	100,641
	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$	5,525	\$ 114,189	\$	12,474
					Total	\$	254,918	\$ 65,972,942	\$	647,142

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162102	CHAPMAN - CLAY CENTER JUNCTION 115KV CKT 1	6/1/2007	6/1/2009		No
	CLAY CENTER - GREENLEAF 115KV CKT 1	6/1/2007	6/1/2009		No
	Evans - Grant - Chisolm Rebuild and Conversion Project	6/1/2007	6/1/2009		No
	GILL ENERGY CENTER EAST - GILLJCT269.0 69KV CKT 1	6/1/2007	6/1/2008	10/1/2007	No
	GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1	6/1/2007	7/1/2007		No
	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009		No
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009		No
	HEIZER 115/69KV TRANSFORMER CKT 1	6/1/2016	6/1/2016		
	HEIZER 115/69KV TRANSFORMER CKT 2	6/1/2016	6/1/2016		
	KINSLEY CAPACITOR	6/1/2007	1/1/2009		No
	Mooreland - Potter 345 kV SPS	6/1/2016	6/1/2016		
	Mooreland - Potter 345 kV WFEC	6/1/2016	6/1/2016		
	Mooreland 345/138 kV Transformer	6/1/2016	6/1/2016		
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2016	6/1/2016		
	Spearville - Mooreland 345 kV SUNC	6/1/2016	6/1/2016		
	Spearville - Mooreland 345 kV WFEC	6/1/2016	6/1/2016		
	STRANGER CREEK TRANSFORMER CKT 2	6/1/2009	6/1/2009		
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2016	6/1/2016		

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162102	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		

Construction Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD			Available
1162102	HEIZER TO KNOLL 230KV	6/1/2007	6/1/2008		No
	LACYGNE-PAOLA-WEST GARDER 345KV	6/1/2007	6/1/2008		No
	PHILLIPSBURG - RHOADES	6/1/2007	10/1/2008		No
	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No

Potential reservation deferral and redispatch requirement on the following upgrades due to positive MW Impact on limitations that require upgrade. No cost assignment due to negative MW impact on defined upgrade. Reservation Upgrade Name COD EOC Earliest Service Redispatch Available

1162102 CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacemen 6/1/2007 6/1/2010

Potter - Roosevelt 345KV Displacement 6/1/2007 6/1/2010

				Requested		Requested Stop	Date Without	Date Without	Potential Base Plan Funding		Allocated E & C	
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
MIDW	1162109	WR	WR	10	6/1/2008			7/1/2019		\$ -	\$ 101,982	
MIDW	1162122	WR	WR	10	6/1/2008	6/1/2018	7/1/2009	7/1/2019	\$ -	\$ -	\$ 101,982	\$ 258,894
MIDW	1162123	WR	WR	19	6/1/2008	6/1/2018	7/1/2009	7/1/2019	\$ -	\$ -	\$ 193,707	\$ 491,749
MIDW	1162130	WR	WR	6	6/1/2008	6/1/2018	7/1/2009	7/1/2019	\$ -	\$ -	\$ 61,175	\$ 155,302
		•		•	•		•		\$ -	\$ -	\$ 458,846	\$ 1,164,840

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated Cost	E&C	Total E & C Cost	I Revenue uirements
1162109	ARCADIA - SOONER 345kV CKT 1	6/1/2011	6/1/2011			\$	85,023	\$ 65,000,000	\$ 213,648
	ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2010)		\$	14,749	\$ 858,753	\$ 40,257
	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$	2,210	\$ 114,189	\$ 4,989
					Total	\$	101,982	\$ 65,972,942	\$ 258,894
1162122	ARCADIA - SOONER 345kV CKT 1	6/1/2011	6/1/2011			\$	85,023	\$ 65,000,000	\$ 213,648
	ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2010)		\$	14,749	\$ 858,753	\$ 40,257
	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$	2,210	\$ 114,189	\$ 4,989
					Total	\$	101,982	\$ 65,972,942	\$ 258,894
1162123	ARCADIA - SOONER 345kV CKT 1	6/1/2011	6/1/2011			\$	161,493	\$ 65,000,000	\$ 405,804
	ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2010			\$	28,015	\$ 858,753	\$ 76,466
	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$	4,199	\$ 114,189	\$ 9,480
					Total	\$	193,707	\$ 65,972,942	\$ 491,749
1162130	ARCADIA - SOONER 345kV CKT 1	6/1/2011	6/1/2011			\$	50,992	\$ 65,000,000	\$ 128,134
	ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2010			\$	8,857	\$ 858,753	\$ 24,175
	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$	1,326	\$ 114,189	\$ 2,994
		•	•	•	Total	\$	61,175	\$ 65,972,942	\$ 155,302

				Earliest Service	Redispatch
Reservation			EOC	Start Date	Available
1162109	Evans - Grant - Chisolm Rebuild and Conversion Project	6/1/2007	6/1/2009		No
	GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1	6/1/2007	7/1/2007		No
	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009		No
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009		No
	HEIZER 115/69KV TRANSFORMER CKT 1	6/1/2016	6/1/2016		
	HEIZER 115/69KV TRANSFORMER CKT 2	6/1/2016	6/1/2016		
	KINSLEY CAPACITOR	6/1/2007	1/1/2009		No
	Mooreland - Potter 345 kV SPS	6/1/2016	6/1/2016		
	Mooreland - Potter 345 kV WFEC	6/1/2016			
	Mooreland 345/138 kV Transformer	6/1/2016	6/1/2016		
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2016	6/1/2016		
	Spearville - Mooreland 345 kV SUNC	6/1/2016	6/1/2016		
	Spearville - Mooreland 345 kV WFEC	6/1/2016	6/1/2016		
	STRANGER CREEK TRANSFORMER CKT 2	6/1/2009	6/1/2009		
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2016	6/1/2016		
1162122	Evans - Grant - Chisolm Rebuild and Conversion Project	6/1/2007	6/1/2009		No
	GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1	6/1/2007	7/1/2007		No
	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009		No
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009		No
	HEIZER 115/69KV TRANSFORMER CKT 1	6/1/2016	6/1/2016		
	HEIZER 115/69KV TRANSFORMER CKT 2	6/1/2016	6/1/2016		
	KINSLEY CAPACITOR	6/1/2007	1/1/2009		No
	Mooreland - Potter 345 kV SPS	6/1/2016	6/1/2016		
	Mooreland - Potter 345 kV WFEC	6/1/2016	6/1/2016		
	Mooreland 345/138 kV Transformer	6/1/2016	6/1/2016		
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2016	6/1/2016		
	Spearville - Mooreland 345 kV SUNC	6/1/2016	6/1/2016		
	Spearville - Mooreland 345 kV WFEC	6/1/2016	6/1/2016		
	STRANGER CREEK TRANSFORMER CKT 2	6/1/2009	6/1/2009		
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2016	6/1/2016		

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

11C0102 Evens Creat Chicago Debuild and Conversion Project	6/1/2007	6/1/2009	No
1162123 Evans - Grant - Chisolm Rebuild and Conversion Project			
GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1	6/1/2007	7/1/2007	No
HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009	No
HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009	No
HEIZER 115/69KV TRANSFORMER CKT 1	6/1/2016	6/1/2016	
HEIZER 115/69KV TRANSFORMER CKT 2	6/1/2016	6/1/2016	
KINSLEY CAPACITOR	6/1/2007	1/1/2009	No
Mooreland - Potter 345 kV SPS	6/1/2016	6/1/2016	
Mooreland - Potter 345 kV WFEC	6/1/2016	6/1/2016	
Mooreland 345/138 kV Transformer	6/1/2016	6/1/2016	
POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2016	6/1/2016	
Spearville - Mooreland 345 kV SUNC	6/1/2016	6/1/2016	
Spearville - Mooreland 345 kV WFEC	6/1/2016	6/1/2016	
STRANGER CREEK TRANSFORMER CKT 2	6/1/2009	6/1/2009	
TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2016	6/1/2016	
1162130 Evans - Grant - Chisolm Rebuild and Conversion Project	6/1/2007	6/1/2009	No
GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1	6/1/2007	7/1/2007	No
HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009	No
HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009	No
HEIZER 115/69KV TRANSFORMER CKT 1	6/1/2016	6/1/2016	
HEIZER 115/69KV TRANSFORMER CKT 2	6/1/2016	6/1/2016	
KINSLEY CAPACITOR	6/1/2007	1/1/2009	No
Mooreland - Potter 345 kV SPS	6/1/2016	6/1/2016	
Mooreland - Potter 345 kV WFEC	6/1/2016	6/1/2016	
Mooreland 345/138 kV Transformer	6/1/2016	6/1/2016	
POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2016	6/1/2016	
Spearville - Mooreland 345 kV SUNC	6/1/2016	6/1/2016	
Spearville - Mooreland 345 kV WFEC	6/1/2016	6/1/2016	
STRANGER CREEK TRANSFORMER CKT 2	6/1/2009	6/1/2009	
TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2016	6/1/2016	

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

					l
				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162109	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		ĺ
1162122	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		ĺ
1162123	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
1162130	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		

Construction Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

Reservation	Upgrade Name	COD		Earliest Service Start Date	Redispatch Available
1162109	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No
	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No
1162123	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No
1162130	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009	· · · · · · · · · · · · · · · · · · ·	No

		000		Earliest Service	
					Available
1162109	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacemen	6/1/2007	6/1/2010		
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010		
1162122	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacemen	6/1/2007	6/1/2010		
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010		
1162123	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacemen	6/1/2007	6/1/2010		
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010		
1162130	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacemen	6/1/2007	6/1/2010		
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010		

				Requested	Requested	Requested Stop	Deferred Start Deferred Stop Potential Base Date Without Date Without Plan Funding Point-to-Point A				ted E & C	Total Revenue	
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost		Requirements
MIDW	1167662	WR	WR	35	2/1/2007	2/1/2012	7/1/2009			\$ -	\$	356,864	\$ 742,589
MIDW	1167664	WR	WR	10	2/1/2007	2/1/2012	7/1/2009	7/1/2014	\$ -	\$ -	\$	101,982	\$ 212,211
									\$ -	- \$	\$	458.846	\$ 954,800

				Earliest Service	Redispatch	Allocat	ed E & C			Total Reve	enue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total	E & C Cost	Requireme	ents
	ARCADIA - SOONER 345kV CKT 1	6/1/2011	6/1/2011			\$	297,508	\$	65,000,000	\$	610,277
	ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2010			\$	51,621	\$	858,753	\$	117,584
	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$	7,735	\$	114,189	\$	14,727
					Total	\$	356,864	\$	65,972,942	\$	742,589
1167664	ARCADIA - SOONER 345kV CKT 1	6/1/2011	6/1/2011			\$	85,023	\$	65,000,000	\$	174,407
	ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2010			\$	14,749	\$	858,753	\$	33,596
	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$	2,210	\$	114,189	\$	4,208
					Total	\$	101,982	\$	65,972,942	\$	212,211

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
		COD	EOC	Start Date	Available
1167662	CHAPMAN - CLAY CENTER JUNCTION 115KV CKT 1	6/1/2007	6/1/2009		No
	CLAY CENTER - GREENLEAF 115KV CKT 1	6/1/2007	6/1/2009		No
	Evans - Grant - Chisolm Rebuild and Conversion Project	6/1/2007	6/1/2009		No
	GILL ENERGY CENTER EAST - GILLJCT269.0 69KV CKT 1	6/1/2007	6/1/2008	10/1/2007	No
	GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1	6/1/2007	7/1/2007		No
	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008			No
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009		No
	KINSLEY CAPACITOR	6/1/2007	1/1/2009		No
	STRANGER CREEK TRANSFORMER CKT 2	6/1/2009	6/1/2009		
1167664	CHAPMAN - CLAY CENTER JUNCTION 115KV CKT 1	6/1/2007	6/1/2009		No
	CLAY CENTER - GREENLEAF 115KV CKT 1	6/1/2007	6/1/2009		No
	Evans - Grant - Chisolm Rebuild and Conversion Project	6/1/2007	6/1/2009		No
	GILL ENERGY CENTER EAST - GILLJCT269.0 69KV CKT 1	6/1/2007	6/1/2008	10/1/2007	No
	GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1	6/1/2007	7/1/2007		No
	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009		No
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009		No
	KINSLEY CAPACITOR	6/1/2007	1/1/2009		No
	STRANGER CREEK TRANSFORMER CKT 2	6/1/2009	6/1/2009		

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1167662	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
1167664	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		

Construction Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

Reservation	Upgrade Name	COD		Earliest Service Start Date	Redispatch Available
1167662	HEIZER TO KNOLL 230KV	6/1/2007	6/1/2008		No
	LACYGNE-PAOLA-WEST GARDER 345KV	6/1/2007	6/1/2008		No
	PHILLIPSBURG - RHOADES	6/1/2007	10/1/2008		No
	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No
1167664	HEIZER TO KNOLL 230KV	6/1/2007	6/1/2008		No
	LACYGNE-PAOLA-WEST GARDER 345KV	6/1/2007	6/1/2008		No
	PHILLIPSBURG - RHOADES	6/1/2007	10/1/2008		No
	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No

Reservation	Upgrade Name	COD		Earliest Service Start Date	Redispatch Available
1167662	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacemen	6/1/2007	6/1/2010		
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010		
1167664	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacemen	6/1/2007	6/1/2010		
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010		

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

Customer	Reservation	POR			Requested Start Date	Requested Stop	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point	Allocated E & C	Total Revenue Requirements
NTEC	1161974	CSWS	CSWS	52	6/1/2011	6/1/2031			\$ 6,121,447	\$ -	\$ 6,221,447	\$ 20,861,246

				Earliest Service	Redispatch	Alloca	ted E & C			Total F	Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total	E & C Cost	Requir	ements
1161974	DIANA - PERDUE 138KV CKT 1	6/1/2016	6/1/2016			\$	750,000	\$	750,000	\$	1,872,199
	HEMPSTEAD - NW TEXARKANA 345 kV CKT 1	6/1/2011	6/1/2011			\$	4,684,037	\$	56,000,000	\$	16,394,153
	HOOKS - LONESTAR ORDINANCE TAP 69KV CKT 1	6/1/2011	6/1/2011			\$	125,000	\$	125,000	\$	437,671
	NEW BOSTON - NORTH NEW BOSTON 69KV CKT 1 Displacement	6/1/2011	6/1/2011			\$	100,000	\$	100,000	\$	-
	SOUTHWEST SHREVEPORT - SOUTHWEST SHREVEPORT TAP 138KV CKT 1	6/1/2009	6/1/2009			\$	369,296	\$	2,500,000	\$	1,484,869
	SUGAR HILL (SUGAR HL) 138/69/12.47KV TRANSFORMER CKT 1	6/1/2011	6/1/2011			\$	193,114	\$	2,500,000	\$	672,354
					Total	\$	6.221.447	\$	61.975.000	\$	20.861,246

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1161974	BANN - LONESTAR ORDINANCE TAP 69KV CKT 1	6/1/2011	6/1/2011		
	BEN WHEELER - BARTONS CHAPEL	6/1/2016	6/1/2016		
	BIG SANDY - HAWKINS 69KV CKT 1	6/1/2016	6/1/2016		
	BIG SANDY - PERDUE 69KV CKT 1	6/1/2016	6/1/2016		
	DAINGERFIELD - JENKINS REC T 69KV CKT 1	6/1/2011	6/1/2011		

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1161974	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2010	6/1/2010		
	SOLITHWEST SHREVEPORT (SW SHV 2) 345/138/13 8KV TRANSFORMER CKT 2	6/1/2010	6/1/2010		

				Requested	Requested	Requested Stop		Deferred Stop Date Without	Potential Base Plan Funding		Allocated E & C	Total Revenue
Customer	Reservation		POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
OGE	1161665	OKGE	SPA	20	2/1/2007	2/1/2012	6/1/2009	6/1/2014	\$ -	\$ 1,080,000	\$ 786,564	\$ 286,391
									\$ -	\$ 1,080,000	\$ 786,564	\$ 286,391

				Earliest Service	Redispatch	Allocate	ed E & C		Total I	Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total E & C Cost	Requi	rements
1161665	5 TRIBES - HANCOCK 161KV CKT 1 Displacement	6/1/2007	6/1/2009		Yes	\$	604	\$ 100,000	\$	-
	5 TRIBES - PECAN CREEK 161KV CKT 1 Displacement	6/1/2007	6/1/2009		Yes	\$	2,819	\$ 466,473	\$	7,817
	BEAVER - EUREKA SPRINGS 161KV CKT 1 ÅEPW	6/1/2013	6/1/2013			\$	197,024	\$ 850,000	\$	215,646
	BEAVER - EUREKA SPRINGS 161KV CKT 1 SWPA	6/1/2013	6/1/2013			\$	556,304	\$ 2,400,000	\$	-
	FRANKLIN SW - MIDWEST TAP 138KV CKT 1 OKGE Displacement	6/1/2014	6/1/2014			\$	590	\$ 14,588	\$	958
	FRANKLIN SW - MIDWEST TAP 138KV CKT 1 WFEC Displacement	6/1/2014	6/1/2014			\$	4,047	\$ 100,000	\$	-
	JONES - JONESBORO 161KV CKT 1 SWPA	6/1/2007	6/1/2008	2/1/2008	Yes	\$	2,000	\$ 2,000	\$	-
	MILLER - WHITE EAGLE 138KV CKT 1	6/1/2011	6/1/2011			\$	2,739	\$ 300,000	\$	5,608
	PECAN CREEK (PECANCK1) 345/161/13.8KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2009		Yes	\$	20,437	\$ 3,381,928	\$	56,362
		•		•	Total	\$	786,564	\$ 7,614,989	\$	286,391

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Dediesetele
				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1161665	ARCADIA - REDBUD 345 KV CKT 1	6/1/2006	6/1/2006		
	ARCADIA - REDBUD 345 KV CKT 2	6/1/2006	6/1/2006		
	FPL SWITCH - MOORELAND 138KV CKT 1 OKGE	6/1/2006	4/1/2008		
	FPL SWITCH - MOORELAND 138KV CKT 1 WFEC	6/1/2006	4/1/2008		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	5/1/2010	5/1/2010		
	HUGO POWER PLANT - VALLIANT 345 KV WFEC	5/1/2010	5/1/2010	,	_
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		

Third Party Limitations.

Reservation	Upgrade Name	COD		Earliest Service Start Date	Redispatch Available
1161665	5TRUMAN - HARISBURG TAP 161KV CKT 1	6/1/2011	6/1/2011		
	JONES - JONESBORO 161KV CKT 1 ENTR	6/1/2007	6/1/2007		
	JONESBORO - JONESBORO NORTH (AECC) 161KV CKT 1	6/1/2011	6/1/2011		
	JONESBORO NORTH (AECC) - PARAGOULD SOUTH (AECC) 161KV CKT 1	6/1/2011	6/1/2011		

Customer Study Number OGE AG3-2006-049

				Requested	Requested	Requested Stop			Potential Base Plan Funding		Allocated E & C	Total Revenue
Customer			POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
OGE	1162077	OKGE	OKGE	384	6/1/2011	6/1/2031			\$ 37,225,529	\$ -	\$ 37,263,748	\$ 157,102,841
									\$ 37,225,529	\$ -	\$ 37,263,748	\$ 157,102,841

Reservation	Upgrade Name	COD		Earliest Service Start Date		Alloca	ated E & C	Tota	al E & C Cost	al Revenue
	5 TRIBES - HANCOCK 161KV CKT 1 Displacement	6/1/2007			rvanabio	\$	38,219		100.000	-
	5 TRIBES - PECAN CREEK 161KV CKT 1 Displacement	6/1/2007				\$	178,281	\$	466,473	1,038,774
	ARCADIA - SOONER 345kV CKT 1	6/1/2011	6/1/2011			\$	28,557,652	\$	65,000,000	\$ 122,169,988
	ARKOMA - FT SMITHW 161KV CKT 1	6/1/2016	6/1/2016			\$	2,900,000	\$	2,900,000	\$ 8,506,968
	FAIRMONT TAP - WOODRING 138KV CKT 1	6/1/2011	6/1/2011			\$	576,681	\$	850,000	\$ 2,519,827
	MILLER - WHITE EAGLE 138KV CKT 1	6/1/2011	6/1/2011			\$	101,995	\$	300,000	\$ 438,836
	PECAN CREEK (PECANCK1) 345/161/13.8KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2009			\$	1,292,540	\$	3,381,928	\$ 7,490,165
	ROSEHILL - SOONER 345KV CKT 1 OKGE Displacement	6/1/2011	6/1/2011			\$	1,712,779		6,322,628	7,389,882
	ROSEHILL - SOONER 345KV CKT 1 WERE Displacement	6/1/2011	6/1/2011			\$	996,162		3,677,275	3,574,574
	WAUKOMIS TAP - WOODRING 138KV CKT 1	6/1/2011	6/1/2011			\$	909,439	\$	1,500,000	\$ 3,973,825
					Total	\$	37,263,748	\$	84,498,304	\$ 157,102,841

ſ								
							Earliest Service	Redispatch
	Reservation	Upgrade Name			COD	EOC	Start Date	Available
	1162077	COLONY - FT SMITH 161KV CK	(T 1		6/1/2011	6/1/2011		

							Deferred Start		Potential Base			
				Requested	Requested	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
OMPA	1159596	CSWS	CSWS	41	6/1/2011	6/1/2031			\$ 7,380,000	\$ -	\$ 28,376,454	\$ 111,895,825

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date		Allocat	ted E & C	Total I		Total Revenue Requirements
1159596	ARCADIA - SOONER 345kV CKT 1	6/1/2011	6/1/2011			\$	40,156	\$	65,000,000	\$ 171,788
	CANEY CREEK 345/138 kV	6/1/2011	6/1/2011			\$.	19,705,875	\$	31,000,000	\$ 84,785,061
	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacemen	6/1/2007	6/1/2010			\$	5,569	\$	344,362	\$ 24,483
	DANVILLE (APL) - MAGAZINE REC 161KV CKT 1 AEPW	6/1/2011	6/1/2011			\$	541,839	\$	9,000,000	\$ 1,958,384
	FAIRMONT TAP - WOODRING 138KV CKT 1	6/1/2011	6/1/2011			\$	57,388	\$	850,000	
	HEMPSTEAD - NW TEXARKANA 345 kV CKT 1	6/1/2011	6/1/2011			\$	3,562,356	\$	56,000,000	\$ 12,468,264
	Hugo - SunnySide 345kV	6/1/2011	6/1/2011			\$	3,711,580	\$	50,000,000	\$ 9,104,144
	MILLER - WHITE EAGLE 138KV CKT 1	6/1/2011	6/1/2011			\$	25,689	\$	300,000	\$ 110,528
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010			\$	15,529	\$	10,372,158	\$ 68,225
	ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2010			\$	2,887	\$	858,753	
	SUGAR HILL (SUGAR HL) 138/69/12.47KV TRANSFORMER CKT 1	6/1/2011	6/1/2011			\$	125,601	\$	2,500,000	
	SUNNYSIDE 345/138KV TRANSFORMER CKT 2	6/1/2011	6/1/2011			\$	481,086	\$	6,500,000	
	WAUKOMIS TAP - WOODRING 138KV CKT 1	6/1/2011	6/1/2011			\$	100,899	\$	1,500,000	\$ 440,882
•	•				Total	\$ 2	28,376,454	\$ 2	34,225,273	\$ 111,895,825

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

Reservation	Upgrade Name	COD		Earliest Service Start Date	Redispatch Available
1159596	BEN WHEELER - BARTONS CHAPEL	6/1/2016	6/1/2016		
	Mooreland - Potter 345 kV SPS	6/1/2016	6/1/2016		
	Mooreland - Potter 345 kV WFEC	6/1/2016	6/1/2016		
	Mooreland 345/138 kV Transformer	6/1/2016	6/1/2016		
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2016	6/1/2016		
	Sayre interconnect	6/1/2011	6/1/2011		
	SNYDER - SNYDER INTERCONNECTION	6/1/2016	6/1/2016		
	Spearville - Mooreland 345 kV SUNC	6/1/2016	6/1/2016		
	Spearville - Mooreland 345 kV WFEC	6/1/2016	6/1/2016		
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2016	6/1/2016		

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1159596	ARCADIA - REDBUD 345 KV CKT 1	6/1/2006	6/1/2006		
	ARCADIA - REDBUD 345 KV CKT 2	6/1/2006	6/1/2006		
	CACHE - SNYDER 138KV CKT 1	6/1/2008	6/1/2008		

Construction Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1159596	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		

Third Party Limitations.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1159596	ARKANSAS NUCLEAR ONE 161 - RUSSELLVILLE NORTH 161KV CKT 1	6/1/2007	6/1/2007		
	DANVILLE (APL) - MAGAZINE REC 161KV CKT 1 ENTR	6/1/2011	6/1/2011		
	EVERTON - HARRISON-EAST 161KV CKT 1	6/1/2011	6/1/2011		
	RUSSELL VILLE FAST - RUSSELL VILLE NORTH 161KV CKT 1	6/1/2011	6/1/2011		

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

Customer	Reservation	POR				Requested Stop	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point	Allocated E & C	Total Revenue Requirements
OMPA	1162095	OKGE	OKGE	73	6/1/2011	6/1/2031		\$ 5,848,818	\$ -	\$ 5,859,066	\$ 24,947,918
								\$ 5.848.818	S -	\$ 5,859,066	\$ 24,947,918

				Earliest Service	Redispatch	Alloca	ted E & C			Total	Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total E	& C Cost	Requ	irements
1162095	ARCADIA - SOONER 345kV CKT 1	6/1/2011	6/1/2011			\$	4,943,904	\$ 6	55,000,000	\$	21,150,082
	FAIRMONT TAP - WOODRING 138KV CKT 1	6/1/2011	6/1/2011			\$	119,068	\$	850,000	\$	520,272
	FRANKLIN SW - MIDWEST TAP 138KV CKT 1 OKGE Displacement	6/1/2014	6/1/2014			\$	1,495	\$	14,588	\$	5,102
	FRANKLIN SW - MIDWEST TAP 138KV CKT 1 WFEC Displacement	6/1/2014	6/1/2014			\$	10,248	\$	100,000	\$	-
	MILLER - WHITE EAGLE 138KV CKT 1	6/1/2011	6/1/2011			\$	62,160		300,000		267,445
	ROSEHILL - SOONER 345KV CKT 1 OKGE Displacement	6/1/2011	6/1/2011			\$	295,730	\$	6,322,628	\$	1,275,944
	ROSEHILL - SOONER 345KV CKT 1 WERE Displacement	6/1/2011	6/1/2011			\$	171,998		3,677,275		617,188
	WAUKOMIS TAP - WOODRING 138KV CKT 1	6/1/2011	6/1/2011			\$	254,463	\$	1,500,000	\$	1,111,885
					Total	\$	5,859,066	\$ 7	77,764,491	\$	24,947,918

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

Reservation	Upgrade Name	COD		Earliest Service Start Date	Redispatch Available
1162095	Mooreland - Potter 345 kV SPS	6/1/2016	6/1/2016		
	Mooreland - Potter 345 kV WFEC	6/1/2016	6/1/2016		
	Mooreland 345/138 kV Transformer	6/1/2016	6/1/2016		
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2016	6/1/2016		
	Sayre interconnect	6/1/2011	6/1/2011		
	SNYDER - SNYDER INTERCONNECTION	6/1/2016	6/1/2016		
	Spearville - Mooreland 345 kV SUNC	6/1/2016	6/1/2016		
	Spearville - Mooreland 345 kV WFEC	6/1/2016	6/1/2016		
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2016	6/1/2016		

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162095	CACHE - SNYDER 138KV CKT 1	6/1/2008	6/1/2008		

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

				Requested	Requested	Requested Stop	Deferred Start Date Without		Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
SEPC	1162670	WR	SECI	51	12/1/2007	12/1/2027	7/1/2009	7/1/2029	\$ -	\$ -	\$ 307,835	\$ 1,158,971
									\$ -	\$ -	\$ 307.835	\$ 1.158.971

				Earliest Service	Redispatch	Alloca	ted E & C		Тс	tal Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total E & C Co	st Re	equirements
1162670	EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1	6/1/2009	6/1/2009			\$	19,188	\$ 300,00	00 \$	72,755
	EXIDE JUNCTION - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$	114,604	\$ 2,000,00	00 \$	423,978
	NORTHVIEW - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$	50,726	\$ 610,00	00 \$	197,193
	ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2010			\$	123,317	\$ 858,75	53 \$	465,045
		•			Total	\$	307.835	\$ 3,768,75	53 \$	1.158.971

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

Reservation	Upgrade Name	COD		Earliest Service Start Date	Redispatch Available
1162670	HÄYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009		No
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009		No
	Mooreland - Potter 345 kV SPS	6/1/2016	6/1/2016		
	Mooreland - Potter 345 kV WFEC	6/1/2016	6/1/2016		
	Mooreland 345/138 kV Transformer	6/1/2016	6/1/2016		
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2016	6/1/2016		
	Spearville - Mooreland 345 kV SUNC	6/1/2016	6/1/2016		
	Spearville - Mooreland 345 kV WFEC	6/1/2016	6/1/2016	,	
	TÜCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2016	6/1/2016		

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162670	IATAN - NASHUA 345KV CKT 1	6/1/2010	6/1/2010		

Construction Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162670	PHILLIPSBURG - RHOADES	6/1/2007	10/1/2008		No
	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162670	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacemen	6/1/2007	6/1/2010		
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010		

				Requested	Requested	Requested Stop	Deferred Start	Deferred Stop Date Without	Potential Base		Allocated E & C	Total Revenue
Customer	Reservation				Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
SPSM	1162675	OKGE	SPS	100	2/1/2007	2/1/2008	6/1/2010	6/1/2011	1 \$ -	\$ 1.741.200	\$ 9.809.510	\$ 20.360.375
OF OW	1102013											

		000		Earliest Service			ed E & C	T. 15000 .	Total Revenu	
Reservation		COD	EOC	Start Date	Available	Cost		Total E & C Cost		
1162675	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacemen	6/1/2007	6/1/2010		No	\$	199,148	\$ 344,362	\$ 41	18,228
	FAIRMONT TAP - WOODRING 138KV CKT 1	6/1/2011	6/1/2011			\$	96,864	\$ 850,000	\$ 18	35,334
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010		No	\$	8,568,559	\$ 10,372,158	\$ 17,98	32,698
	ROSEHILL - SOONER 345KV CKT 1 OKGE Displacement	6/1/2011	6/1/2011			\$	448,746	\$ 6,322,628	\$ 84	17,800
	ROSEHILL - SOONER 345KV CKT 1 WERE Displacement	6/1/2011	6/1/2011			\$	260,993	\$ 3,677,275	\$ 47	6,299
	SPS MUST RUN GENERATION #1	4/1/2007	4/1/2007			\$	-	\$ -	\$	-
	SPS MUST RUN GENERATION #2	10/1/2007	10/1/2007			\$	-	\$ -	\$	-
	SPS MUST RUN GENERATION #3	6/1/2007	6/1/2007			\$	-	\$ -	\$	-
	SPS MUST RUN GENERATION #4	12/1/2007	12/1/2007			\$	-	\$ -	\$	-
	SPS MUST RUN GENERATION #5	10/1/2007	10/1/2007			\$	-	\$ -	\$	-
	WAUKOMIS TAP - WOODRING 138KV CKT 1	6/1/2011	6/1/2011			\$	235,200	\$ 1,500,000	\$ 45	50,017
					Total	\$	9,809,510	\$ 23,066,423	\$ 20,36	60,375

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

Reservation	Upgrade Name	COD		Earliest Service Start Date	Redispatch Available
1162675	CARLSBAD PLANT 115/69KV TRANSFORMERS	6/1/2007	6/1/2008		No
	MUSTANG STATION 230/115KV TRANSFORMER CKT 1	4/1/2007	6/1/2008		No
	Sayre interconnect	6/1/2011	6/1/2011		
	Seven Rivers to Pecos to Potash Junction 230kV	6/1/2007	6/1/2008	10/1/2007	No

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162675	ARCADIA - REDBUD 345 KV CKT 1	6/1/2006	6/1/2006		
	ARCADIA - REDBUD 345 KV CKT 2	6/1/2006	6/1/2006		
	CACHE - SNYDER 138KV CKT 1	6/1/2008	6/1/2008		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		

Construction Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

Reservation	Uporade Name	COD		Earliest Service Start Date	Redispatch Available
	HOBBS 115 KV Lines	10/1/2007	6/1/2008		
	HOBBS 230/115KV TRANSFORMER CKT 2	10/1/2007	6/1/2008		
	HOBBS Substation and Lines	10/1/2007	6/1/2008	4/1/2008	No
	Mustang-San Andr-Amerada Hess 115KV Displacement	4/1/2007	6/1/2008		No
	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	TUCO INTERCHANGE 230KV #1	6/1/2007	6/1/2007		
	TUCO INTERCHANGE 230KV #2	6/1/2008	6/1/2008		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No
	YOAKUM COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2008	10/1/2007	No

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162675	ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2010		No
AT1 1 0 0					

^{*} The existing firm reservations offered for curtailment provided no interim mitigation on the limitations requiring the upgrades for the requested service.

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

Customer Study Number UCU AG3-2006-025D

Customer	Reservation	POR				Requested Stop	Deferred Start Date Without Redispatch	Date Without	Potential Base Plan Funding Allowable	Point-to-Point	Allocated E & C	Total Revenue Requirements
UCU	1152228	MPS	MPS	585	2/1/2007	2/1/2027	10/1/2008	10/1/2028	\$ -	\$ -	\$ 2,100,000	\$ 7,147,508
								•	\$ -	\$ -	\$ 2,100,000	\$ 7,147,508

				Earliest Service	Redispatch	Alloca	ited E & C			Total F	Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total	E & C Cost	Requir	rements
1152228	HARRISONVILLE 161/69KV TRANSFORMER CKT 1	6/1/2007	6/1/2009	10/1/2008	No	\$	2,100,000	\$	2,100,000	\$	7,147,508
	MPS MUST RUN GENERATION #1	12/1/2006	12/1/2006			\$	-	\$	-	\$	-
		*	•		Total	\$	2,100,000	\$	2,100,000	\$	7,147,508

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1152228	EAST 40MVAR CAPACITOR	1/1/2009	1/1/2009		ĺ
	INDUSTRIAL PARK - LAKE ROAD 161KV CKT 1	6/1/2007	6/1/2008		No
	RALPH GREEN 14.4MVAR CAPACITOR	6/1/2011	6/1/2011		ĺ

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1152228	CLINTON - CLINTON GREEN STREET 69KV CKT 1	6/1/2016	6/1/2011		
	CLINTON - CLINTON PLANT 69KV CKT 1	6/1/2011	6/1/2011		

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

 Customer
 Study Number

 UCU
 AG3-2006-052D

				Requested	Requested	Requested Stop	Deferred Start Date Without	Deferred Stop Date Without	Potential Base Plan Funding		Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
UCU	1162075	WR	MPS	51	1/1/2008	1/1/2028	7/1/2009	7/1/2029	\$	\$ 19,718,640	\$ 343,378	\$ 1,293,873
									\$	\$ 19,718,640	\$ 343,378	\$ 1,293,873

				Earliest Service	Redispatch	Allocate	ed E & C			Total	Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total E	& C Cost	Requi	rements
1162075	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacement	6/1/2007	6/1/2010			\$	10,711	\$	344,362	\$	40,366
	EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1	6/1/2009	6/1/2009			\$	17,259	\$	300,000	\$	65,441
	EXIDE JUNCTION - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$	103,082	\$ 2	2,000,000	\$	381,353
	MPS MUST RUN GENERATION #1	12/1/2006	12/1/2006			\$	-	\$		\$	-
	NORTHVIEW - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$	58,275	\$	610,000	\$	226,539
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010			\$	154,051	\$ 10	,372,158	\$	580,175
					Total	\$	343,378	\$ 13	3.626.520	\$	1.293.873

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162075	EAST 40MVAR CAPACITOR	1/1/2009	1/1/2009		
	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009		No
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009		No
	INDUSTRIAL PARK - LAKE ROAD 161KV CKT 1	6/1/2007	6/1/2008		No

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162075	IATAN - NASHUA 345KV CKT 1	6/1/2010	6/1/2010		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		

Construction Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

Reservation	Upgrade Name	COD		Earliest Service Start Date	Redispatch Available
1162075	CLINTON - CLINTON GREEN STREET 69KV CKT 1	6/1/2016	6/1/2011		
	CLINTON - CLINTON PLANT 69KV CKT 1	6/1/2011	6/1/2011		
	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No

				Earliest Service	Redispatch	
Reservation	Upgrade Name	COD	EOC	Start Date	Available	
1162075	ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2010			

Customer Study Number UCU AG3-2006-088D

				Requested	Requested	Requested Stop			Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
UCU	1162678	WR	MPS	25	1/1/2008	1/1/2028	7/1/2009			\$ 9,666,000	\$ 168,314	
UCU	1162681	WR	MPS	25	1/1/2008	1/1/2028	7/1/2009	7/1/2029	\$ -	\$ 9,666,000	\$ 168,314	\$ 634,220
		•	•	•		•		•	\$ -	\$ 19.332.000	\$ 336,628	\$ 1,268,439

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1162678	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacemen	6/1/2007	6/1/2010			\$ 5,249	\$ 344,362	\$ 19,782
	EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1	6/1/2009	6/1/2009			\$ 8,460	\$ 300,000	\$ 32,078
	EXIDE JUNCTION - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$ 50,527	\$ 2,000,000	\$ 186,925
	MPS MUST RUN GENERATION #1	12/1/2006	12/1/2006			\$	\$ -	\$ -
	NORTHVIEW - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$ 28,567	\$ 610,000	\$ 111,052
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010			\$ 75,511	\$ 10,372,158	\$ 284,384
					Total	\$ 168,314	\$ 13,626,520	\$ 634,220
1162681	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacemen	6/1/2007	6/1/2010			\$ 5,249	\$ 344,362	\$ 19,782
	EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1	6/1/2009	6/1/2009			\$ 8,460	\$ 300,000	\$ 32,078
	EXIDE JUNCTION - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$ 50,527	\$ 2,000,000	\$ 186,925
	MPS MUST RUN GENERATION #1	12/1/2006	12/1/2006			\$	\$ -	\$ -
	NORTHVIEW - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$ 28,567	\$ 610,000	
	Potter - Roosevelt 345KV Displacement	6/1/2007	6/1/2010			\$ 75,511	\$ 10,372,158	\$ 284,384
					Total	\$ 168,314	\$ 13,626,520	\$ 634,220

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

Reservation	Upgrade Name	COD		Earliest Service Start Date	Redispatch Available
	EAST 40MVAR CAPACITOR	1/1/2009			Available
	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009		No
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009		No
	INDUSTRIAL PARK - LAKE ROAD 161KV CKT 1	6/1/2007	6/1/2008		No
1162681	EAST 40MVAR CAPACITOR	1/1/2009	1/1/2009		
	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009		No
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009		No
	INDUSTRIAL PARK - LAKE ROAD 161KV CKT 1	6/1/2007	6/1/2008		No

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162678	IATAN - NASHUA 345KV CKT 1	6/1/2010	6/1/2010		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
1162681	IATAN - NASHUA 345KV CKT 1	6/1/2010	6/1/2010		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		

Construction Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	
				Start Date	Available
	CLINTON - CLINTON GREEN STREET 69KV CKT 1	6/1/2016			
	CLINTON - CLINTON PLANT 69KV CKT 1	6/1/2011	6/1/2011		
	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No
1162681	CLINTON - CLINTON GREEN STREET 69KV CKT 1	6/1/2016	6/1/2011		
	CLINTON - CLINTON PLANT 69KV CKT 1	6/1/2011	6/1/2011		
	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		No

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1162678	ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2010		
1162681	ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2010		

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

Customer Study Number WRGS AG3-2006-024D

Customer	Reservation	POR	POD		Requested Start Date	Requested Stop	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point	Allocated E & C	Total Revenue Requirements
WRGS	1161506	WR	WR	380	5/1/2008	5/1/2014	7/1/2009	7/1/2015	\$ 1,531,041	\$ -	\$ 1,531,041	\$ 3,572,237
		•							\$ 1,531,041	0	\$ 1,531,041	\$ 3,572,237

				Earliest Service	Redispatch	Allocat	ed E & C		Tota	al Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total E & C Cost	Red	uirements
1161506	BOEING - STEARMAN 138KV CKT 1	6/1/2012	6/1/2012			\$	87,449	\$ 300,000	\$	126,883
	EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1	6/1/2009	6/1/2009			\$	62,692	\$ 300,000	\$	154,664
	EXIDE JUNCTION - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$	445,369	\$ 2,000,000	\$	1,072,038
	NORTHVIEW - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$	140,688	\$ 610,000	\$	355,847
	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER Displacement	6/1/2007	6/1/2009	10/1/2008	Yes	\$	451,970	\$ 1,132,688	\$	1,138,963
	ROSEHILL - SOONER 345KV CKT 1 OKGE Displacement	6/1/2011	6/1/2011			\$	216,788	\$ 6,322,628	\$	467,702
	ROSEHILL - SOONER 345KV CKT 1 WERE Displacement	6/1/2011	6/1/2011			\$	126,085	\$ 3,677,275	\$	256,140
		•		•	Total	\$	1,531,041	\$ 14,342,591	\$	3,572,237

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Dodienateh
Reservation	Henry de Name	COD			Available
		COD		Start Date	Available
1161506	ALTAMONT 138KV	6/1/2011	6/1/2011		
	DEARING (DEARIN1X) 138/69/13.2KV TRANSFORMER CKT 1	12/1/2011	12/1/2011		
	Evans - Grant - Chisolm Rebuild and Conversion Project	6/1/2007	6/1/2009		Yes
	STRANGER CREEK TRANSFORMER CKT 2	6/1/2009	6/1/2009		

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1161506	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3 Displacement	6/1/2011	6/1/2011		

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1161506	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		Yes

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

Customer Study Number WRGS AG3-2006-025

							Deferred Start		Potential Base			
				Requested	Requested	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
Customer	Reservation	FOR	FOD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Dase Nate	CUSI	
WRGS	1140120	WR	WR	360	5/1/2009					\$ -	\$ 1,044,255	

				Earliest Service	Redispatch	Allocate	ed E & C			Total	Revenue
Reservation	Upgrade Name	COD	EOC	Start Date	Available	Cost		Total E	& C Cost	Requ	irements
1140120	BOEING - STEARMAN 138KV CKT 1	6/1/2012	6/1/2012			\$	84,628	\$	300,000	\$	121,310
	EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1	6/1/2009	6/1/2009			\$	60,669	\$	300,000	\$	147,870
	EXIDE JUNCTION - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$	430,999	\$	2,000,000	\$	1,024,945
	NORTHVIEW - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$	136,151	\$	610,000	\$	340,221
	ROSEHILL - SOONER 345KV CKT 1 OKGE Displacement	6/1/2011	6/1/2011			\$	209,792	\$	6,322,628	\$	445,739
	ROSEHILL - SOONER 345KV CKT 1 WERE Displacement	6/1/2011	6/1/2011			\$	122,016	\$	3,677,275	\$	244,887
					Total	S	1.044.255	\$ 1	3.209.903	S	2.324.972

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1140120	ALTAMONT 138KV	6/1/2011	6/1/2011		
	DEARING (DEARIN1X) 138/69/13.2KV TRANSFORMER CKT 1	12/1/2011	12/1/2011		
	Evans - Grant - Chisolm Rebuild and Conversion Project	6/1/2007	6/1/2009		
	STRANGER CREEK TRANSFORMER CKT 2	6/1/2009	6/1/2009		

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

					Earliest Service	Redispatch
F	Reservation	Upgrade Name	COD	EOC	Start Date	Available
	1140120	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3 Displacement	6/1/2011	6/1/2011		ĺ

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
11401	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		Vac

Table 3 - Additional Details for Each Request Including All Facility Upgrades Required and Allocated costs for Each Upgrade

Customer Study Number WRGS AG3-2006-036D

				Requested	Requested	Requested Stop	Deferred Start Date Without	Deferred Stop Date Without	Potential Base Plan Funding		Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
WRGS	1161997	MPS	WR	300	6/1/2007	6/1/2014	7/1/2009	7/1/2016	\$ 2,315,803	\$ -	\$ 2,315,803	\$ 5,423,928
									\$ 2,315,803	\$ -	\$ 2,315,803	\$ 5,423,928

				Earliest Service	Redispatch	Allocat	ed E & C		Tota	I Revenue
Reservation		COD	EOC	Start Date	Available	Cost		Total E & C Cost	Req	uirements
1161997	BOEING - STEARMAN 138KV CKT 1	6/1/2012	6/1/2012			\$	127,922	\$ 300,000	\$	191,934
	EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1	6/1/2009	6/1/2009			\$	59,061	\$ 300,000	\$	150,674
	EXIDE JUNCTION - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$	421,392	\$ 2,000,000	\$	1,048,904
	NORTHVIEW - SUMMIT 115KV CKT 1	6/1/2009	6/1/2009			\$	144,880	\$ 610,000	\$	378,944
	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER Displacement	6/1/2007	6/1/2009	10/1/2008	Yes	\$	546,393	\$ 1,132,688	\$	1,423,851
	ROSEHILL - SOONER 345KV CKT 1 OKGE Displacement	6/1/2011	6/1/2011			\$	642,483	\$ 6,322,628	\$	1,444,631
	ROSEHILL - SOONER 345KV CKT 1 WERE Displacement	6/1/2011	6/1/2011			\$	373,672	\$ 3,677,275	\$	784,990
			•	•	Total	\$	2,315,803	\$ 14,342,591	\$	5,423,928

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

Reservation	Upgrade Name	COD		Earliest Service Start Date	Redispatch Available
1161997	ALTAMONT 138KV	6/1/2011	6/1/2011		
	CROSSTOWN - NEAST 161KV CKT 1	6/1/2015	6/1/2015		
	DEARING (DEARIN1X) 138/69/13.2KV TRANSFORMER CKT 1	12/1/2011	12/1/2011		
	Evans - Grant - Chisolm Rebuild and Conversion Project	6/1/2007	6/1/2009		Yes
1	GILL ENERGY CENTER EAST - INTERSTATE 138KV CKT 1	6/1/2016	6/1/2016	· · · · · · · · · · · · · · · · · · ·	· ·
	STRANGER CREEK TRANSFORMER CKT 2	6/1/2009	6/1/2009		

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
116199	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3 Displacement	6/1/2011	6/1/2011		

				Earliest Service	Redispatch
Reservation	Upgrade Name	COD	EOC	Start Date	Available
1161997	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	2/1/2007	7/1/2009		Yes

 Table 4 - Upgrade Requirements and Solutions Needed to Provide Transmission Service for the Aggregate Study

Transmission Owner	Upgrade	Solution	Earliest Data Upgrade Required (COD)	Estimated Date of Upgrade Completion (EOC)	Estimated Engineering &
OWING	Opprave	Rebuild 3.24 miles of 1272 AAC with 2156 ACSR. Replace 3	required (COD)	Completion (200)	Construction Cost
AEPW	ARSENAL HILL - FORT HUMBUG 138KV CKT 1	switches, breaker jumpers, and reset CTs @ Arsenal Hill. Replace 2 switches and jumpers @ Fort Humbug	6/1/2011	6/1/2011	\$2,750,000.00
AEPW	ARSENAL HILL - MCWILLIE STREET 138KV CKT 1	Replace Arsenal Hill switches and jumpers	6/1/2011	6/1/2011	\$100,000.00
AEPW AEPW	ARSENAL HILL - WATERWORKS 69KV CKT 1 ARSENAL HILL (ARSHILL1) 138/69/12.47KV TRANSFORMER CKT 1	Rebuild 2.55 miles of 666 ACSR with 1272 ACSR Replace auto & 69 kV breaker and switches	6/1/2011 6/1/2011	6/1/2011 6/1/2011	\$2,000,000.00 \$2,500,000.00
AEPW	ARSENAL HILL (ARSHILL2) 138/69/14.5KV TRANSFORMER CKT 2	Replace auto & 69 kV breaker and switches	6/1/2011	6/1/2011	\$2,500,000.00
AEPW AEPW	BEAVER - EUREKA SPRINGS 161KV CKT 1 AEPW DANVILLE (APL) - MAGAZINE REC 161KV CKT 1 AEPW	Reconductor 1.25 miles of 795 ACSR with 1590 ACSR. Rebuild 17.96 miles of 250 Copperweld with 795 ACSR.	6/1/2013 6/1/2011	6/1/2013 6/1/2011	\$850,000.00 \$9,000,000.00
		Replace Breakers 9310 & 10080 & five switches @ Perdue. Replace			\$5,000,000.00
AEPW	DIANA - PERDUE 138KV CKT 1 DYESS - ELM SPRINGS REC 161KV CKT 1	switch 12798 @ Diana	6/1/2016	6/1/2016	\$750,000.00
AEPW AEPW	DYESS - TONTITOWN 161KV CKT 1	Replace Elm Springs switch. Rebuild 5.17 miles of line. Replace Dyess Breaker, Switches, & wavetrap	6/1/2011 6/1/2011	6/1/2011 6/1/2011	\$5,000,000.00 \$500,000.00
		Duild 22 miles of 2 700MCM ACCD from Tools NIM Tournelless Add			
AEPW	HEMPSTEAD - NW TEXARKANA 345 kV CKT 1	Build 33 miles of 2-795MCM ACSR from Turk NW Texarkana, Add 345kV terminal at NW Texarkana, Add 345kV terminal at Turk	6/1/2011	6/1/2011	\$56,000,000.00
AEPW AEPW	HOOKS - LONESTAR ORDINANCE TAP 69KV CKT 1 NEW BOSTON - NORTH NEW BOSTON 69KV CKT 1 Displacement	Replace Lone Star Ordinance Tap switch Replace New Boston switches	6/1/2011	6/1/2011 6/1/2011	\$125,000.00 \$100,000.00
	·	Rebuild 5.92 miles of 266 ACSR with 795 ACSR. Replace switches,	6/1/2011		\$100,000.00
AEPW AEPW	SOUTH TEXARKANA REC - TEXARKANA PLANT 69KV CKT 1 SOUTHWEST SHREVEPORT - SOUTHWEST SHREVEPORT TAP 138KV CKT 1	jumpers, and reset CTs & relays @ Texarkana Plant	6/1/2016 6/1/2009	6/1/2016	\$4,000,000.00
AEPVV	SOUTHWEST SHREVEPORT - SOUTHWEST SHREVEPORT TAP 138NV CRT T	Rebuild 2.29 miles of 2-397.5 ACSR with 1590 ACSR. Using IEEE Guide for Loading of Mineral-Oil Immersed Power	6/1/2009	6/1/2009	\$2,500,000.00
		Transformers (C57.91-2000) Re-rate the autos. Replace .two 138 kV			
AEPW	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1 Expedite	breakers and five 138 kV switches. Reset relays and CTs Using IEEE Guide for Loading of Mineral-Oil Immersed Power	6/1/2008	4/1/2009	\$1,500,000.00
		Transformers (C57.91-2000) Re-rate the autos. Replace .two 138 kV			
AEPW AEPW	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 2 Expedite SUGAR HILL (SUGAR HL) 138/69/12.47KV TRANSFORMER CKT 1	breakers and five 138 kV switches. Reset relays and CTs Replace auto & 69 kV breaker and switches or Add 2nd Auto	6/1/2008 6/1/2011	4/1/2009 6/1/2011	\$1,500,000.00 \$2,500,000.00
GRDA	CLAREMORE (CLRAUTO3) 161/69/13.8KV TRANSFORMER CKT 3	Add 3rd 161/69 KV Transformer	6/1/2007	6/1/2009	\$2,300,000.00
KACD	COLLEGE CDAIC ACAIN OKT A	Reconductor 4 miles with 1192.5 ACSS, 558 normal/emergency	0/4/0040	C/4/004C	\$700.000.00
KACP MIDW	COLLEGE - CRAIG 161KV CKT 1 ST JOHN CAPACITOR Displacement	rating and upgrade breaker. 20MVar capacitor at ST John	6/1/2016 6/1/2008	6/1/2016 6/1/2008	\$700,000.00 \$114,189.00
MIPU	HARRISONVILLE 161/69KV TRANSFORMER CKT 1	Transformer Upgrade	6/1/2007	6/1/2009	\$2,100,000.00
		MPS Voltage Instability due to EAST - WOODBINE 161KV CKT 1 and ST JOE - WOODBINE 161KV CKT 1 contingencies in the			
		2006/07 Winter Peak, 2007 Spring Peak, 2007 Summer Peak,			
MIPU	MDC MUCT DUM CENEDATION #4	2007Summer Shoulder, 2007/08 Winter Peak, 2008 Summer Peak,	40/4/0000	40/4/0000	60.00
OKGE	MPS MUST RUN GENERATION #1 5 TRIBES - HANCOCK 161KV CKT 1 Displacement	2008/09 Winter Peak. Must Run Lake Road Generation. Replace 800A Wave Trap, increase Relay CTR to 1200-5A.	12/1/2006 6/1/2007	12/1/2006 6/1/2009	\$0.00 \$100,000.00
OKGE	5 TRIBES - PECAN CREEK 161KV CKT 1 Displacement	replace 636AS33 conductor with 795AS33	6/1/2007	6/1/2009	\$466,473.00
OKGE	ARCADIA - SOONER 345kV CKT 1	Build 65 miles of 345kV line from Sooner to Arcadia. Add Terminal equipment at each end	6/1/2011	6/1/2011	\$65,000,000.00
		Replace 1200A terminal equipment at Arkoma to 2000A and rebuild			
OKGE	ARKOMA - FT SMITHW 161KV CKT 1	4.47 miles of line to 1590AS52. Tap Sunnyside - Pittsburg 345kV and build new substation between	6/1/2016	6/1/2016	\$2,900,000.00
		Russett and Mills Creek. Build 25 miles of 138kV from new			
OKGE	CANEY CREEK 345/138 kV	substation to Caney Creek	6/1/2011	6/1/2011	\$31,000,000.00
		Reconductor .75 with ACCC conductor. Increase CTRs to at least 1600-5 ratio. Line relays will need to check to determine if			
OKGE	FAIRMONT TAP - WOODRING 138KV CKT 1	replacement is needed.	6/1/2011	6/1/2011	\$850,000.00
OKGE	FRANKLIN SW - MIDWEST TAP 138KV CKT 1 OKGE Displacement	Reconductor 1.27 miles of line to 1590AS52. WFEC will have to provide upgrade solution also for their Franklin (WFEC).	6/1/2014	6/1/2014	\$14,588.00
OKGE	MILLER - WHITE EAGLE 138KV CKT 1	Replace line relay at White Eagle & Cont. Empire	6/1/2011	6/1/2011	\$300,000.00
OKGE OKGE	PECAN CREEK (PECANCK1) 345/161/13.8KV TRANSFORMER CKT 1 Displacement ROSEHILL - SOONER 345KV CKT 1 OKGE Displacement	Add a 345/161 kV 369MVA transformer New 345 kV line from Sooner to Oklahoma/Kansas	6/1/2007 6/1/2011	6/1/2009 6/1/2011	\$3,381,928.00 \$6,322,628.00
OKGE	RUSSETT - RUSSETT 138KV CKT 1 OKGE	Replace trap and increase CTR. Pending verification of relays.	6/1/2016	6/1/2016	\$45,000.00
OKGE OKGE	RUSSETT - RUSSETT 138KV CKT 1 WFEC SUNNYSIDE 345/138KV TRANSFORMER CKT 2	Upgrade Terminal Equip CTs at Russett Add 2nd 345/138KV Auto	6/1/2016 6/1/2011	6/1/2016 6/1/2011	\$75,000.00 \$6,500,000.00
ONOL	SONATOIDE 340/130KV TICANOI OKWEK OKT 2	Reconductor 2.75 miles of line with Drake ACCC conductor and	0/1/2011	0/1/2011	\$0,000,000.00
OKGE	WAUKOMIS TAP - WOODRING 138KV CKT 1	increase CTR.	6/1/2011	6/1/2011	\$1,500,000.00
SPS	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2 Displacement	Upgrade Roosevelt to Curry 115 kV circuit w/795 ACSR New Delivery Point tapping 69 kV Tie Line from AEPW Shamrock to	6/1/2007	6/1/2010	\$344,362.00
SPS	GSEC Midway Interconnection #1	SPS Magic City	6/1/2007	6/1/2007	\$70,000.00
SPS	Potter - Roosevelt 345KV Displacement	New 345 kV circuit from Potter - Roosevelt 2-795 ACSR & 345/230 kV 560 MVA transformer	6/1/2007	6/1/2010	\$10,372,158.00
SPS	ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	Add 2nd transformer 230/115 kV 252 MVA	6/1/2007	6/1/2010	\$858,753.00
		SPS Voltage Instability for Forced Harrington or Tolk Outages due to High Wind Generation Level, Import Level, and Scheduled Harrington			
		Outage in 2007 Spring Peak MUST Run Nichols Generation no less			
SPS	SPS MUST RUN GENERATION #1	than 300 MW	4/1/2007	4/1/2007	\$0.00
		SPS Voltage Instability for Tolk to Eddy 345 kV outage due to Scheduled Cunningham Outage and either High Wind Generation			
		Level or Import Level in 2007 Fall Peak MUST Run Cunningham and			
SPS	SPS MUST RUN GENERATION #2	Maddox Generation in order to not exceed approximately 225 MW of Flow	10/1/2007	10/1/2007	\$0.00
0.0	or o moor now defend that we	SPS Voltage Instability for Tolk to Eddy 345 kV outage due to	10/1/2007	10/1/2007	\$0.00
		Scheduled Cunningham Outage and either High Wind Generation Level or Import Level in 2007 Summer Shoulder MUST Run			
		Cunningham and Maddox Generation in order to not exceed			
SPS	SPS MUST RUN GENERATION #3	approximately 225 MW o	6/1/2007	6/1/2007	\$0.00
		SPS Voltage Instability for Tolk to Eddy 345 kV outage due to Scheduled Cunningham Outage and either High Wind Generation			
		Level or Import Level in 2007/08 Winter Peak MUST Run			
SPS	SPS MUST RUN GENERATION #4	Cunningham and Maddox Generation in order to not exceed approximately 225 MW of	12/1/2007	12/1/2007	\$0.00
51.0	S. S. MOST TON DEBELOATION #4	Must Run Requirement of Cunningham #2 and Maddox #1 to preven	12/1/2007	12/1/2007	9 0.00
ene	CDC MUCT DUN CENERATION #E	Voltage Collapse in 2007 Fall Peak for the DENVER CITY	40/4/000	40/4/0007	ec. 00
SPS WEPL	SPS MUST RUN GENERATION #5 MEDICINE LODGE - SUN CITY 115KV CKT 1	INTERCHANGE S - SHELC23 115KV CKT 1 line outage Replace relaying from Sun City to Medicine Lodge	10/1/2007 6/1/2007	10/1/2007 1/1/2008	\$0.00 \$150,000.00
WERE	BOEING - STEARMAN 138KV CKT 1	Uprate 1.95 mile Boeing-Stearman 138 kV line.	6/1/2012	6/1/2012	\$300,000.00
WERE	EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1	Rebuild and reconductor 0.34 miles with 1192 ACSR and rebuild substations.	6/1/2009	6/1/2009	\$300,000.00
WERE	EXIDE JUNCTION - SUMMIT 115KV CKT 1	Rebuild 4.94-mile Summit-Exide Jct 115 kV, 1192.5 ACSR	6/1/2009	6/1/2009	\$2,000,000.00
WERE WERE	NORTHVIEW - SUMMIT 115KV CKT 1 ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER Displacement	Uprate line to 100oC and replace wave trap Add third 345-138 kV transformer at Rose Hill	6/1/2009 6/1/2007	6/1/2009 6/1/2009	\$610,000.00 \$1,132,688.00
WERE	ROSEHILL - SOONER 345KV CKT 1 WERE Displacement	New 345 kV line from Oklahoma/Kansas Stateline to Rose Hill	6/1/2011	6/1/2011	\$3,677,275.00
WFEC	FRANKLIN SW - MIDWEST TAP 138KV CKT 1 WFEC Displacement	Replace switches and wavetrap at Franklin Switch to 2000A Add 345 line from Hugo to SunnySide	6/1/2014	6/1/2014	\$100,000.00
WFEC	Hugo - SunnySide 345kV	Add 343 lifte from rugo to SunnySide	6/1/2011	6/1/2011	\$50,000,000.00

 Table 4 - Upgrade Requirements and Solutions Needed to Provide Transmission Service for the Aggregate Study

			Earliest Data	Estimated Date of
Transmission Owner			Upgrade	Upgrade Completion (EOC)
Owner	Upgrade	Reconductor 666 ACSR (11.6 mies)and 1272 ACSR (.1 mile) to	Required (COD)	Completion (EOC)
		Drake ACCC (2156 ACSR (11.6 miles) and 1272 ACSR (.1 mile) to		
	OLUMBER OPPINGS TOLETONIA LOUIS OFF	remove the series reactors at Chamber Springs on the Chamber	40/4/0000	0/4/0007
AEPW AEPW	CHAMBER SPRINGS - TONTITOWN 161KV CKT 1	Springs to Tontitown 161 kV line New 345 kV Line and Tontitown 345/161 kV Transformer	12/1/2006	
	Chamber Springs - Tontitown 345 kV			
AEPW	Flint Creek - East Centerton 345 kV	New 345 kV Line and East Centerton 345/161 kV Transformer	6/1/2008	6/1/2008
		Tap the Tallant-Ramona(PSO) 69 kV line 10.62 miles from Tallant,		
		2.01 miles from Ramona. There is a 138/69 kV transformer at South		
GRDA	TALLANT - RAMONA 161kV CKT 1	Fork, and then a 9 mile 138 kV line to Skiatook East.	4/1/2007	10/1/2008
GRUA	TALLANT - RAMONA ISTRUCKT I	New 345/161kV transformer and 345kV line tapping LaCvne - West	4/1/2007	10/1/2006
	LAGUANE DAGUANETE CARDED AFFIC		0/4/0007	0/4/0000
KACP MIDW	LACYGNE-PAOLA-WEST GARDER 345KV HEIZER TO KNOLL 230KV	Gardner 345kV Convert 115 kV to 230kV	6/1/2007	
MIPU	CLINTON - CLINTON GREEN STREET 69KV CKT 1	Upgrade line to 795 26/7 ACSR conductor	6/1/2016	
MIPU	CLINTON - CLINTON PLANT 69KV CKT 1	Upgrade line to 795 26/7 ACSR conductor	6/1/2011	6/1/2011
		Reroute two lines into New Hobbs Substation (Cunningham to Millen		
SPS	HOBBS 115 KV Lines	115 kV line and Cunningham to Russell 115 kV line)	10/1/2007	
SPS	HOBBS 230/115KV TRANSFORMER CKT 2	Add 2nd 150 MVA transformer at Hobbs	10/1/2007	6/1/2008
		New 230/115 kV Substation on Lea Co to Midland 230 kV line with		
SPS	HOBBS Substation and Lines	reroute of the Maddox to Lea Co 115 kV line	10/1/2007	6/1/2008
		Terminate V53 at Mustang instead of Denver City - 3 mi of new 115		
SPS	Mustang-San Andr-Amerada Hess 115KV Displacement	kV circuit. Mustang-San Andr-Amerada Hess 115 kV ckt	4/1/2007	6/1/2008
		SPS Plan to add 2 50 MVAR Shunt Capacitors at TUCO 230 kV, a 5	q	
		MVAR Shunt Capacitor at Swisher 230 kV, a 50 MVAR Shunt		
		Capacitor at Lubbock South 230 kV, and a 50 MVAR Shunt Capacito		
SPS	TUCO INTERCHANGE 230KV #1	at Carlisle 230 kV	6/1/2007	
SPS	TUCO INTERCHANGE 230KV #2	SPS Plan to Add +150/-50 SVC at TUCO 230 kV	6/1/2008	
SPS	YOAKUM COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	Upgrade Transformer 230/115 kV 252 MVA	6/1/2007	6/1/2008
		New line between Phillipsburg and Rhoades scheduled to be in		
SUNC	PHILLIPSBURG - RHOADES	service by 6/1/2008	6/1/2007	10/1/2008
		Install new 50.55-mile 345 kV line from Reno county to Summit; 31		
		miles of 115 kV line between Circle and S Philips would be rebuilt as		
		double circuit with the 345 kV line to minimize ROW impacts;		
WERE	RENO - SUMMIT 345KV	Substation work required at Summit for new 345 kV terminal	1/1/2011	
WERE	WICHITA - RENO 345KV	Build 345kV from Wichita to Reno Co	2/1/2007	7/1/2009
		WFEC has plans to Increase CT Rating. Project should be inservce		
WFEC	ALTUS JCT TAP - RUSSELL 138KV CKT 1	by 6/1/2008	6/1/2015	6/1/2008

Transmission Owner	Upgrade	Solution	Earliest Data Upgrade Required (COD)	Estimated Date of Upgrade Completion (EOC
	563		,	
FPW	ALLIMAN TAD MODELINGCE TEVADICAMA 400KU CKT 4	Rebuild 1.68 miles of 1024 ACAR with 2156 ACSR, Replace wavetra	C/4/2000	C/4/000
EPW	ALUMAX TAP - NORTHWEST TEXARKANA 138KV CKT 1 ARSENAL HILL - NORTH MARKET 69KV CKT 1	& jumpers with 2156 ACSR. Replace Switch 2285 @ Alumax Tap. Rebuild 2.3 miles of 666 ACSR with 1272 ACSR	6/1/2008 6/1/2011	
	AROENAL FILE - NORTH WARRET ONLY ORT T	Reset relays @ Bann and replace switch @ Lone Star Ordinance	0/1/2011	0/1/201
EPW	BANN - LONESTAR ORDINANCE TAP 69KV CKT 1	Tap. Rebuild 4.14 miles of 397 ACSR with 795 ACSR.	6/1/2011	6/1/201
EPW	BIG SANDY - HAWKINS 69KV CKT 1	Rebuild 5.5 miles of 477 ACSR with 1272 ACSR.	6/1/2016	6/1/201
EPW	BIG SANDY - PERDUE 69KV CKT 1	Rebuild 5.4 miles of 477 ACSR with 1272 ACSR.	6/1/2016	
EPW	BROKEN BOW - CRAIG JUNCTION 138KV CKT 1 AEPW	Rebuild 7.66 miles of 3/0 CW CU with 795 ACSR	12/1/2007	
EPW EPW	DAINGERFIELD - JENKINS REC T 69KV CKT 1 DUNCAN (DUNCAN) 138/69/13.8KV TRANSFORMER CKT 1	Replace Daingerfield Breaker # 1M90 & reset relays	6/1/2011	6/1/201
EPW		Replace Duncan Autotransformer		
EPW	ELK CITY - ELK CITY 69KV CKT 1 AEPW LINWOOD - MCWILLIE STREET 138KV CKT 1	Replace metering CTs & Jumpers and reset relay Cts Rebuild 2.09 miles of 666 ACSR with 1272 ACSR	12/1/2008 6/1/2007	4/1/20 1/1/20
	ENWOOD - WOWLELE OTKEET 130KV OKT 1	New 138 kV line from Port Robson - Red Point via McDade &	0/1/2007	1/1/20
EPW	PORT ROBSON - REDPOINT 138kV	Haughton. Convert McDade & Haughton to 138 kV.	6/1/2011	6/1/201
EPW	Siloam Springs - South Fayetteville 161 kV	Convert Existing 69 kV Line to 161 kV Operation	6/1/2014	6/1/201
EPW	WALDRON CAPACITOR	Install additional cap bank at Waldron	6/1/2016	
EPW/WFEC	SNYDER - SNYDER INTERCONNECTION	New Tie line between AEPW's Snyder and WFEC's Snyder	6/1/2016	
RDA	Kansas 7.2MVAR Cap	Add 7.2MVAr at Kansas area	6/1/2007	6/1/200
RDA	SCoffeyville Capacitor	Increase to a 14.4MVAr at South Coffeyville Bus 97001	6/1/2008	
RDA	Turkey Ford 7.2MVAR Cap	Install 7.2MVAR capacitors at Turkey Ford 69 kV bus	6/1/2007	6/1/200
ACP	AVONDALE - GLADSTONE 161KV CKT 1	Replace 800 amp wavetrap at Gladstone with 1200 amp wavetrap	6/1/2016	6/1/20
ACP	CROSSTOWN - NEAST 161KV CKT 1	Add series reactor at Crosstown	6/1/2015	
IDW	HAYS PLANT - SOUTH HAYS 115KV CKT 1	Reconductor Line	6/1/2008	6/1/20
IIDW	HAYS PLANT - VINE STREET 115KV CKT 1	Reconductor Line	6/1/2008	6/1/200
IIDW	HEIZER 115/69KV TRANSFORMER CKT 1	Replace auto	6/1/2016	6/1/20
IIDW	HEIZER 115/69KV TRANSFORMER CKT 2	Replace auto	6/1/2016	
MIDW MIPU	KINSLEY CAPACITOR EAST 40MVAR CAPACITOR	Install 12mvar capacitor at Kinsley	6/1/2007 1/1/2009	1/1/200
IIPU IIPU	INDUSTRIAL PARK - LAKE ROAD 161KV CKT 1	Add 40MVAR capacitor at East 161kV Structure replacement - Higher line rating	6/1/2009	
IIPU	MARTIN CITY - TURNER ROAD SUBSTATION 161KV CKT 1	Replace Wavetrap at Martin City	12/1/2006	
IIPU	RALPH GREEN 14.4MVAR CAPACITOR	14.4MVAR at Raiph Green	6/1/2011	6/1/20
		Rebuild 0.06 miles of 397 ACSR with 1272 ACSR & reset relay @		
KGE	BONANZA - BONANZA TAP 161KV CKT 1 Displacement	Bonanza or Bonanza T-Excelsior-Midland-N. Huntington 161 kV loop Reconductor 2.2 miles to Drake ACCC/TW and change terminal	6/1/2015	6/1/20
KGE	COLONY - FT SMITH 161KV CKT 1	equipment at Ft. Smith & Colony to 2000A.	6/1/2011	6/1/20
PS	CARLSBAD PLANT 115/69KV TRANSFORMERS	Upgrade to 75 MVA transformers	6/1/2007	6/1/200
SPS	Hitchland 345 and 115 kV Interchange	New 345/115 kV Substation on Potter to Finney 345 kV line near the Texas Oklahoma border with tap of Spearman to Texas Co 115 kV line (Three breaker 345 kV bus, 345/115 Kv transformer, five 115 kV breakers)	6/1/2010	
:PS	Mooreland - Potter 345 kV SPS	New 345 kV line from Potter to Mooreland on wooden h-frame structures.	6/1/2016	6/1/201
iPS	MUSTANG STATION 230/115KV TRANSFORMER CKT 1	Install 252 MVA Transformer	4/1/2007	
PS	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	New 345/230 kV 560 MVA transformer	6/1/2016	
PS	Seven Rivers to Pecos to Potash Junction 230kV	Seven Rivers to Pecos to Potash Junction 230kV	6/1/2007	6/1/200
SPS	Tex-Hitchland-Sherman Tap 115 kV ckt	Route Sherman Tap to Texas Co in/out of New Hitchland Interchang	6/1/2010	6/1/201
PS	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	Install 345/115 kV Transformer at Tuco	6/1/2016	
UNC	Spearville - Mooreland 345 kV SUNC	New 345 kV line from Spearville to Kansas/Oklahoma Stateline	6/1/2016	6/1/20
WPA	BULL SHOALS - BULL SHOALS 161KV CKT 1	Replace buswork in Bull Shoals switchyard.	6/1/2010	6/1/201
VEPI	OLAV OF NITED ODE FAIL FAE ALEIGN OVE A	B 35 44510/6 31.00 4 4 6 6 4 6 6 6 4	0/4/0007	0141001
VEPL VEPL	CLAY CENTER - GREENLEAF 115KV CKT 1 GREENSBURG - JUDSON LARGE 115KV CKT 1	Building a new 115 kV tie with Westar from Greenleaf to Clay Center Replace relaying from Judson Large to Greensgirg	6/1/2007	6/1/200 9/1/200
/ERE	ALTAMONT 138KV	Install 30 Mvar cap at Altamont 138 kV (bus # 57000)	6/1/2011	
/ERE	CHAPMAN - CLAY CENTER JUNCTION 115KV CKT 1	Reset terminal equipment	6/1/2007	
	DEARING (DEARIN1X) 138/69/13.2KV TRANSFORMER CKT 1	2nd Dearing 138-69 kV Transformer	12/1/2011	12/1/20
VERE				,
VERE	DEARING (DEARINTA) 136/69/13.2KV TRANSPORMER CKT T	Build Evans - Grant 138 kV line, Convert Grant - Chisolm 69 kV line to 138 kV, Install New Grant 138/69 kV XEMR, And Rebuild Grant -		
VERE		Build Evans - Grant 138 kV line, Convert Grant - Chisolm 69 kV line to 138 kV, Install New Grant 138/69 kV XFMR. And Rebuild Grant - Grant Jct. 69 kV line.	6/1/2007	6/1/200
VERE VERE	Evans - Grant - Chisolm Rebuild and Conversion Project GILL ENERGY CENTER EAST - GILLJCT269.0 69KV CKT 1	to 138 kV, Install New Grant 138/69 kV XFMR. And Rebuild Grant -	6/1/2007	6/1/200 6/1/200
/ERE /ERE	Evans - Grant - Chisolm Rebuild and Conversion Project	to 138 kV, Install New Grant 138/69 kV XFMR. And Rebuild Grant - Grant Jct. 69 kV line. Rebuild Gill-Gill Jct Replace wave trap		6/1/200
/ERE /ERE /ERE	Evans - Grant - Chisolm Rebuild and Conversion Project GILL ENERGY CENTER EAST - GILLICT269.0 69KV CKT 1 GILL ENERGY CENTER EAST - INTERSTATE 138KV CKT 1	to 138 kV, Install New Grant 138/69 kV XFMR. And Rebuild Grant - Grant Jct. 60 kV line. Rebuild Gill-Gill Jct Replace wave trap Replace bus, jumpers and disconnect switches at MacArthur 69 kV	6/1/2007 6/1/2016	6/1/200 6/1/20
/ERE /ERE /ERE	Evans - Grant - Chisolm Rebuild and Conversion Project GILL ENERGY CENTER EAST - GILLJCT289.0 69KV CKT 1 GILL ENERGY CENTER EAST - INTERSTATE 138KV CKT 1 GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1	to 138 kV, Install New Grant 138/69 kV XFMR. And Rebuild Grant - Grant Jdt. 69 kV line. Rebuild Gill-Gill Jdt Replace wave trap Replace bus, jumpers and disconnect switches at MacArthur 69 kV substation to increase line capacity to conductor rating	6/1/2007 6/1/2016 6/1/2007	6/1/20 6/1/20 7/1/20
/ERE /ERE /ERE	Evans - Grant - Chisolm Rebuild and Conversion Project GILL ENERGY CENTER EAST - GILLICT269.0 69KV CKT 1 GILL ENERGY CENTER EAST - INTERSTATE 138KV CKT 1	to 138 kV, Install New Grant 138/69 kV XFMR. And Rebuild Grant - Grant Lt. 69 kV line. Rebuild Gill-Gill Jct Replace wave trap Replace bus, jumpers and disconnect switches at MacArthur 69 kV substation to increase line capacity to conductor rating Install second Stranger Creek 345-115 transformer	6/1/2007 6/1/2016	6/1/20 6/1/20 7/1/20
/ERE /ERE /ERE /ERE /ERE	Evans - Grant - Chisolm Rebuild and Conversion Project GILL ENERGY CENTER EAST - GILLJCT269 0 69KV CKT 1 GILL ENERGY CENTER EAST - INTERSTATE 136KV CKT 1 GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1 STRANGER CREEK TRANSFORMER CKT 2	to 138 kV, Install New Grant 138/69 kV XFMR. And Rebuild Grant - Grant Jct. 69 kV line. Rebuild Gill-Gill Jct Replace wave trap Replace bus, jumpers and disconnect switches at MacArthur 69 kV substation to increase line capacity to conductor rating Install second Stranger Creek 345-115 transformer Anadarko-Cyril 336-795 Reconductor 13 miles from 336 to 795	6/1/2007 6/1/2016 6/1/2007 6/1/2009	6/1/20/ 6/1/20 7/1/20/ 6/1/20/
ERE ERE ERE ERE ERE	Evans - Grant - Chisolm Rebuild and Conversion Project GILL ENERGY CENTER EAST - GILLJCT269.0 69KV CKT 1 GILL ENERGY CENTER EAST - INTERSTATE 138KV CKT 1 GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1 STRANGER CREEK TRANSFORMER CKT 2 ANADARKO - CYRIL 69KV CKT 1	to 138 kV, Install New Grant 138/69 kV XFMR. And Rebuild Grant - Grant J.t. 69 kV line. Rebuild Gill-Gill Jct Replace wave trap Replace bus, jumpers and disconnect switches at MacArthur 69 kV substation to increase line capacity to conductor rating Install second Stranger Creek 345-115 transformer Anadarko-Cyril 336-795 Reconductor 13 miles from 336 to 795 ACSR	6/1/2007 6/1/2016 6/1/2007 6/1/2009	6/1/20 6/1/20 7/1/20 6/1/20 6/1/20
/ERE /ERE /ERE /ERE /ERE	Evans - Grant - Chisolm Rebuild and Conversion Project GILL ENERGY CENTER EAST - GILLJCT269 0 69KV CKT 1 GILL ENERGY CENTER EAST - INTERSTATE 136KV CKT 1 GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1 STRANGER CREEK TRANSFORMER CKT 2	to 138 kV, Install New Grant 138/69 kV XFMR. And Rebuild Grant - Grant Jct. 69 kV line. Rebuild Gill-Gill Jct Replace wave trap Replace bus, jumpers and disconnect switches at MacArthur 69 kV substation to increase line capacity to conductor rating Install second Stranger Creek 436-115 transformer Anadarko-Cyril 336>795 Reconductor 13 miles from 336 to 795 ACSR Replace Terminal Equipment	6/1/2007 6/1/2016 6/1/2007 6/1/2009	6/1/20 6/1/20 7/1/20 6/1/20
/ERE /ERE /ERE /ERE /ERE /ERE	Evans - Grant - Chisolm Rebuild and Conversion Project GILL ENERGY CENTER EAST - GILLJCT269.0 69KV CKT 1 GILL ENERGY CENTER EAST - INTERSTATE 139KV CKT 1 GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1 STRANGER CREEK TRANSFORMER CKT 2 ANADARKO - CYRIL 69KV CKT 1 ANADARKO - GEORGIA 138KV CKT 1	to 138 kV, Install New Grant 138/69 kV XFMR. And Rebuild Grant - Grant Jut. 69 kV line. Rebuild Gill-Gill Jct Replace wave trap Replace bus, jumpers and disconnect switches at MacArthur 69 kV substation to increase line capacity to conductor rating Install second Stranger Creek 345-115 transformer Anadarko-Cyril 336-795 Reconductor 13 miles from 336 to 795 ACSR Replace Terminal Equipment Cyril 3-Medparkut 336-795: Reconductor 12.9 miles from 336 to 79	6/1/2007 6/1/2016 6/1/2007 6/1/2009 6/1/2011	6/1/20 6/1/20 7/1/20 6/1/20 6/1/20
/ERE /ERE /ERE /ERE /ERE /ERE /FEC	Evans - Grant - Chisolm Rebuild and Conversion Project GILL ENERGY CENTER EAST - GILLJCT269 0 69KV CKT 1 GILL ENERGY CENTER EAST - INTERSTATE 138KV CKT 1 GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1 STRANGER CREEK TRANSFORMER CKT 2 ANADARKO - CYRIL 69KV CKT 1 ANADARKO - GEORGIA 138KV CKT 1 CYRIL - MEDICINE PARK JCT 69KV CKT 1	to 138 kV, Install New Grant 138/69 kV XFMR. And Rebuild Grant - Grant Jct. 69 kV line. Rebuild Gill-Gill Jct Replace wave trap Replace bus, jumpers and disconnect switches at MacArthur 69 kV substation to increase line capacity to conductor rating Install second Stranger Creek 436-115 transformer Anadarko-Cyril 336>795 Reconductor 13 miles from 336 to 795 ACSR Replace Terminal Equipment	6/1/2007 6/1/2016 6/1/2007 6/1/2009 6/1/2011 6/1/2011 6/1/2011	6/1/20 6/1/20 7/1/20 6/1/20 6/1/20 6/1/20
/ERE /ERE /ERE /ERE /ERE /ERE /FEC	Evans - Grant - Chisolm Rebuild and Conversion Project GILL ENERGY CENTER EAST - GILLJCT269.0 69KV CKT 1 GILL ENERGY CENTER EAST - INTERSTATE 139KV CKT 1 GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1 STRANGER CREEK TRANSFORMER CKT 2 ANADARKO - CYRIL 69KV CKT 1 ANADARKO - GEORGIA 138KV CKT 1	to 138 kV, Install New Grant 138/69 kV XFMR. And Rebuild Grant - Grant Jut. 69 kV line. Rebuild Gill-Gill Jct Replace wave trap Replace bus, jumpers and disconnect switches at MacArthur 69 kV substation to increase line capacity to conductor rating install second Stranger Creek 345-115 transformer Anadarko-Cyril 336-795 Reconductor 13 miles from 336 to 795 ACSR Replace Terminal Equipment Cyrl 3-Medparkut 236-795: Reconductor 12.9 miles from 336 to 79 ACSR Reconductor 4 miles from 336 to 795 ACSR	6/1/2007 6/1/2016 6/1/2007 6/1/2009 6/1/2011	6/1/20 6/1/20 7/1/20 6/1/20 6/1/20 6/1/20
/ERE /ERE /ERE /ERE /ERE /ERE /FEC	Evans - Grant - Chisolm Rebuild and Conversion Project GILL ENERGY CENTER EAST - GILLJCT269 0 69KV CKT 1 GILL ENERGY CENTER EAST - INTERSTATE 138KV CKT 1 GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1 STRANGER CREEK TRANSFORMER CKT 2 ANADARKO - CYRIL 69KV CKT 1 ANADARKO - GEORGIA 138KV CKT 1 CYRIL - MEDICINE PARK JCT 69KV CKT 1 FLETCHER - MEDICINE PARK JCT 69KV CKT 1	to 138 kV, Install New Grant 138/69 kV XFMR. And Rebuild Grant - Grant Lt. 69 kV line. Rebuild Gill-Gill Jct Replace wave trap Replace bus, jumpers and disconnect switches at MacArthur 69 kV substation to increase line capacity to conductor rating Install second Stranger Creek 436-115 transformer Anadarko-Cyril 336-795 Reconductor 13 miles from 336 to 795 ACSR Replace Terminal Equipment Cyril ->Medpark.uct 336-795. Reconductor 12.9 miles from 336 to 79 ACSR Reconductor 4 miles from 336 to 795 ACSR Replace 70 MVA Auto with 112 MVA autotranformer (100 MVA base	6/1/2007 6/1/2016 6/1/2007 6/1/2009 6/1/2011 6/1/2011 6/1/2011	6/1/20 6/1/20 7/1/20 6/1/20 6/1/20 6/1/20 6/1/20
VERE VERE VERE VERE VERE VERE VERE VERE	Evans - Grant - Chisolm Rebuild and Conversion Project GILL ENERGY CENTER EAST - GILLJCT269 0 69KV CKT 1 GILL ENERGY CENTER EAST - INTERSTATE 138KV CKT 1 GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1 STRANGER CREEK TRANSFORMER CKT 2 ANADARKO - CYRIL 69KV CKT 1 ANADARKO - GEORGIA 138KV CKT 1 CYRIL - MEDICINE PARK JCT 69KV CKT 1	to 138 kV, Install New Grant 138/69 kV XFMR. And Rebuild Grant - Grant Jut. 69 kV line. Rebuild Gill-Gill Jct Replace wave trap Replace bus, jumpers and disconnect switches at MacArthur 69 kV substation to increase line capacity to conductor rating install second Stranger Creek 345-115 transformer Anadarko-Cyril 336-795 Reconductor 13 miles from 336 to 795 ACSR Replace Terminal Equipment Cyrl 3-Medparkut 236-795: Reconductor 12.9 miles from 336 to 79 ACSR Reconductor 4 miles from 336 to 795 ACSR	6/1/2007 6/1/2016 6/1/2007 6/1/2009 6/1/2011 6/1/2011 6/1/2011	6/1/20 6/1/20 7/1/20 6/1/20 6/1/20 6/1/20 6/1/20
/ERE /ERE /ERE /ERE /ERE /FEC /FEC /FEC	Evans - Grant - Chisolm Rebuild and Conversion Project GILL ENERGY CENTER EAST - GILLJCT269.0 69KV CKT 1 GILL ENERGY CENTER EAST - INTERSTATE 136KV CKT 1 GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1 STRANGER CREEK TRANSFORMER CKT 2 ANADARKO - CYRIL 69KV CKT 1 ANADARKO - GEORGIA 138KV CKT 1 CYRIL - MEDICINE PARK JCT 69KV CKT 1 FRANKLIN SW 138/69KV TRANSFORMER CKT 1 FRANKLIN SW 138/69KV TRANSFORMER CKT 1	to 138 kV, Install New Grant 138/69 kV XFMR. And Rebuild Grant - Grant Jut. 69 kV line. Rebuild Gill-Gill Jet Replace wave trap Replace wave trap Replace bus, jumpers and disconnect switches at MacArthur 69 kV substation to increase line capacity by conductor rating Install second Stranger Creek 345-115 transformer Anadarko-Cyril 336-795 Reconductor 13 miles from 336 to 795 ACSR Replace Terminal Equipment Cyrl 3-Medparkut 336-795: Reconductor 12.9 miles from 336 to 79 ACSR Reconductor 4 miles from 336 to 795 ACSR Replace 70 MVA Auto with 112 MVA autotranformer (100 MVA base Rating), Upgrade 138 and 69 kV buswork and switches. 345 kV line Terminal New Mooreland 345/138 kV Transformer	6/1/2007 6/1/2016 6/1/2009 6/1/2011 6/1/2011 6/1/2011 6/1/2011 6/1/2011	6/1/20 6/1/20 7/1/20 6/1/20 6/1/20 6/1/20 6/1/20 6/1/20
/ERE	Evans - Grant - Chisolm Rebuild and Conversion Project GILL ENERGY CENTER EAST - GILLJCT269 0 69KV CKT 1 GILL ENERGY CENTER EAST - INTERSTATE 138KV CKT 1 GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1 STRANGER CREEK TRANSFORMER CKT 2 ANADARKO - CYRIL 69KV CKT 1 ANADARKO - GEORGÍA 138KV CKT 1 CYRIL - MEDICINE PARK JCT 69KV CKT 1 FLETCHER - MEDICINE PARK JCT 69KV CKT 1 FLETCHER - MEDICINE PARK JCT 69KV CKT 1 MOORBING - POINT 345 KV WFEC	to 138 kV, Install New Grant 138/69 kV XFMR. And Rebuild Grant - Grant J.t. 69 kV line. Rebuild Gill-Gill Jct Replace wave trap Replace bus, jumpers and disconnect switches at MacArthur 69 kV substation to increase line capacity to conductor rating Install second Stranger Creek 436-115 transformer Anadarko-Cyril 336-795 Reconductor 13 miles from 336 to 795 ACSR Replace Terminal Equipment Cyril - MedparkJct 336-795: Reconductor 12.9 miles from 336 to 79 ACSR Reconductor 4 miles from 336 to 795 ACSR Replace 70 MVA Auto with 112 MVA autotranformer (100 MVA base Rating), Upgrade 138 and 69 KV buswork and switches. 345 kV line Terminal	6/1/2016 6/1/2016 6/1/2019 6/1/2009 6/1/2011 6/1/2011 6/1/2011 6/1/2011	6/1/20 6/1/20 7/1/20 6/1/20 6/1/20 6/1/20 6/1/20 6/1/20 6/1/20

 Table 4 - Upgrade Requirements and Solutions Needed to Provide Transmission Service for the Aggregate Study

Previously Assigned Aggregate Study Upgrades requiring credits to Previous Aggregate Study Customers

Transmission			Earliest Data Upgrade	Estimated Date of Upgrade
Owner	Upgrade	Solution		Completion (EOC)
AEPW	CACHE - SNYDER 138KV CKT 1	Replace Snyder wavetrap	6/1/2008	
AEPW	COFFEYVILLE TAP - DEARING 138KV CKT 1 AEPW Displacement	Rebuild 1.09 miles of line using 1590 ACSR	6/1/2011	6/1/2011
AEPW	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	Reconductor 1.9 miles with ACCC. Replace wave trap jumpers at Riverside.	6/1/2009	6/1/2009
AEPW	HUGO POWER PLANT - VALLIANT 345 KV AEPW	Vallient 345 KV line terminal	5/1/2010	5/1/2010
		Using IEEE Guide for Loading of Mineral-Oil Immersed Power Transformers (C57.91-2000) Re-rate the autos. Replace .two 138 kV		
AEPW	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1	breakers and five 138 kV switches. Reset relays and CTs	6/1/2010	6/1/2010
		Using IEEE Guide for Loading of Mineral-Oil Immersed Power Transformers (C57.91-2000) Re-rate the autos. Replace .two 138 kV		
AEPW	SOUTHWEST SHREVEPORT (SW SHV 2) 345/138/13.8KV TRANSFORMER CKT 2	breakers and five 138 kV switches. Reset relays and CTs	6/1/2010	6/1/2010
		New latan-Nashua line (27.5 mi.) and Nashua substation work and 345/161kV		
KACP	IATAN - NASHUA 345KV CKT 1	transformer	6/1/2010	6/1/2010
KACP	LACYGNE - WEST GARDNER 345KV CKT 1	KCPL Sponsored Project to Reconductor Line to be In-Service by 6/1/2006	6/1/2006	
OKGE	ARCADIA - REDBUD 345 KV CKT 1	Sponsored Project to Uprate Terninal Equipment	6/1/2006	
OKGE	ARCADIA - REDBUD 345 KV CKT 2	Sponsored Project to Uprate Terninal Equipment	6/1/2006	6/1/2006
OKGE	BEELINE - EXPLORER GLENPOOL 138KV CKT 1	Reconductor .92miles of line with Drake ACCC/TW.	6/1/2009	6/1/2009
OKGE	BROWN - EXPLORER TAP 138KV CKT 1	Upgrade CT to 800A at Brown.	6/1/2008	
OKGE	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	Reconductor 1.82 miles line with Drake ACCC/TW.	6/1/2009	6/1/2009
		OGE would rebuild .18 miles of 267AS33 with 795AS33. This would raise OGE's summer and winter Rate B to 287MVA. The limit will sti		
OKGE	FPL SWITCH - MOORELAND 138KV CKT 1 OKGE	be at WFEC's Mooreland at 390A & 600A.	6/1/2006	4/1/2008
WERE	COFFEYVILLE TAP - DEARING 138KV CKT 1 WERE Displacement	Tie Line, Rebuild 3.93 miles of 795 ACSR with 1590 ACSR.	6/1/2011	6/1/2011
WERE	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3 Displacement	Add third 345-138 kV transformer at Rose Hill	6/1/2011	6/1/2011
WFEC	ANADARKO 138/69KV TRANSFORMER CKT 1	Install 2nd 112 MVA auto in parallel with existing Unit	6/1/2011	6/1/2011
WFEC	FPL SWITCH - MOORELAND 138KV CKT 1 WFEC	Upgrade terminal equipment FPL Sw & Mooreland	6/1/2006	4/1/2008
WFEC	HUGO POWER PLANT - VALLIANT 345 KV WFEC	New 345/138 kv Auto, and 19 miles 345 KV	5/1/2010	5/1/2010

Table 5 - Third Party Facility Constraints

Transmission			Earliest Date Upgrade	Estimated Date of Upgrade	Estimated Engineering &
Owner	Upgrade	Solution	Required (COD)	Completion (EOC)	Construction Cost
	1-10	Change the ratio on the metering CTs to 1200/5 and adjust	7	1	
SWPA	JONES - JONESBORO 161KV CKT 1 SWPA	the meters	6/1/200	7 2/1/2008	3 \$ 2,000
CELE	BAYOU RAPIDES - TWIN BRIDGES 138KV CKT 1	Reconductor Bayou Rapides to Twin Bridges 138 kV	6/1/201	6/1/2011	\$1,230,000.00
CELE	COCODRIE 230/138KV TRANSFORMER CKT 1	Replace Cocodrie 230/138 kV Auto XFMR	12/1/201	1 12/1/2011	\$6,000,000.00
CELE	Natchitoches Capacitor	Install 28.8 MVAr capacitor bank at Natchitoches Bus 50131	6/1/201	6/1/2011	\$622,080.00
ENTR	5FLIPN - BULL SHOALS HES 161KV CKT 1		6/1/201	6/1/2011	Indeterminate
ENTR	5HILLTOP 161 - 5ST_JOE 161 161KV CKT 1		6/1/201	6/1/2011	Indeterminate
ENTR	5ST_JOE 161 - EVERTON 161KV CKT 1		6/1/201	6/1/2011	Indeterminate
ENTR	5TRUMAN - HARISBURG TAP 161KV CKT 1		6/1/201	6/1/2011	Indeterminate
ENTR	ARKANSAS NUCLEAR ONE 161 - RUSSELLVILLE NORTH 161KV CKT 1		6/1/200	7 6/1/2007	Indeterminate
ENTR	DANVILLE (APL) - MAGAZINE REC 161KV CKT 1 ENTR		6/1/201	6/1/2011	Indeterminate
ENTR	EVERTON - HARRISON-EAST 161KV CKT 1		6/1/201	6/1/2011	Indeterminate
ENTR	HARRISON-EAST - SUMMIT 161KV CKT 1		6/1/201	6 6/1/2016	Indeterminate
ENTR	JONES - JONESBORO 161KV CKT 1 ENTR		6/1/200	7 6/1/2007	Indeterminate
ENTR	JONESBORO - JONESBORO NORTH (AECC) 161KV CKT 1		6/1/201	6/1/2011	Indeterminate
ENTR	JONESBORO NORTH (AECC) - PARAGOULD SOUTH (AECC) 161KV CKT 1		6/1/201	6/1/2011	Indeterminate
ENTR	RUSSELLVILLE EAST - RUSSELLVILLE NORTH 161KV CKT 1		6/1/201	6/1/2011	Indeterminate
GSEC	GSEC Midway Interconnection #2	Install 7.2 MVAR Capacitor at GSEC Midway 69 kV	6/1/201	1 6/1/2011	\$200,000.00
RAYBURN	BEN WHEELER - BARTONS CHAPEL	Diana - Bartons Chapel & Ben Wheeler - Bartons Chapel	6/1/201	6/1/2016	Indeterminate
		Reconductor 6 miles of 795 ACSR with 1590 ACSR.			
		Reconnect CT's to 1000:5 Tap on Bkrs 42, 32, & half or 22.			
		Replace metering & reset relays for Line 2 & Line 3. Conduc	t		
SWPA	BEAVER - EUREKA SPRINGS 161KV CKT 1 SWPA	Environmental Impact Study.	6/1/201	6/1/2013	\$2,400,000.00
		Change the ratio on the metering CTs to 1200/5 and adjust			
SWPA	JONES - JONESBORO 161KV CKT 1 SWPA	the meters	6/1/200	7 6/1/2008	\$2,000.00

Upgrade: 5 TRIBES - HANCOCK 161KV CKT 1 Displacement, 5 TRIBES - PECAN CREEK 161KV CKT 1 Displacement, PECAN CREEK (PECANCK1) 345/161/13.8KV TRANSFORMER CKT 1 Displacement, PECAN CREEK (PECAN C

Reservation		Aggregate Relief Amount
1161665	0.6	8.0
1162654	0.5	8.0
1162763	3.6	8.0
4400700	2.2	0.0

1162763 1162766								
1102700	3.3							Aggregate
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Redispatch Factor Amount (MW)
OKGE	'MUSKOGEE 161KV'	166			'MUSKOGEE 345KV'	1516		-0.44174 18
OKGE	'MUSKOGEE 161KV'	31 166	-0.29781		'MUSKOGEE 345KV'	1516		-0.44174 18
OKGE OKGE	'MUSKOGEE 161KV' 'MUSKOGEE 161KV'	31	-0.29781 -0.29781		'FPLWND2 34KV' 'FPLWND2 34KV'	102		-0.33392 24 -0.33392 24
OKGE	'MUSKOGEE 161KV'	166	-0.29781	OKGE	'HORSESHOE LAKE 138KV'	91	0.03326	-0.33107 24
OKGE OKGE	'MUSKOGEE 161KV' 'MUSKOGEE 161KV'	166 166	-0.29781 -0.29781		'HORSESHOE LAKE 138KV' 'HORSESHOE LAKE 138KV'	111.835		-0.33107 24 -0.33107 24
OKGE	'MUSKOGEE 161KV'	31	-0.29781	OKGE	'HORSESHOE LAKE 138KV'	91	0.03326	-0.33107 24
OKGE OKGE	'MUSKOGEE 161KV' 'MUSKOGEE 161KV'	31	-0.29781 -0.29781		'HORSESHOE LAKE 138KV' 'HORSESHOE LAKE 138KV'	111.835		-0.33107 24 -0.33107 24
OKGE	'MUSKOGEE 161KV'	166	-0.29781	OKGE	'HORSESHOE LAKE 69KV'	16	0.03033	-0.32814 24
OKGE OKGE	'MUSKOGEE 161KV' 'MUSKOGEE 161KV'	31 166	-0.29781 -0.29781		'HORSESHOE LAKE 69KV' 'MCCLAIN 138KV'	16 478		-0.32814 24 -0.33509 24
OKGE	'MUSKOGEE 161KV'	31	-0.29781		'MCCLAIN 138KV'	478		-0.33509 24
OKGE	'MUSKOGEE 161KV'	166	-0.29781	OKGE	'MUSTANG 138KV'	365.5	0.03707	-0.33488 24
OKGE OKGE	'MUSKOGEE 161KV' 'MUSKOGEE 161KV'	31 166	-0.29781 -0.29781		'MUSTANG 138KV' 'MUSTANG 69KV'	365.5 106		-0.33488 24 -0.33468 24
OKGE	'MUSKOGEE 161KV'	31	-0.29781		'MUSTANG 69KV'	106		-0.33468 24
OKGE	'MUSKOGEE 161KV'	166			'OMPA-KINGFISHER BOWMAN 69KV'	19.7		-0.33433 24
OKGE OKGE	'MUSKOGEE 161KV' 'MUSKOGEE 161KV'	31 166	-0.29781 -0.29781	OKGE	'OMPA-KINGFISHER BOWMAN 69KV' 'OMPA-PONCA CITY 69KV'	19.7 76.35928		-0.33433 24 -0.33163 24
OKGE	'MUSKOGEE 161KV'	31	-0.29781	OKGE	'OMPA-PONCA CITY 69KV'	76.35928	0.03382	-0.33163 24
OKGE OKGE	'MUSKOGEE 161KV' 'MUSKOGEE 161KV'	166 31	-0.29781 -0.29781		'ONE OAK 345KV' 'ONE OAK 345KV'	132		-0.33682 24 -0.33682 24
OKGE	'MUSKOGEE 161KV'	166	-0.29781	OKGE	'REDBUD 345KV'	250	0.04319	-0.341 24
OKGE OKGE	'MUSKOGEE 161KV'	31 166	-0.29781		'REDBUD 345KV' 'SEMINOLE 138KV'	476 2900		-0.341 24
OKGE	'MUSKOGEE 161KV' 'MUSKOGEE 161KV'	31	-0.29781 -0.29781		'SEMINOLE 138KV'	476.3899 476.3899		-0.33716 24 -0.33716 24
OKGE	'MUSKOGEE 161KV'	166	-0.29781	OKGE	'SEMINOLE 345KV'	996	0.04283	-0.34064 24
OKGE OKGE	'MUSKOGEE 161KV' 'MUSKOGEE 161KV'	31 166	-0.29781 -0.29781		'SEMINOLE 345KV' 'SLEEPING BEAR 34KV'	996		-0.34064 24 -0.33398 24
OKGE	'MUSKOGEE 161KV'	31	-0.29781	OKGE	'SLEEPING BEAR 34KV'	120	0.03617	-0.33398 24
OKGE OKGE	'MUSKOGEE 161KV' 'MUSKOGEE 161KV'	166 31	-0.29781 -0.29781		'SMITH COGEN 138KV' 'SMITH COGEN 138KV'	120		-0.33478 24 -0.33478 24
OKGE	'MUSKOGEE 161KV'	166	-0.29781		'SOONER 138KV'	505	0.03471	-0.33252 24
OKGE	'MUSKOGEE 161KV' 'MUSKOGEE 161KV'	31 166	-0.29781 -0.29781		'SOONER 138KV'	505 513	0.03471	-0.33252 24
OKGE OKGE	'MUSKOGEE 161KV'	31	-0.29781		'SOONER 345KV'	513		-0.33405 24 -0.33405 24
OKGE	'MUSKOGEE 161KV'	166	-0.29781	OKGE	'AES 161KV'	320	-0.06234	-0.23547 34
OKGE OKGE	'MUSKOGEE 161KV' 'SHADY2 345 69KV'	31 600	-0.29781 -0.05853		'AES 161KV' 'MUSKOGEE 345KV'	320 1516		-0.23547 34 -0.20246 40
SWPA	TENKILLER FERRY 161KV'	26	-0.14959	SWPA	'KEYSTONE DAM 161KV'	59.40001	0.04152	-0.19111 42
SWPA	'WEBBERS FALLS 161KV'	30	-0.14959		'KEYSTONE DAM 161KV'	59.40001		-0.19111 42
SWPA SWPA	'TENKILLER FERRY 161KV' 'WEBBERS FALLS 161KV'	26 30			'DENISON 138KV' 'DENISON 138KV'	59.40001 59.40001		-0.18165 44 -0.18165 44
SWPA	'TENKILLER FERRY 161KV'	26	-0.14959	SWPA	'BROKEN BOW 138KV'	93.4	0.02151	-0.1711 47
SWPA SWPA	'WEBBERS FALLS 161KV' 'TENKILLER FERRY 161KV'	30 26			'BROKEN BOW 138KV' 'BEAVER 161KV'	93.4		-0.1711 47 -0.16891 48
SWPA	'TENKILLER FERRY 161KV'	26			'CARTHAGE 69KV'	30		-0.16779 48
SWPA SWPA	'TENKILLER FERRY 161KV' 'WEBBERS FALLS 161KV'	26 30			'STOCKTON 161KV' 'BEAVER 161KV'	44.1 100.7001		-0.16672 48 -0.16891 48
SWPA	WEBBERS FALLS 161KV	30	-0.14959		'CARTHAGE 69KV'	30		-0.16779 48
SWPA	WEBBERS FALLS 161KV'	30			'STOCKTON 161KV'	44.1		-0.16672 48
SWPA SWPA	'TENKILLER FERRY 161KV' 'TENKILLER FERRY 161KV'	26 26			'JAMES RIVER 161KV' 'JAMES RIVER 69KV'	159 233.8672		-0.16546 49 -0.16546 49
SWPA	'TENKILLER FERRY 161KV'	26	-0.14959	SWPA	'MCCARTNEY 161KV'	322.3152	0.01551	-0.1651 49
SWPA SWPA	'TENKILLER FERRY 161KV' 'TENKILLER FERRY 161KV'	26 26			TABLE ROCK 161KV' TRUMAN 161KV'	186.8		-0.16298 49 -0.16532 49
SWPA	'WEBBERS FALLS 161KV'	30	-0.14959	SWPA	'JAMES RIVER 161KV'	159	0.01587	-0.16546 49
SWPA	'WEBBERS FALLS 161KV' 'WEBBERS FALLS 161KV'	30			'JAMES RIVER 69KV' 'MCCARTNEY 161KV'	233.8672 322.3152		-0.16546 49 -0.1651 49
SWPA SWPA	WEBBERS FALLS 161KV	30			'TABLE ROCK 161KV'	186.8		-0.1651 49 -0.16298 49
SWPA	'WEBBERS FALLS 161KV'	30	-0.14959		'TRUMAN 161KV'	102	0.01573	-0.16532 49
SWPA SWPA	'TENKILLER FERRY 161KV' 'WEBBERS FALLS 161KV'	26 30			'CLARENCE CANNON DAM 69KV' 'CLARENCE CANNON DAM 69KV'	39.2 39.2	0.01136	-0.16095 50 -0.16095 50
SWPA	'TENKILLER FERRY 161KV'	26	-0.14959	SWPA	'BULL SHOALS 161KV'	293.2	0.00487	-0.15446 52
SWPA SWPA	'WEBBERS FALLS 161KV' 'TENKILLER FERRY 161KV'	30 26			BULL SHOALS 161KV' NORFORK 161KV'	293.2		-0.15446 52 -0.15272 53
SWPA	'TENKILLER FERRY 161KV'	26	-0.14959	SWPA	'SIKESTON 161KV'	235	0.00178	-0.15137 53
SWPA	WEBBERS FALLS 161KV	30	-0.14959	SWPA	'NORFORK 161KV'	20	0.00313	-0.15272 53
SWPA SWPA	'WEBBERS FALLS 161KV' 'TENKILLER FERRY 161KV'	30 26			'SIKESTON 161KV' 'JONESBORO 161KV'	235		-0.15137 53 -0.14713 55
SWPA	'WEBBERS FALLS 161KV'	30	-0.14959	SWPA	'JONESBORO 161KV'	43	-0.00246	-0.14713 55
SWPA SWPA	'TENKILLER FERRY 161KV'	26	-0.14959 -0.14959		'GREERS FERRY 161KV'	93.4		-0.13925 58 -0.13925 58
AEPW	'FITZHUGH 161KV'	95.00001	-0.05708	AEPW	'OEC 345KV'	506	0.07008	-0.12716 63
AEPW SWPA	'FITZHUGH 161KV'	95.00001			'COGENTRIX 345KV'	765		-0.12295 65 -0.12232 66
SWPA	'TENKILLER FERRY 161KV' 'WEBBERS FALLS 161KV'	26 30			'DARDANELLE 161KV' 'DARDANELLE 161KV'	105.2 105.2		-0.12232 66 -0.12232 66
OKGE	'HORSESHOE LAKE 138KV'	268.665	0.03326	OKGE	'MUSKOGEE 345KV'	1516	0.14393	-0.11067 73
OKGE AEPW	'OMPA-PONCA CITY 69KV' 'FITZHUGH 161KV'	80.24073 95.00001	0.03382 -0.05708		'MUSKOGEE 345KV' 'RIVERSIDE STATION 138KV'	1516		-0.11011 73 -0.10879 74
OKGE	'SOONER 138KV'	24.99997	0.03471	OKGE	'MUSKOGEE 345KV'	1516	0.14393	-0.10922 74
OKGE AEPW	'SOUTH 4TH ST 69KV' 'FITZHUGH 161KV'	42.7 95.00001	0.03536 -0.05708		'MUSKOGEE 345KV' 'TULSA POWER STATION 138KV'	1516		-0.10857 74 -0.10651 75
AEPW	'FITZHUGH 161KV'	95.00001	-0.05708	AEPW	'TULSA POWER STATION 138KV'	147	0.04943	-0.10651 75
OKGE	'MCCLAIN 138KV'	42	0.03728	OKGE	'MUSKOGEE 345KV'	1516	0.14393	-0.10665 75
OKGE OKGE	'SOONER 7 345 345KV' 'TINKER 5G 138KV'	1050 62	0.03624		MUSKOGEE 345KV' MUSKOGEE 345KV'	1516 1516		-0.10769 75 -0.1073 75
AEPW	'FITZHUGH 161KV'	95.00001	-0.05708	AEPW	'NORTHEASTERN STATION 345KV'	645	0.04737	-0.10445 77
OKGE OKGE	'ONE OAK 345KV' 'SEMINOLE 138KV'	204 28.61011			'MUSKOGEE 345KV' 'MUSKOGEE 345KV'	1516 1516		-0.10492 77 -0.10458 77
OKGE	'SHADY2 345 69KV'	28.61011	-0.05853		'REDBUD 345KV'	250		-0.10172 79
OKGE	'SHADY2 345 69KV'	600			'SEMINOLE 345KV'	996		-0.10136 79
OKGE OKGE	'REDBUD 345KV' 'REDBUD 345KV'	650 300		OKGE	'MUSKOGEE 345KV' 'MUSKOGEE 345KV'	1516 1516		-0.10074 80 -0.10074 80
SWPA	'OZARK 161KV'	37	-0.05701	SWPA	'KEYSTONE DAM 161KV'	59.40001	0.04152	-0.09853 81
OKGE	'SHADY2 345 69KV'	600	-0.05853	OKGE	'ONE OAK 345KV'	132	0.03901	-0.09754 82

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

OKGE	'SHADY2 345 69KV'	600	-0.05853 OKGE	'SEMINOLE 138KV'	476.3899	0.03935	-0.09788	82
AEPW	'FITZHUGH 161KV'	95.00001	-0.05708 AEPW	'COMANCHE 138KV'	160	0.03989	-0.09697	83

Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified.

Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

Upgrade: 5 TRIBES - HANCOCK 161KV CKT 1 Displacement, 5 TRIBES - PECAN CREEK 161KV CKT 1 Displacement, PECAN CREEK (PECANCK1) 345/161/13.8KV TRANSFORMER CKT 1 Displacement, PECAN CREEK (PECAN CREEK (PE

		Aggregate Relief
Reservation	Relief Amount	Amount
1161665	0.7	8.8
1162654	0.6	8.8
1162762	4.0	0.0

1162763	4.0	8.8							
1162766	3.6	8.8 Maximum		Sink Control		Maximum			Aggregate Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
OKGE	'MUSKOGEE 161KV' 'MUSKOGEE 161KV'	166			'MUSKOGEE 345KV' 'MUSKOGEE 345KV'	1516		-0.44174 -0.44174	
OKGE OKGE	MUSKOGEE 161KV	31 166			'FPLWND2 34KV'	1516		-0.44172	20
OKGE	'MUSKOGEE 161KV'	31			'FPLWND2 34KV'	102		-0.33397	26
OKGE	'MUSKOGEE 161KV'	166	-0.29784		'HORSESHOE LAKE 138KV'	91	0.03324	-0.33108	
OKGE	MUSKOGEE 161KV' 'MUSKOGEE 161KV'	166	-0.29784 -0.29784		'HORSESHOE LAKE 138KV' 'HORSESHOE LAKE 138KV'	212.7954		-0.33108	
OKGE OKGE	'MUSKOGEE 161KV'	166 31			'HORSESHOE LAKE 138KV'	380		-0.33108 -0.33108	
OKGE	'MUSKOGEE 161KV'	31			'HORSESHOE LAKE 138KV'	212.7954		-0.33108	26
OKGE	'MUSKOGEE 161KV'	31			'HORSESHOE LAKE 138KV'	91		-0.33108	26
OKGE	'MUSKOGEE 161KV'	166			'MCCLAIN 138KV'	478		-0.33497	26
OKGE OKGE	'MUSKOGEE 161KV' 'MUSKOGEE 161KV'	31 166			'MCCLAIN 138KV' 'MUSTANG 138KV'	478 365.5		-0.33497 -0.3349	
OKGE	'MUSKOGEE 161KV'	31		OKGE	'MUSTANG 138KV'	365.5		-0.3349	
OKGE	'MUSKOGEE 161KV'	166	-0.29784	OKGE	'MUSTANG 69KV'	106		-0.33471	26
OKGE	'MUSKOGEE 161KV'	31			'MUSTANG 69KV'	106		-0.33471	26
OKGE OKGE	'MUSKOGEE 161KV' 'MUSKOGEE 161KV'	166		OKGE	'OMPA-KINGFISHER BOWMAN 69KV' 'OMPA-KINGFISHER BOWMAN 69KV'	19.7 19.7		-0.33435 -0.33435	26
OKGE	'MUSKOGEE 161KV'	166			'OMPA-PONCA CITY 69KV'	78.07812		-0.33455	
OKGE	'MUSKOGEE 161KV'	31	-0.29784	OKGE	'OMPA-PONCA CITY 69KV'	78.07812	0.03381	-0.33165	26
OKGE	'MUSKOGEE 161KV'	166			'ONE OAK 345KV'	136			
OKGE OKGE	'MUSKOGEE 161KV' 'MUSKOGEE 161KV'	31 166			'ONE OAK 345KV' 'REDBUD 345KV'	136		-0.33683 -0.34101	26 26
OKGE	'MUSKOGEE 161KV'	31	-0.29784		'REDBUD 345KV'	250	0.04317	-0.34101	26
OKGE	'MUSKOGEE 161KV'	166	-0.29784		'SEMINOLE 138KV'	476.6378		-0.33717	
OKGE	'MUSKOGEE 161KV'	31	-0.29784	OKGE	'SEMINOLE 138KV'	476.6378	0.03933	-0.33717	26
OKGE	'MUSKOGEE 161KV'	166			'SEMINOLE 345KV'	996		-0.34064	
OKGE OKGE	'MUSKOGEE 161KV' 'MUSKOGEE 161KV'	31 166	-0.29784 -0.29784		'SEMINOLE 345KV' 'SLEEPING BEAR 34KV'	996		-0.34064 -0.33403	
OKGE	'MUSKOGEE 161KV'	31	-0.29784	OKGE	'SLEEPING BEAR 34KV'	120	0.03619	-0.33403	26
OKGE	'MUSKOGEE 161KV'	166	-0.29784	OKGE	'SMITH COGEN 138KV'	120	0.03698	-0.33482	26
OKGE	'MUSKOGEE 161KV'	31			'SMITH COGEN 138KV'	120		-0.33482	2 26 3 26
OKGE OKGE	'MUSKOGEE 161KV' 'MUSKOGEE 161KV'	166		OKGE	'SOONER 138KV' 'SOONER 138KV'	505		-0.33253 -0.33253	26
OKGE	'MUSKOGEE 161KV'	166			'SOONER 345KV'	513		-0.33407	26
OKGE	'MUSKOGEE 161KV'	31			'SOONER 345KV'	513		-0.33407	
OKGE	'MUSKOGEE 161KV'	166			'HORSESHOE LAKE 69KV'	16		-0.32815	
OKGE OKGE	'MUSKOGEE 161KV' 'MUSKOGEE 161KV'	31 166	-0.29784 -0.29784		'HORSESHOE LAKE 69KV' 'AES 161KV'	320		-0.32815 -0.23545	27 37
OKGE	'MUSKOGEE 161KV'	31			'AES 161KV'	320		-0.23545	
OKGE	'SHADY2 345 69KV'	600	-0.05857		'MUSKOGEE 345KV'	1516	0.1439	-0.20247	43
SWPA	'TENKILLER FERRY 161KV'	26			'KEYSTONE DAM 161KV'	59.59999	0.0415	-0.19113	
SWPA SWPA	'WEBBERS FALLS 161KV' 'TENKILLER FERRY 161KV'	29.8 26			'KEYSTONE DAM 161KV' 'DENISON 138KV'	59.59999 59.59999		-0.19113 -0.18167	
SWPA	'WEBBERS FALLS 161KV'	29.8			'DENISON 138KV'	59.59999		-0.18167	
SWPA	'TENKILLER FERRY 161KV'	26	-0.14963	SWPA	'BROKEN BOW 138KV'	93.6	0.02149	-0.17112	51
SWPA	'WEBBERS FALLS 161KV'	29.8	-0.14963		'BROKEN BOW 138KV'	93.6		-0.17112	51
SWPA SWPA	TENKILLER FERRY 161KV' TENKILLER FERRY 161KV'	26 26	-0.14963 -0.14963		'BEAVER 161KV' 'CARTHAGE 69KV'	104.1233		-0.16917 -0.16791	52 52 52
SWPA	'WEBBERS FALLS 161KV'	29.8	-0.14963		BEAVER 161KV	104.1233	0.01026	-0.1679	52
SWPA	'WEBBERS FALLS 161KV'	29.8			'CARTHAGE 69KV'	32		-0.16791	52
SWPA	'TENKILLER FERRY 161KV'	26			'JAMES RIVER 161KV'	159		-0.16556	
SWPA SWPA	'TENKILLER FERRY 161KV' 'TENKILLER FERRY 161KV'	26 26			'JAMES RIVER 69KV' 'MCCARTNEY 161KV'	233.6668 342.4351		-0.16555 -0.1652	53
SWPA	'TENKILLER FERRY 161KV'	26			STOCKTON 161KV	44.3		-0.1668	53
SWPA	'TENKILLER FERRY 161KV'	26	-0.14963	SWPA	'TRUMAN 161KV'	102	0.01575	-0.16538	53
SWPA	'WEBBERS FALLS 161KV'	29.8			'JAMES RIVER 161KV'	159		-0.16556	53
SWPA SWPA	'WEBBERS FALLS 161KV' 'WEBBERS FALLS 161KV'	29.8 29.8	-0.14963 -0.14963		'JAMES RIVER 69KV' 'MCCARTNEY 161KV'	233.6668 342.4351		-0.16555 -0.1652	53 2 53
SWPA	'WEBBERS FALLS 161KV'	29.8			STOCKTON 161KV	44.3		-0.1668	
SWPA	'WEBBERS FALLS 161KV'	29.8	-0.14963	SWPA	'TRUMAN 161KV'	102	0.01575	-0.16538	53
SWPA	TENKILLER FERRY 161KV	26			'CLARENCE CANNON DAM 69KV'	39.4		-0.161	
SWPA SWPA	TENKILLER FERRY 161KV' 'WEBBERS FALLS 161KV'	26 29.8		SWPA	'TABLE ROCK 161KV' 'CLARENCE CANNON DAM 69KV'	187.2 39.4		-0.16311 -0.161	
SWPA	'WEBBERS FALLS 161KV'	29.8	-0.14963	SWPA	'TABLE ROCK 161KV'	187.2		-0.16311	54
SWPA	'TENKILLER FERRY 161KV'	26	-0.14963	SWPA	'BULL SHOALS 161KV'	294	0.00492	-0.15455	57
SWPA	TENKILLER FERRY 161KV	26			'NORFORK 161KV'	20		-0.1528	57
SWPA SWPA	WEBBERS FALLS 161KV' WEBBERS FALLS 161KV'	29.8 29.8			BULL SHOALS 161KV' 'NORFORK 161KV'	294		-0.15455 -0.1528	
SWPA	'TENKILLER FERRY 161KV'	29.6	-0.14963		'SIKESTON 161KV'	235		-0.15141	
SWPA	'WEBBERS FALLS 161KV'	29.8	-0.14963	SWPA	'SIKESTON 161KV'	235	0.00178	-0.15141	58
SWPA	TENKILLER FERRY 161KV	26	-0.14963		'JONESBORO 161KV'	43		-0.14718	
SWPA SWPA	'WEBBERS FALLS 161KV' 'TENKILLER FERRY 161KV'	29.8 26	-0.14963 -0.14963		'JONESBORO 161KV' 'GREERS FERRY 161KV'	93.6		-0.14718 -0.13929	
SWPA	'WEBBERS FALLS 161KV'	29.8	-0.14963		'GREERS FERRY 161KV'	93.6	-0.01034	-0.13929	63
SWPA	TENKILLER FERRY 161KV'	26	-0.14963	SWPA	'DARDANELLE 161KV'	105.2	-0.02728	-0.12235	72
SWPA	'WEBBERS FALLS 161KV'	29.8			'DARDANELLE 161KV'	105.2		-0.12235	
OKGE OKGE	'HORSESHOE LAKE 138KV' 'CONTINENTAL EMPIRE 138KV'	167.7046 32			'MUSKOGEE 345KV' 'MUSKOGEE 345KV'	1516			
OKGE	'OMPA-PONCA CITY 69KV'	78.52188			'MUSKOGEE 345KV'	1516		-0.11092	
OKGE	'SOONER 7 345 345KV'	1050	0.03623	OKGE	'MUSKOGEE 345KV'	1516	0.1439	-0.10767	81
OKGE	'SOUTH 4TH ST 69KV'	42.7			'MUSKOGEE 345KV'	1516		-0.10855	
OKGE	'MCCLAIN 138KV' 'TINKER 5G 138KV'	42 62			'MUSKOGEE 345KV'	1516		-0.10677 -0.10729	
OKGE OKGE	'ONE OAK 345KV'	200			'MUSKOGEE 345KV' 'MUSKOGEE 345KV'	1516			
OKGE	'SEMINOLE 138KV'	28.36224	0.03933	OKGE	'MUSKOGEE 345KV'	1516	0.1439	-0.10457	84
OKGE	'SHADY2 345 69KV'	600			'REDBUD 345KV'	250			86
OKGE	SHADY2 345 69KV	600		OKGE	'SEMINOLE 345KV'	996		-0.10137	
OKGE OKGE	'REDBUD 345KV' 'REDBUD 345KV'	650 300			'MUSKOGEE 345KV' 'MUSKOGEE 345KV'	1516		-0.10073 -0.10073	
OKGE	'SHADY2 345 69KV'	600			'ONE OAK 345KV'	136			
	<u> </u>				1	, 100			

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

OKGE	'SHADY2 345 69KV'	600	-0.05857	OKGE	'SEMINOLE 138KV'	476.6378	0.03933	-0.0979	90
OKGE	'SHADY2 345 69KV'	600	-0.05857	OKGE	'MCCLAIN 138KV'	478	0.03713	-0.0957	92
OKGE	'SHADY2 345 69KV'	600	-0.05857	OKGE	'MUSTANG 138KV'	365.5	0.03706	-0.09563	92
OKGE	'SHADY2 345 69KV'	600	-0.05857	OKGE	'MUSTANG 69KV'	106	0.03687	-0.09544	92
OKGE	'SHADY2 345 69KV'	600	-0.05857	OKGE	'SMITH COGEN 138KV'	120	0.03698	-0.09555	92
OKGE	'SHADY2 345 69KV'	600	-0.05857	OKGE	'SOONER 345KV'	513	0.03623	-0.0948	92
OKGE	'SHADY2 345 69KV'	600	-0.05857	OKGE	'FPLWND2 34KV'	102	0.03613	-0.0947	93
OKGE	'SHADY2 345 69KV'	600	-0.05857	OKGE	'SLEEPING BEAR 34KV'	120	0.03619	-0.09476	93
OKGE	'SHADY2 345 69KV'	600	-0.05857	OKGE	'SOONER 138KV'	505	0.03469	-0.09326	94

UNDER STRUCT 345 69NV 600 -0.05857 ORGE SUCINCE TSRV Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF Redispatch Amount = Relief Amount / Factor

Upgrade: Evans - Grant - Chisolm Rebuild and Conversion Project
Limiting Facility: 17TH STREET (17TH 4X) 138/69/11.295KV TRANSFORMER CK
Direction: From->To
Line Outage: CHISHOLM (CHISLM1X) 138/69/13.2KV TRANSFORMER CKT 1
Flowgate: 17TTH4X1421CHISISLM1X212208SP
Date Redispatch Needed: Season Flowgate Identified: 2008 Summer Peak

| Aggregate R Evans - Grant - Chisolm Rebuild and Conversion Project 17TH STREET (17TH 4X) 138/69/11.295KV TRANSFORMER CKT 1

eservation 1161506	Relief Amount 0.2	Amount 0.5							
1161997	0.3	0.5							Aggregate
urce Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Redispatch Amount (MV
RE	'GILL ENERGY CENTER 69KV'	118	-0.09189		'ABILENE ENERGY CENTER 115KV'	40		-0.09001	
RE	'GILL ENERGY CENTER 69KV'	118	-0.09189		'CHANUTE 69KV'	55.637			
RE	'GILL ENERGY CENTER 69KV'	118			'CITY OF AUGUSTA 69KV'	20.02			
RE RE	'GILL ENERGY CENTER 69KV' 'GILL ENERGY CENTER 69KV'	118 118	-0.09189 -0.09189		'CITY OF BURLINGTON 69KV' 'CITY OF ERIE 69KV'	7.8 23.374	0.00372 0.00235	-0.09561 -0.09424	
RE	'GILL ENERGY CENTER 69KV'	118	-0.09189		'CITY OF FREDONIA 69KV'	3.596	0.00233	-0.09464	
RE	'GILL ENERGY CENTER 69KV'	118	-0.09189		'CITY OF GIRARD 69KV'	4.592	0.00139	-0.09328	
RE	'GILL ENERGY CENTER 69KV'	118			'CITY OF IOLA 69KV'	24.471			
RE	'GILL ENERGY CENTER 69KV'	118	-0.09189	WERE	'CLAY CENTER JUNCTION 115KV'	21.056	-0.00155		
RE	'GILL ENERGY CENTER 69KV'	118			'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	0.00372		
RE	'GILL ENERGY CENTER 69KV'	118	-0.09189		'JEFFREY ENERGY CENTER 230KV'	494			
RE RE	'GILL ENERGY CENTER 69KV' 'GILL ENERGY CENTER 69KV'	118 118	-0.09189 -0.09189		JEFFREY ENERGY CENTER 345KV' 'LANG 7 345 345KV'	982	-0.00081	-0.09108	
RE	GILL ENERGY CENTER 69KV	118	-0.09189		'LAWRENCE ENERGY CENTER 115KV'	310 85	-0.00112 -0.00015	-0.09077 -0.09174	
RE	'GILL ENERGY CENTER 69KV'	118	-0.09189		'LAWRENCE ENERGY CENTER 230KV'	274.2987	-0.00015	-0.09174	
RE	'GILL ENERGY CENTER 69KV'	118			'TECUMSEH ENERGY CENTER 115KV'	108			
RE	'GILL ENERGY CENTER 69KV'	118	-0.09189		'COLBY 115KV'	2.6903	-0.00359	-0.0883	
RE	'GILL ENERGY CENTER 69KV'	118			'HUTCHINSON ENERGY CENTER 115KV'	120	-0.00405	-0.08784	
RE	'GILL ENERGY CENTER 69KV'	118	-0.09189		'KNOLL 3 115 115KV'	75	-0.00408	-0.08781	
RE	'GILL ENERGY CENTER 69KV'	118	-0.09189		'SMOKEY HILLS 34KV'	152	-0.00291	-0.08898	
RE DE	GILL ENERGY CENTER 138KV	17.99999	-0.06368		'CHANUTE 69KV'	55.637	0.00235	-0.06603	
RE	'GILL ENERGY CENTER 138KV' 'GILL ENERGY CENTER 138KV'	17.99999 17.99999	-0.06368 -0.06368	WERE	'CITY OF AUGUSTA 69KV' 'CITY OF BURLINGTON 69KV'	20.02			
RE	'GILL ENERGY CENTER 138KV'	17.99999	-0.06368		'CITY OF ERIE 69KV'	23.374		-0.06603	
RE	'GILL ENERGY CENTER 138KV'	17.99999	-0.06368	WERE	'CITY OF FREDONIA 69KV'	3.596	0.00275	-0.06643	
RE	'GILL ENERGY CENTER 138KV'	17.99999	-0.06368		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	0.00372	-0.0674	
RE	'GILL ENERGY CENTER 69KV'	118	-0.09189		'EVANS ENERGY CENTER 138KV'	320.8022		-0.07483	
RE	'GILL ENERGY CENTER 138KV'	17.99999	-0.06368		'ABILENE ENERGY CENTER 115KV'	40	-0.00188		
RE	'GILL ENERGY CENTER 138KV'	17.99999	-0.06368	WERE	'CITY OF GIRARD 69KV'	4.592	0.00139	-0.06507	
RE	'GILL ENERGY CENTER 138KV'	17.99999	-0.06368		'CITY OF IOLA 69KV'	24.471	0.00203	-0.06571	
RE RE	'GILL ENERGY CENTER 138KV' 'GILL ENERGY CENTER 138KV'	17.99999 17.99999	-0.06368 -0.06368		CLAY CENTER JUNCTION 115KV'	21.056 2.6903	-0.00155 -0.00359	-0.06213 -0.06009	
RE	'GILL ENERGY CENTER 138KV'	17.99999	-0.06368		'HUTCHINSON ENERGY CENTER 115KV'	120	-0.00359		
RE	'GILL ENERGY CENTER 138KV'	17.99999	-0.06368		'JEFFREY ENERGY CENTER 230KV'	494	-0.00081	-0.06287	
RE	'GILL ENERGY CENTER 138KV'	17.99999	-0.06368		'JEFFREY ENERGY CENTER 345KV'	982		-0.06287	1
RE	'GILL ENERGY CENTER 138KV'	17.99999	-0.06368		'KNOLL 3 115 115KV'	75		-0.0596	
RE	'GILL ENERGY CENTER 138KV'	17.99999	-0.06368		'LANG 7 345 345KV'	310			
RE	'GILL ENERGY CENTER 138KV'	17.99999	-0.06368		'LAWRENCE ENERGY CENTER 115KV'	85	-0.00015		
RE	'GILL ENERGY CENTER 138KV'	17.99999	-0.06368		'LAWRENCE ENERGY CENTER 230KV'	274.2987	-0.00025	-0.06343	
RE RE	'GILL ENERGY CENTER 138KV' 'GILL ENERGY CENTER 138KV'	17.99999 17.99999	-0.06368 -0.06368	WERE	'SMOKEY HILLS 34KV' 'TECUMSEH ENERGY CENTER 115KV'	152 108	-0.00291 -0.00018	-0.06077 -0.0635	
RE	CITY OF MULVANE 69KV	7.5	-0.06368		'CITY OF AUGUSTA 69KV'	20.02	0.00766		
RE	'CITY OF MULVANE 69KV'	7.5	-0.0489		'CITY OF BURLINGTON 69KV'	7.8	0.00700	-0.05262	
RE	'CITY OF MULVANE 69KV'	7.5	-0.0489		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	0.00372	-0.05262	
RE	'CITY OF MULVANE 69KV'	7.5	-0.0489		'CHANUTE 69KV'	55.637	0.00235	-0.05125	
RE	'CITY OF MULVANE 69KV'	7.5	-0.0489		'CITY OF ERIE 69KV'	23.374	0.00235	-0.05125	
RE	'CITY OF MULVANE 69KV'	7.5	-0.0489		'CITY OF FREDONIA 69KV'	3.596	0.00275	-0.05165	
RE	'CITY OF MULVANE 69KV'	7.5			'CITY OF GIRARD 69KV'	4.592	0.00139		
RE	'CITY OF MULVANE 69KV' 'CITY OF MULVANE 69KV'	7.5 7.5	-0.0489 -0.0489		'CITY OF IOLA 69KV' 'CLAY CENTER JUNCTION 115KV'	24.471 21.056	0.00203 -0.00155	-0.05093 -0.04735	1
RE	CITY OF MULVANE 69KV	7.5	-0.0489		'JEFFREY ENERGY CENTER 230KV'	21.056	-0.00155	-0.04735	
RE	'CITY OF MULVANE 69KV'	7.5	-0.0489		'JEFFREY ENERGY CENTER 345KV'	982	-0.00081	-0.04809	
RE	'CITY OF MULVANE 69KV'	7.5	-0.0489		'LANG 7 345 345KV'	310			
RE	'CITY OF MULVANE 69KV'	7.5	-0.0489		'LAWRENCE ENERGY CENTER 115KV'	85	-0.00015		
RE	'CITY OF MULVANE 69KV'	7.5	-0.0489		'LAWRENCE ENERGY CENTER 230KV'	274.2987	-0.00025	-0.04865	
RE	'CITY OF MULVANE 69KV'	7.5	-0.0489		'TECUMSEH ENERGY CENTER 115KV'	108	-0.00018	-0.04872	1
RE	'GILL ENERGY CENTER 69KV'	118 7.5	-0.09189		'CITY OF WELLINGTON 69KV'	41.45	-0.04432	-0.04757	
RE RE	'CITY OF MULVANE 69KV' 'CITY OF MULVANE 69KV'	7.5	-0.0489 -0.0489		'ABILENE ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 115KV'	40 120		-0.04702 -0.04485	
RE	'CITY OF MULVANE 69KV'	7.5	-0.0489		'KNOLL 3 115 115KV'	75	-0.00405	-0.04485	
RE	'CITY OF MULVANE 69KV'	7.5	-0.0489	WERE	'SMOKEY HILLS 34KV'	152		-0.04482	
RE	'GILL ENERGY CENTER 138KV'	17.99999	-0.06368	WERE	'EVANS ENERGY CENTER 138KV'	320.8022	-0.01706	-0.04662	
PL	'HARPER 138KV'	15.06			'BELOIT 115KV'	9.25			
PL	'HARPER 138KV'	15.06	-0.04694	WEPL	'CLIFTON 115KV'	41.81085	-0.00132	-0.04562	
PL	'HARPER 138KV'	15.06	-0.04694	WEPL	'GREENLEAF 115KV'	6.744			
PL	'HARPER 138KV'	15.06	-0.04694		'PLAINVILLE 115KV'	5.25	-0.00379		
PL RE	'HARPER 138KV' 'GILL ENERGY CENTER 69KV'	15.06 118	-0.04694 -0.09189		'SMITH CENTER 115KV' 'CITY OF MULVANE 69KV'	3.812997 8.29	-0.00293 -0.0489	-0.04401 -0.04299	
PL	'HARPER 138KV'	118	-0.09189		'A. M. MULLERGREN GENERATOR 115KV'	63	-0.0489		
PL	'HARPER 138KV'	15.06	-0.04694		'NORTH WEST GREAT BEND 115KV'	12.243	-0.00576	-0.04118	
PL	'HARPER 138KV'	15.06	-0.04694		'RUSSELL 115KV'	25.25	-0.00471	-0.04223	
PL	'HARPER 138KV'	15.06	-0.04694	WEPL	'GRAY COUNTY WIND FARM 115KV'	60	-0.00939	-0.03755	
PL	'HARPER 138KV'	15.06	-0.04694	WEPL	'JUDSON LARGE 115KV'	104.1272	-0.00945	-0.03749	
RE	'GILL ENERGY CENTER 69KV'	118	-0.09189		'WACO 138KV'	17.967	-0.05894	-0.03295	

Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified.

Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

 Upgrade:
 Evans - Grant - Chisolm Rebuild and Conversion Project

 Limiting Facility:
 CHISHOLM (CHISLM1X) 138/69/13.2KV TRANSFORMER CKT 1

 Direction:
 From->To

 Line Outage:
 EVANS ENERGY CENTER NORTH - SEDGWICK COUNTY NO. 12 COLWICH 138KV CKT 1

 Flowgate:
 CHIISLM1X1421570405706512207SP

 Date Redispatch Needed:
 6/1/07 - 10/1/07

Season Flowgate Identified: 2007 Summer Peak

Reservation	Relief Amount	Aggregate Relief Amount							
116199		0.2							
		Maximum		Sink Control		Maximum			Aggregate Redispatch
ource Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
/ERE	'GILL ENERGY CENTER 69KV'	118	-0.05046		'ABILENE ENERGY CENTER 115KV'	40		-0.04998	i
/ERE	'GILL ENERGY CENTER 69KV'	118	-0.05046		'BPU - CITY OF MCPHERSON 115KV'	135		-0.0491	
/ERE	'GILL ENERGY CENTER 69KV'	118	-0.05046		'CHANUTE 69KV'	56.723		-0.05129	
/ERE	'GILL ENERGY CENTER 69KV'	118	-0.05046		'CITY OF AUGUSTA 69KV'	20.02		-0.05149	
/ERE	'GILL ENERGY CENTER 69KV'	118	-0.05046		'CITY OF BURLINGTON 69KV'	7.8	0.00168	-0.05214	
/ERE	'GILL ENERGY CENTER 69KV'	118	-0.05046		'CITY OF ERIE 69KV'	23.27	0.00083	-0.05129	
/ERE	'GILL ENERGY CENTER 69KV'	118	-0.05046		'CITY OF FREDONIA 69KV'	3.895		-0.05145	
/ERE	'GILL ENERGY CENTER 69KV'	118	-0.05046		'CITY OF GIRARD 69KV'	4.789	0.00042	-0.05088	
/ERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'CITY OF IOLA 69KV'	24.267	0.00071	-0.05117	
/ERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'CLAY CENTER JUNCTION 115KV'	22.939	-0.00029	-0.05017	
/ERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00168	-0.05214	
/ERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'COLBY 115KV'	4.092612	-0.00179	-0.04867	
/ERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'EVANS ENERGY CENTER 138KV'	340	-0.003	-0.04746	
/ERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'HUTCHINSON ENERGY CENTER 115KV'	120	-0.00187	-0.04859	
/ERE	'GILL ENERGY CENTER 69KV'	118	-0.05046		'JEFFREY ENERGY CENTER 230KV'	470	0.00009	-0.05055	1
/ERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.00009	-0.05055	
/ERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'LAWRENCE ENERGY CENTER 115KV'	85	0.00033	-0.05079	
/ERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'LAWRENCE ENERGY CENTER 230KV'	235,4582	0.00032	-0.05078	
/ERE	'GILL ENERGY CENTER 69KV'	118	-0.05046		'TECUMSEH ENERGY CENTER 115KV'	122,7222	0.00037	-0.05083	
/ERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.03703		'ABILENE ENERGY CENTER 115KV'	40		-0.03655	
'ERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.03703		'BPU - CITY OF MCPHERSON 115KV'	135		-0.03567	1
'ERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.03703		'CHANUTE 69KV'	56,723	0.00083	-0.03786	
'ERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.03703		'CITY OF AUGUSTA 69KV'	20.02		-0.03806	
'ERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.03703		'CITY OF BURLINGTON 69KV'	7.8		-0.03871	
/ERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.03703		'CITY OF ERIE 69KV'	23.27	0.00083	-0.03786	
/ERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.03703		'CITY OF FREDONIA 69KV'	3,895		-0.03802	
/ERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.03703		'CITY OF GIRARD 69KV'	4.789	0.00042	-0.03745	
/ERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.03703		'CITY OF IOLA 69KV'	24.267	0.00071	-0.03774	
/ERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.03703		'CLAY CENTER JUNCTION 115KV'	22,939		-0.03674	
/ERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.03703		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97		-0.03871	
/ERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.03703		'JEFFREY ENERGY CENTER 230KV'	470		-0.03712	
/ERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.03703		'JEFFREY ENERGY CENTER 345KV'	940		-0.03712	
/ERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.03703		'LAWRENCE ENERGY CENTER 115KV'	85		-0.03712	
/ERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.03703		'LAWRENCE ENERGY CENTER 230KV'	235.4582		-0.03735	
/ERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.03703		TECUMSEH ENERGY CENTER 115KV	122.7222	0.00032	-0.03733	
/ERE	'CITY OF MULVANE 69KV'	7.502	-0.03703		'ABILENE ENERGY CENTER 115KV'	40		-0.0374	-
/ERE	'CITY OF MULVANE 69KV'	7.502	-0.03281		'BPU - CITY OF MCPHERSON 115KV'	135		-0.03233	-
ERE	'CITY OF MULVANE 69KV'	7.502	-0.03281		CHANUTE 69KV	56.723	0.00083	-0.03145	
ERE	'CITY OF MULVANE 69KV'	7.502	-0.03281		'CITY OF AUGUSTA 69KV'	20.02		-0.03384	-
ERE	'CITY OF MULVANE 69KV'	7.502	-0.03281		'CITY OF AUGUSTA 69KV'	7.8	0.00103	-0.03364	
ERE	'CITY OF MULVANE 69KV'	7.502	-0.03281		CITY OF BURLINGTON 69KV	23.27	0.00188	-0.03449	
	'CITY OF MULVANE 69KV'	7.502	-0.03281		CITY OF ERIE 69KV	3.895	0.00083	-0.03364	
/ERE									
ERE	'CITY OF MULVANE 69KV'	7.502	-0.03281		'CITY OF GIRARD 69KV'	4.789	0.00042	-0.03323	
/ERE	'CITY OF MULVANE 69KV'	7.502	-0.03281		'CITY OF IOLA 69KV'	24.267	0.00071	-0.03352	
/ERE	'CITY OF MULVANE 69KV'	7.502	-0.03281		'CLAY CENTER JUNCTION 115KV'	22.939		-0.03252	
/ERE	'CITY OF MULVANE 69KV'	7.502	-0.03281		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00168	-0.03449	
ERE	'CITY OF MULVANE 69KV'	7.502	-0.03281		'COLBY 115KV'	4.092612		-0.03102	
ERE	'CITY OF MULVANE 69KV'	7.502	-0.03281		'HUTCHINSON ENERGY CENTER 115KV'	120	-0.00187	-0.03094	
/ERE	'CITY OF MULVANE 69KV'	7.502	-0.03281		'JEFFREY ENERGY CENTER 230KV'	470		-0.0329	
ERE	'CITY OF MULVANE 69KV'	7.502	-0.03281		'JEFFREY ENERGY CENTER 345KV'	940		-0.0329	
'ERE	'CITY OF MULVANE 69KV'	7.502	-0.03281		'LAWRENCE ENERGY CENTER 115KV'	85	0.00033	-0.03314	
/ERE	'CITY OF MULVANE 69KV'	7.502	-0.03281		'LAWRENCE ENERGY CENTER 230KV'	235.4582	0.00032	-0.03313	4
/ERE	'CITY OF MULVANE 69KV'	7.502	-0.03281		'TECUMSEH ENERGY CENTER 115KV'	122.7222	0.00037	-0.03318	4
	'GILL ENERGY CENTER 138KV'	17.99999	-0.03703	WERE	'COLBY 115KV'	4.092612	-0.00179	-0.03524	il .
/ERE									
/ERE /ERE	'GILL ENERGY CENTER 138KV' 'GILL ENERGY CENTER 138KV'	17.99999 17.99999	-0.03703 -0.03703	WERE	'EVANS ENERGY CENTER 138KV' 'HUTCHINSON ENERGY CENTER 115KV'	340 120	-0.003	-0.03403 -0.03516	3

WERE GILL ENERGY CENTER 138KV 17.99999 -0.03703/WERE HOLD-INSON ENERGY CENTER
Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified.

Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

Upgrade: Evans - Grant - Chisolm Rebuild and Conversion Project
Limiting Facility: CHISHOLM (CHISLM1X) 138/69/13.2KV TRANSFORMER CKT 1
Direction: From->To
Line Outage: EVANS ENERGY CENTER NORTH - SEDGWICK COUNTY NO. 12 COLWICH 138KV CKT 1
Flowgate: CHISLM1X14215704057065122085P
Date Redispatch Needed: Season Flowgate Identified: 2008 Summer Peak

		Aggregate Relief
Reservation	Relief Amount	Amount
1161506	2.7	5.4
1161007	26	E 4

1161997	2.6	5.4							
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'CHANUTE 69KV'	55.637	0.00084	-0.0513	105
WERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'JEFFREY ENERGY CENTER 230KV'	494	0.00006	-0.05052	106
WERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.00006	-0.05052	106
WERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'LANG 7 345 345KV'	310	0.00033	-0.05079	106
WERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'LAWRENCE ENERGY CENTER 115KV'	85	0.00031	-0.05077	106
WERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'LAWRENCE ENERGY CENTER 230KV'	274.2987	0.0003	-0.05076	106
WERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00035	-0.05081	106
WERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'ABILENE ENERGY CENTER 115KV'	40	-0.00052	-0.04994	
WERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'SMOKEY HILLS 34KV'	152	-0.00117	-0.04929	109
WERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'HUTCHINSON ENERGY CENTER 115KV'	120	-0.00183	-0.04863	111
WERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'KNOLL 3 115 115KV'	75	-0.00192	-0.04854	111
WERE	'GILL ENERGY CENTER 69KV'	118	-0.05046	WERE	'EVANS ENERGY CENTER 138KV'	320.8022	-0.00301	-0.04745	113

WERE | CILL ENERGY CENTER 69KV | 118 | -0.05046|WERE | EVANS ENERGY CENTER 138K |
Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF |
Redispatch Amount = Relief Amount / Factor

Upgrade: Limiting Facility: Direction: Line Outage: Flowgate: Date Redispatch Needed: GREENSBURG - JUDSON LARGE 115KV CKT 1 GREENSBURG - JUDSON LARGE 115KV CKT 1 To--From '88779 MULGRENE 230 58795 SPEARVL6 230 1' 58764587711587795879511106WP 12/106 - 4/1/07

Season Flowgate Identified: 2006 Winter Peak

		Aggregate Relief							
Reservation	Relief Amount	Amount							
116264	9	13.3	1						
								,	Aggregate
		Maximum		Sink Control		Maximum		'	Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WEPL	'HARPER 138KV'	17.21	-0.12721	WEPL	'GRAY COUNTY WIND FARM 115KV'	63	0.23722	-0.36443	36
WEPI	'HARPER 138KV'	17.21	-0.12721	WEPL	'JUDSON LARGE 115KV'	53.76038	0.23887	-0.36608	36

WEPL	'A. M. MULLERGREN GENERATOR 115KV'	46.01582	-0.04038	WEPL	'JUDSON LARGE 115KV'	53.76038	0.23887	-0.27925	47
WEPL	'A. M. MULLERGREN GENERATOR 115KV'	46.01582	-0.04038	WEPL	'GRAY COUNTY WIND FARM 115KV'	63	0.23722	-0.2776	48
WEPL	'RUSSELL 115KV'	27.9	-0.03155	WEPL	'GRAY COUNTY WIND FARM 115KV'	63	0.23722	-0.26877	49
WEPL	'RUSSELL 115KV'	27.9	-0.03155	WEPL	'JUDSON LARGE 115KV'	53.76038	0.23887	-0.27042	49
WEPL	'CLIFTON 115KV'	70	-0.00966	WEPL	'JUDSON LARGE 115KV'	53.76038	0.23887	-0.24853	53
WEPL	'CLIFTON 115KV'	70	-0.00966	WEPL	'GRAY COUNTY WIND FARM 115KV'	63	0.23722	-0.24688	54
KACP	'BULL CREEK 161KV'	308	-0.00494	KACP	'SPEARVILLE WIND 34KV'	101	0.12719	-0.13213	100
KACP	'PAOLA COMBUSTION TURBINES 161KV'	77	-0.00489	KACP	'SPEARVILLE WIND 34KV'	101	0.12719	-0.13208	100
KACP	'GRAND AVENUE 161KV'	65	-0.00372	KACP	'SPEARVILLE WIND 34KV'	101	0.12719	-0.13091	101
KACP	'HAWTHORN 161KV'	423	-0.00353	KACP	'SPEARVILLE WIND 34KV'	101	0.12719	-0.13072	101
KACP	'MONTROSE 161KV'	118.3993	-0.0038	KACP	'SPEARVILLE WIND 34KV'	101	0.12719	-0.13099	101
KACP	'NORTHEAST 13KV'	56	-0.00368	KACP	'SPEARVILLE WIND 34KV'	101	0.12719	-0.13087	101
KACP	'NORTHEAST 13KV'	56	-0.00368	KACP	'SPEARVILLE WIND 34KV'	101	0.12719	-0.13087	101
KACP	'NORTHEAST 13KV'	58	-0.00368	KACP	'SPEARVILLE WIND 34KV'	101	0.12719	-0.13087	101
KACP	'NORTHEAST 13KV'	59	-0.00368	KACP	'SPEARVILLE WIND 34KV'	101	0.12719	-0.13087	101
KACP	'NORTHEAST 161KV'	55	-0.00368	KACP	'SPEARVILLE WIND 34KV'	101	0.12719	-0.13087	101
KACP	'NORTHEAST 161KV'	58	-0.00368	KACP	'SPEARVILLE WIND 34KV'	101	0.12719	-0.13087	101
KACP	'NORTHEAST 161KV'	58	-0.00368	KACP	'SPEARVILLE WIND 34KV'	101	0.12719	-0.13087	101
KACP	'NORTHEAST 161KV'	58	-0.00368	KACP	'SPEARVILLE WIND 34KV'	101	0.12719	-0.13087	101
KACP	'CITY OF HIGGINSVILLE 69KV'	36	-0.00303	KACP	'SPEARVILLE WIND 34KV'	101	0.12719	-0.13022	102
KACP	'MARSHALL 161KV'	54.1	-0.00195	KACP	'SPEARVILLE WIND 34KV'	101	0.12719	-0.12914	103
WEPL	'CIMARRON RIVER 115KV'	72	0.14655	WEPL	'JUDSON LARGE 115KV'	53.76038	0.23887	-0.09232	144
WEPL	'CIMARRON RIVER 115KV'	72	0.14655	WEPL	'GRAY COUNTY WIND FARM 115KV'	63	0.23722	-0.09067	146
WERE	'PAWNEE 115KV'	999	-0.09442	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	-0.00683	-0.08759	151
WERE	'RICE 115KV'	999	-0.09442	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	-0.00683	-0.08759	151
WERE	'PAWNEE 115KV'	999	-0.09442	WERE	'LAWRENCE ENERGY CENTER 230KV'	220.265	-0.00723	-0.08719	152
WERE	'RICE 115KV'	999	-0.09442		'LAWRENCE ENERGY CENTER 230KV'	220.265	-0.00723	-0.08719	152
WERE	'PAWNEE 115KV'	999	-0.09442	WERE	'TECUMSEH ENERGY CENTER 115KV'	61.06841	-0.00789	-0.08653	153
WERE	'RICE 115KV'	999	-0.09442		'TECUMSEH ENERGY CENTER 115KV'	61.06841	-0.00789	-0.08653	153
WERE	'PAWNEE 115KV'	999	-0.09442	WERE	'JEFFREY ENERGY CENTER 230KV'	470	-0.00893	-0.08549	155
WERE	'PAWNEE 115KV'	999	-0.09442		'JEFFREY ENERGY CENTER 345KV'	940	-0.00882	-0.0856	155
WERE	'RICE 115KV'	999	-0.09442	WERE	'JEFFREY ENERGY CENTER 230KV'	470	-0.00893	-0.08549	155
WERE	'RICE 115KV'	999	-0.09442	WERE	'JEFFREY ENERGY CENTER 345KV'	940	-0.00882	-0.0856	155
WERE	'PAWNEE 115KV'	999	-0.09442	WERE	'EVANS ENERGY CENTER 138KV'	165	-0.01573	-0.07869	169
WERE	'RICE 115KV'	999	-0.09442	WERE	'EVANS ENERGY CENTER 138KV'	165	-0.01573	-0.07869	169
Maximum Dogramant and M	avimum Increment were determine from the Source and	Sink Operating Bo	into in tho	ctudy modele i	whore limiting facility was identified	•			

Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified.

Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

Reservation	Relief Amount	Amount							
116264	9 13.2	13.2				Ť.	,		
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source	Increment(MW)		Area	Sink	Decrement(MW)		Factor	Amount (MW)
WEPL	'HARPER 138KV'	17.21	-0.12652		'GRAY COUNTY WIND FARM 115KV'	63		-0.36359	
WEPL	'HARPER 138KV'	17.21	-0.12652		'JUDSON LARGE 115KV'	87.15894		-0.36524	
WEPL	'A. M. MULLERGREN GENERATOR 115KV'	19.71292	-0.03192		'GRAY COUNTY WIND FARM 115KV' 'JUDSON LARGE 115KV'	63		-0.26899	
WEPL	'A. M. MULLERGREN GENERATOR 115KV'	19.71292	-0.03192 -0.02558			87.15894		-0.27064 -0.26265	
WEPL WEPL	'RUSSELL 115KV'	27.9 27.9	-0.02558		'GRAY COUNTY WIND FARM 115KV' 'JUDSON LARGE 115KV'	63 87.15894		-0.26265	
WEPL		70	-0.02558			87.15894 87.15894		-0.24782	
	'CLIFTON 115KV'				'JUDSON LARGE 115KV'				
WEPL	'CLIFTON 115KV'	70	-0.0091		'GRAY COUNTY WIND FARM 115KV'	63		-0.24617	
KACP	'LACYGNE UNIT 345KV'	736	-0.00607		'SPEARVILLE WIND 34KV'	101	0.12673	-0.1328	
KACP	'BULL CREEK 161KV'	80.21997	-0.00483		'SPEARVILLE WIND 34KV'	101	0.12673	-0.13156	
KACP	'PAOLA COMBUSTION TURBINES 161KV'	77	-0.00479		'SPEARVILLE WIND 34KV'	101		-0.13152	
KACP	'GRAND AVENUE 161KV'	65	-0.00363		'SPEARVILLE WIND 34KV'	101	0.12673	-0.13036	
KACP	'NORTHEAST 13KV'	56	-0.00359		'SPEARVILLE WIND 34KV'	101	0.12673	-0.13032	
KACP	'NORTHEAST 13KV'	56	-0.00359		'SPEARVILLE WIND 34KV'	101	0.12673	-0.13032	
KACP	'NORTHEAST 13KV'	58	-0.00359		'SPEARVILLE WIND 34KV'	101	0.12673	-0.13032	
KACP	'NORTHEAST 13KV'	59	-0.00359		'SPEARVILLE WIND 34KV'	101	0.12673	-0.13032	10
KACP	'NORTHEAST 161KV'	55	-0.00359		'SPEARVILLE WIND 34KV'	101	0.12673	-0.13032	10
KACP	'NORTHEAST 161KV'	58	-0.00359		'SPEARVILLE WIND 34KV'	101	0.12673	-0.13032	10
KACP	'NORTHEAST 161KV'	58	-0.00359		'SPEARVILLE WIND 34KV'	101	0.12673	-0.13032	
KACP	'NORTHEAST 161KV'	58	-0.00359		'SPEARVILLE WIND 34KV'	101	0.12673	-0.13032	
KACP	'CITY OF HIGGINSVILLE 69KV'	36	-0.00297		'SPEARVILLE WIND 34KV'	101	0.12673	-0.1297	
KACP	'MARSHALL 161KV'	54.1	-0.00192		'SPEARVILLE WIND 34KV'	101	0.12673	-0.12865	
WEPL	'CIMARRON RIVER 115KV'	72	0.14611		'JUDSON LARGE 115KV'	87.15894		-0.09261	14
WEPL	'CIMARRON RIVER 115KV'	72	0.14611		'GRAY COUNTY WIND FARM 115KV'	63		-0.09096	
WERE	'PAWNEE 115KV'	999	-0.09134		'LAWRENCE ENERGY CENTER 115KV'	60		-0.08469	
WERE	'RICE 115KV'	999	-0.09134		'LAWRENCE ENERGY CENTER 115KV'	60	-0.00665	-0.08469	
WERE	'PAWNEE 115KV'	999	-0.09134		'LAWRENCE ENERGY CENTER 230KV'	230.0213		-0.08431	15
WERE	'PAWNEE 115KV'	999	-0.09134		'TECUMSEH ENERGY CENTER 115KV'	78.1487	-0.00735	-0.08399	
WERE	'RICE 115KV'	999	-0.09134		'LAWRENCE ENERGY CENTER 230KV'	230.0213	-0.00703	-0.08431	15
WERE	'RICE 115KV'	999	-0.09134	WERE	'TECUMSEH ENERGY CENTER 115KV'	78.1487		-0.08399	15
WERE	'PAWNEE 115KV'	999	-0.09134	WERE	'JEFFREY ENERGY CENTER 230KV'	470		-0.0827	16
WERE	'PAWNEE 115KV'	999	-0.09134	WERE	'JEFFREY ENERGY CENTER 345KV'	940	-0.00857	-0.08277	16
WERE	'RICE 115KV'	999	-0.09134	WERE	'JEFFREY ENERGY CENTER 230KV'	470	-0.00864	-0.0827	16
WERE	'RICE 115KV'	999	-0.09134	WERE	'JEFFREY ENERGY CENTER 345KV'	940	-0.00857	-0.08277	16
NERE	'PAWNEE 115KV'	999	-0.09134	WERE	'EVANS ENERGY CENTER 138KV'	340	-0.01562	-0.07572	17
WERE	'RICE 115KV'	999	-0.09134	WERE	'EVANS ENERGY CENTER 138KV'	340	-0.01562	-0.07572	17
WERE	'PAWNEE 115KV'	999	-0.09134	WERE	'BPU - CITY OF MCPHERSON 115KV'	135	-0.02187	-0.06947	19
WERE	'RICE 115KV'	999	-0.09134		'BPU - CITY OF MCPHERSON 115KV'	135		-0.06947	19
WERE	'PAWNEE 115KV'	999	-0.09134	WERE	'GILL ENERGY CENTER 138KV'	155	-0.02485	-0.06649	19
WERE	'RICE 115KV'	999	-0.09134	WERE	'GILL ENERGY CENTER 138KV'	155		-0.06649	19
WERE	'PAWNEE 115KV'	999	-0.09134		'HUTCHINSON ENERGY CENTER 115KV'	120		-0.06348	20
WERE	'RICE 115KV'	999	-0.09134	WERE	'HUTCHINSON ENERGY CENTER 115KV'	120	-0.02786	-0.06348	20

Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified.

Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

Aggregate Relief

		Aggregate Relief							
Reservation	Relief Amount	Amount							
1161665	3.6	3.6							
									Aggregate
		Maximum		Sink Control		Maximum		1	Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
SWPA	'JONESBORO 161KV'	20	-0.65617	SWPA	'BEAVER 161KV'	100.2468	-0.02684	-0.62933	6

DIAMP 4	LIGHTON OR A MANUAL			014/04	INDOVEL BOW TOOLS				
SWPA SWPA	'JONESBORO 161KV' 'JONESBORO 161KV'	20			BROKEN BOW 138KV' BULL SHOALS 161KV'	93.4 293.2			6
SWPA	'JONESBORO 161KV'	20			CARTHAGE 69KV	293.2		-0.63392	6
SWPA	'JONESBORO 161KV'	20		SWPA	'CLARENCE CANNON DAM 69KV'	39.2		-0.64183	6
SWPA	'JONESBORO 161KV'	20			'DARDANELLE 161KV'	105.2		-0.63176	6
SWPA	'JONESBORO 161KV'	20	-0.65617	SWPA	'DENISON 138KV'	59.40001	-0.01524	-0.64093	6
SWPA	'JONESBORO 161KV'	20			'EUFAULA 138KV'	51		-0.63883	6
SWPA	'JONESBORO 161KV'	20			'EUFAULA 161KV'	25.5		-0.63883	6
SWPA	'JONESBORO 161KV'	20			FORT GIBSON 161KV'	42.4		-0.63792	6
SWPA SWPA	'JONESBORO 161KV' 'JONESBORO 161KV'	20 20			'JAMES RIVER 161KV' 'JAMES RIVER 69KV'	159 232.999		-0.63164 -0.63161	6
SWPA	'JONESBORO 161KV'	20			'KEYSTONE DAM 161KV'	59.40001		-0.63799	6
SWPA	'JONESBORO 161KV'	20		SWPA	'MCCARTNEY 161KV'	322.3152		-0.63212	6
SWPA	'JONESBORO 161KV'	20			'NORFORK 161KV'	20		-0.5934	6
SWPA	'JONESBORO 161KV'	20	-0.65617		'OZARK 161KV'	78		-0.63667	6
SWPA	'JONESBORO 161KV'	20		SWPA	'POPLAR BLUFF 69KV'	6		-0.59876	6
SWPA	'JONESBORO 161KV'	20			'ROBERT S. KERR 161KV'	107.2		-0.63888	6
SWPA SWPA	'JONESBORO 161KV' 'JONESBORO 161KV'	20 20			'SIKESTON 161KV' 'STOCKTON 161KV'	235 44.1		-0.64165 -0.63506	6
SWPA	'JONESBORO 161KV'	20			'TABLE ROCK 161KV'	186.8		-0.62458	6
SWPA	'JONESBORO 161KV'	20			'TENKILLER FERRY 161KV'	16		-0.63849	6
SWPA	'JONESBORO 161KV'	20	-0.65617		'TRUMAN 161KV'	102	-0.01767	-0.6385	6
SWPA	'JONESBORO 161KV'	20	-0.65617		'WEBBERS FALLS 161KV'	39	-0.01768	-0.63849	6
SWPA	'PARAGOULD 69KV'	12			'BEAVER 161KV'	100.2468		-0.5932	6
SWPA	'PARAGOULD 69KV'	12			'BROKEN BOW 138KV'	93.4		-0.60805	6
SWPA SWPA	'PARAGOULD 69KV' 'PARAGOULD 69KV'	12 12			'BULL SHOALS 161KV' 'CARTHAGE 69KV'	293.2		-0.57009 -0.59779	6
SWPA	'PARAGOULD 69KV'	12			'CLARENCE CANNON DAM 69KV'	39.2		-0.59779	6
SWPA	'PARAGOULD 69KV'	12		SWPA	'DARDANELLE 161KV'	105.2		-0.59563	6
SWPA	'PARAGOULD 69KV'	12			'DENISON 138KV'	59.40001		-0.6048	6
SWPA	'PARAGOULD 69KV'	12	-0.62004	SWPA	'EUFAULA 138KV'	51	-0.01734	-0.6027	6
SWPA	'PARAGOULD 69KV'	12			'EUFAULA 161KV'	25.5		-0.6027	6
SWPA	'PARAGOULD 69KV'	12	-0.62004		FORT GIBSON 161KV	42.4		-0.60179	6
SWPA	'PARAGOULD 69KV'	12			'JAMES RIVER 161KV'	159		-0.59551	6
SWPA SWPA	'PARAGOULD 69KV' 'PARAGOULD 69KV'	12 12			'JAMES RIVER 69KV' 'KEYSTONE DAM 161KV'	232.999 59.40001		-0.59548 -0.60186	6
SWPA	'PARAGOULD 69KV'	12			'MCCARTNEY 161KV'	322.3152		-0.59599	6
SWPA	'PARAGOULD 69KV'	12		SWPA	'NORFORK 161KV'	20		-0.55727	6
SWPA	'PARAGOULD 69KV'	12			'OZARK 161KV'	78		-0.60054	6
SWPA	'PARAGOULD 69KV'	12	-0.62004	SWPA	'POPLAR BLUFF 69KV'	6		-0.56263	6
SWPA	'PARAGOULD 69KV'	12	-0.62004		'ROBERT S. KERR 161KV'	107.2		-0.60275	6
SWPA	'PARAGOULD 69KV'	12			'SIKESTON 161KV'	235		-0.60552	6
SWPA SWPA	'PARAGOULD 69KV' 'PARAGOULD 69KV'	12 12			'STOCKTON 161KV' 'TABLE ROCK 161KV'	44.1 186.8		-0.59893 -0.58845	6
SWPA	'PARAGOULD 69KV'	12			TENKILLER FERRY 161KV	160.6		-0.60236	6
SWPA	'PARAGOULD 69KV'	12		SWPA	TRUMAN 161KV	102		-0.60237	6
SWPA	'PARAGOULD 69KV'	12			'WEBBERS FALLS 161KV'	39		-0.60236	6
SWPA	'KENNETT 69KV'	21.8	-0.53283	SWPA	'BEAVER 161KV'	100.2468	-0.02684	-0.50599	7
SWPA	'KENNETT 69KV'	21.8	-0.53283	SWPA	'BROKEN BOW 138KV'	93.4		-0.52084	7
SWPA	'KENNETT 69KV'	21.8	-0.53283		'BULL SHOALS 161KV'	293.2		-0.48288	7
SWPA SWPA	'KENNETT 69KV' 'KENNETT 69KV'	21.8 21.8			'CARTHAGE 69KV'	30 39.2		-0.51058 -0.51849	7
SWPA	'KENNETT 69KV'	21.8	-0.53283 -0.53283		'CLARENCE CANNON DAM 69KV' 'DARDANELLE 161KV'	105.2		-0.51849	7
SWPA	'KENNETT 69KV'	21.8			'DENISON 138KV'	59.40001		-0.51759	7
SWPA	'KENNETT 69KV'	21.8	-0.53283		'EUFAULA 138KV'	51		-0.51549	7
SWPA	'KENNETT 69KV'	21.8	-0.53283	SWPA	'EUFAULA 161KV'	25.5	-0.01734	-0.51549	7
SWPA	'KENNETT 69KV'	21.8	-0.53283		'FORT GIBSON 161KV'	42.4		-0.51458	7
SWPA	'KENNETT 69KV'	21.8	-0.53283		'JAMES RIVER 161KV'	159		-0.5083	7
SWPA	'KENNETT 69KV'	21.8			'JAMES RIVER 69KV'	232.999		-0.50827	7
SWPA SWPA	'KENNETT 69KV'	21.8 21.8			'KEYSTONE DAM 161KV' 'MCCARTNEY 161KV'	59.40001 322.3152		-0.51465 -0.50878	7
SWPA	'KENNETT 69KV'	21.8			'OZARK 161KV'	78		-0.51333	7
SWPA	'KENNETT 69KV'	21.8		SWPA	'ROBERT S. KERR 161KV'	107.2		-0.51554	7
SWPA	'KENNETT 69KV'	21.8			'SIKESTON 161KV'	235		-0.51831	7
SWPA	'KENNETT 69KV'	21.8	-0.53283	SWPA	'STOCKTON 161KV'	44.1	-0.02111	-0.51172	7
SWPA	'KENNETT 69KV'	21.8	-0.53283	SWPA	'TABLE ROCK 161KV'	186.8		-0.50124	7
SWPA	'KENNETT 69KV'	21.8			TENKILLER FERRY 161KV	16		-0.51515	7
SWPA SWPA	'KENNETT 69KV' 'KENNETT 69KV'	21.8 21.8			'TRUMAN 161KV' 'WEBBERS FALLS 161KV'	102		-0.51516 -0.51515	7
SWPA	'JONESBORO 161KV'	21.8			'GREERS FERRY 161KV'	93.4		-0.51515	8
SWPA	'KENNETT 69KV'	21.8			'NORFORK 161KV'	20		-0.47006	8
SWPA	'KENNETT 69KV'	21.8	-0.53283	SWPA	'POPLAR BLUFF 69KV'	6	-0.05741	-0.47542	8
SWPA	'JONESBORO 161KV'	20	-0.65617		'MALDEN 69KV'	7	-0.24774	-0.40843	9
SWPA	'PARAGOULD 69KV'	12	-0.62004		'GREERS FERRY 161KV'	93.4		-0.41292	9
SWPA	'PIGGOTT 69KV'	7.5			BEAVER 161KV	100.2468		-0.40444	9
SWPA SWPA	'PIGGOTT 69KV' 'PIGGOTT 69KV'	7.5 7.5			'BROKEN BOW 138KV' 'BULL SHOALS 161KV'	93.4 293.2		-0.41929 -0.38133	9
SWPA	'PIGGOTT 69KV'	7.5			'CARTHAGE 69KV'	30			9
SWPA	'PIGGOTT 69KV'	7.5			'CLARENCE CANNON DAM 69KV'	39.2			9
SWPA	'PIGGOTT 69KV'	7.5	-0.43128	SWPA	'DARDANELLE 161KV'	105.2	-0.02441	-0.40687	9
SWPA	'PIGGOTT 69KV'	7.5	-0.43128	SWPA	'DENISON 138KV'	59.40001	-0.01524		9
SWPA	'PIGGOTT 69KV'	7.5			'EUFAULA 138KV'	51			9
SWPA	'PIGGOTT 69KV' 'PIGGOTT 69KV'	7.5			'EUFAULA 161KV' 'FORT GIBSON 161KV'	25.5			9
SWPA SWPA	'PIGGOTT 69KV'	7.5 7.5			'JAMES RIVER 161KV'	42.4 159	-0.01825		9
SWPA	'PIGGOTT 69KV'	7.5			'JAMES RIVER 161KV	232.999			9
SWPA	'PIGGOTT 69KV'	7.5			'KEYSTONE DAM 161KV'	59.40001		-0.40072	9
SWPA	'PIGGOTT 69KV'	7.5	-0.43128	SWPA	'MCCARTNEY 161KV'	322.3152	-0.02405	-0.40723	9
SWPA	'PIGGOTT 69KV'	7.5	-0.43128	SWPA	'OZARK 161KV'	78	-0.0195	-0.41178	9
SWPA	'PIGGOTT 69KV'	7.5	-0.43128		'ROBERT S. KERR 161KV'	107.2			9
SWPA	'PIGGOTT 69KV'	7.5			'SIKESTON 161KV'	235			9
SWPA SWPA	'PIGGOTT 69KV'	7.5 7.5			'STOCKTON 161KV' 'TABLE ROCK 161KV'	44.1 186.8		-0.41017 -0.39969	9
SWPA	PIGGOTT 69KV	7.5			TENKILLER FERRY 161KV	186.8			9
SWPA	'PIGGOTT 69KV'	7.5			'TRUMAN 161KV'		-0.01767		9
SWPA	'PIGGOTT 69KV'	7.5			'WEBBERS FALLS 161KV'	39		-0.4136	9
SWPA	'PARAGOULD 69KV'	12	-0.62004	SWPA	'MALDEN 69KV'	7	-0.24774	-0.3723	10
SWPA	'PIGGOTT 69KV'	7.5			'NORFORK 161KV'	20		-0.36851	10
SWPA	PIGGOTT 69KV' eximum Increment were determine from the Souce and		-0.43128		'POPLAR BLUFF 69KV'	6	-0.05741	-0.37387	10
Manual Increment and Ma		Sink Operating Po			where ilmiting tacility was identified				

|SWPA | PIGGOTT 69KV' | 7.5| -0.43128|SWPA | POPLAR BLUFF 69KV' | Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF | Redispatch Amount = Relief Amount / Factor

 Upgrade:
 LACYGNE-PAOLA-WEST GARDER 345KV

 Limiting Facility:
 WEST GARDNER (WGARD 11) 345/161/13.8KV TRANSFORMER CKT 11

 Direction:
 From>-To

 Line Outage:
 5°965 W.GRDNR7 345 57977 CRAIG 7 345 1'

 Flowgate:
 WGAARD1117511579775796513307SP

 Date Redispatch Needed:
 6'1/07-101/1070

 Season Flowgate Identifiled:
 2007 Summer Peak

Reservation	Relief Amount	Aggregate Relief Amount
Reservation	Reliei Afficunt	AITIOUTIL
1162650	14.8	34.0

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

1162651	14.5	34.0							
1162654	4.6	34.0							
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
	'MARSHALL 161KV'	54.1	0.02209	KACP	'BULL CREEK 161KV'	119.6306	0.35437	-0.33228	
	'GRAND AVENUE 161KV'	65	0.06491	KACP	'BULL CREEK 161KV'	119.6306	0.35437	-0.28946	117
KACP	'NORTHEAST 13KV'	56	0.06338	KACP	'BULL CREEK 161KV'	119.6306	0.35437	-0.29099	
KACP	'NORTHEAST 13KV'	56	0.06338	KACP	'BULL CREEK 161KV'	119.6306	0.35437	-0.29099	
KACP	'NORTHEAST 13KV'	58	0.06338	KACP	'BULL CREEK 161KV'	119.6306	0.35437	-0.29099	
KACP	'NORTHEAST 13KV'	59	0.06338	KACP	'BULL CREEK 161KV'	119.6306	0.35437	-0.29099	117
KACP	'NORTHEAST 161KV'	55	0.06338	KACP	'BULL CREEK 161KV'	119.6306	0.35437	-0.29099	
KACP	'NORTHEAST 161KV'	58	0.06338	KACP	'BULL CREEK 161KV'	119.6306	0.35437	-0.29099	
KACP	'NORTHEAST 161KV'	58	0.06338	KACP	'BULL CREEK 161KV'	119.6306	0.35437	-0.29099	117
KACP	'NORTHEAST 161KV'	58	0.06338	KACP	'BULL CREEK 161KV'	119.6306	0.35437	-0.29099	117
	'PAOLA COMBUSTION TURBINES 161KV'	77	0.10111	KACP	'BULL CREEK 161KV'	119.6306	0.35437	-0.25326	
WERE	'CLR_3 .575 34KV'	300	-0.0501	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03101	-0.08111	419
	'LATHAM1234.0 345KV'	150	-0.0501		'JEFFREY ENERGY CENTER 345KV'	940	0.03101	-0.08111	419
WERE	'CLR_3 .575 34KV'	300	-0.0501	WERE	'LAWRENCE ENERGY CENTER 230KV'	225.3871	0.0297	-0.0798	426
	'LATHAM1234.0 345KV'	150	-0.0501	WERE	'LAWRENCE ENERGY CENTER 230KV'	225.3871	0.0297	-0.0798	426
WERE	'CLR_3 .575 34KV'	300	-0.0501	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.02895	-0.07905	430
WERE	'LATHAM1234.0 345KV'	150	-0.0501	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.02895	-0.07905	430 475
WERE	'EVANS ENERGY CENTER 138KV'	174.7754	-0.04048	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03101	-0.07149	475
	'EVANS N4 138 16KV'	360	-0.04047	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03101	-0.07148	475
	'EVANS ENERGY CENTER 138KV'	174.7754	-0.04048		'LAWRENCE ENERGY CENTER 230KV'	225.3871	0.0297	-0.07018	484
WERE	'EVANS N4 138 16KV'	360	-0.04047	WERE	'LAWRENCE ENERGY CENTER 230KV'	225.3871	0.0297	-0.07017	
	'EVANS ENERGY CENTER 138KV'	174.7754	-0.04048		'JEFFREY ENERGY CENTER 230KV'	470	0.02895	-0.06943	489
	'EVANS N4 138 16KV'	360	-0.04047		'JEFFREY ENERGY CENTER 230KV'	470	0.02895	-0.06942	489
	'LYONS 115KV'	999	-0.01311		'JEFFREY ENERGY CENTER 345KV'	940	0.03101	-0.04412	770
WERE	'LYONS 115KV'	999	-0.01311	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.02895	-0.04206	808

Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

Upgrade:

LACYGNE-PAOLA-WEST GARDER 345KV WEST GARDNER (WGARD 11) 345/161/13.8KV TRANSFORMER CKT 11 Limiting Facility:

Direction: Line Outage:

From->To '57965 W.GRDNR7 345 57977 CRAIG 7 345 1' Flowgate: Date Redispatch Needed: Season Flowgate Identified: WGAARD1127511579775796511307SH 6/1 - 10/1 Until EOC of Upgrade 2007 Summer Shoulder

Aggregate Relief Reservation Relief Amount Amount 14.7

1162	2686	3.9 14.7							Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source		GSF	Area	Sink			Factor	Amount (MW)
KACP	'BULL CREEK 161KV'	308			'LACYGNE UNIT 345KV'	958			31
KACP	'BULL CREEK 161KV'	308			'SPEARVILLE WIND 34KV'	101	-0.01118		
KACP	'BULL CREEK 161KV'	308			'MONTROSE 161KV'	355.9788			
KACP	'BULL CREEK 161KV'	308			'HAWTHORN 161KV'	45.42407	-0.05555		49
KACP	'BULL CREEK 161KV'	308			'HAWTHORN 161KV'	455			49
KACP	'BULL CREEK 161KV'	308			'IATAN 345KV'	396	-0.0586	-0.29577	50
KACP	'PAOLA COMBUSTION TURBINES 161KV'	77			'LACYGNE UNIT 345KV'	958	0.1266	-0.22771	65
KACP	'GRAND AVENUE 161KV'	65	-0.06491	KACP	'LACYGNE UNIT 345KV'	958	0.1266	-0.19151	77
KACP	'NORTHEAST 13KV'	56	-0.06338	KACP	'LACYGNE UNIT 345KV'	958	0.1266	-0.18998	78
KACP	'NORTHEAST 13KV'	56	-0.06338	KACP	'LACYGNE UNIT 345KV'	958	0.1266	-0.18998	78
KACP	'NORTHEAST 13KV'	58	-0.06338	KACP	'LACYGNE UNIT 345KV'	958	0.1266	-0.18998	78
KACP	'NORTHEAST 13KV'	59	-0.06338	KACP	'LACYGNE UNIT 345KV'	958	0.1266	-0.18998	78
KACP	'NORTHEAST 161KV'	55	-0.06338	KACP	'LACYGNE UNIT 345KV'	958	0.1266	-0.18998	78
KACP	'NORTHEAST 161KV'	58	-0.06338	KACP	'LACYGNE UNIT 345KV'	958	0.1266	-0.18998	78
KACP	'NORTHEAST 161KV'	58	-0.06338	KACP	'LACYGNE UNIT 345KV'	958	0.1266	-0.18998	78
KACP	'NORTHEAST 161KV'	58	-0.06338	KACP	'LACYGNE UNIT 345KV'	958	0.1266	-0.18998	78
KACP	'HAWTHORN 161KV'	268.5759	-0.05555	KACP	'LACYGNE UNIT 345KV'	958	0.1266	-0.18215	81
KACP	'CITY OF HIGGINSVILLE 69KV'	36	-0.02828	KACP	'LACYGNE UNIT 345KV'	958	0.1266	-0.15488	95
KACP	'MARSHALL 161KV'	54.1	-0.02207	KACP	'LACYGNE UNIT 345KV'	958	0.1266	-0.14867	99
KACP	'PAOLA COMBUSTION TURBINES 161KV'	77	-0.10111	KACP	'SPEARVILLE WIND 34KV'	101	-0.01118	-0.08993	164
WERE	'LAWRENCE ENERGY CENTER 115KV'	78	-0.03527	WERE	'GILL ENERGY CENTER 138KV'	155	0.04133	-0.0766	192
WERE	'LAWRENCE ENERGY CENTER 115KV'	78	-0.03527	WERE	'EVANS ENERGY CENTER 138KV'	305	0.04047	-0.07574	195
KACP	'PAOLA COMBUSTION TURBINES 161KV'	77	-0.10111	KACP	'MONTROSE 161KV'	355.9788	-0.03298	-0.06813	216
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.01905	WERE	'GILL ENERGY CENTER 138KV'	155	0.04133	-0.06038	244
WERE	'KNOLL 3 115 115KV'	84.35999	-0.01845	WERE	'GILL ENERGY CENTER 138KV'	155	0.04133	-0.05978	247
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.01905	WERE	'EVANS ENERGY CENTER 138KV'	305	0.04047	-0.05952	248
WERE	'KNOLL 3 115 115KV'	84.35999	-0.01845	WERE	'EVANS ENERGY CENTER 138KV'	305	0.04047	-0.05892	250
WERE	'HUTCHINSON ENERGY CENTER 115KV'	275,2344	-0.01721	WERE	'GILL ENERGY CENTER 138KV'	155	0.04133	-0.05854	252
WERE	'HUTCHINSON ENERGY CENTER 115KV'	275,2344	-0.01721	WERE	'EVANS ENERGY CENTER 138KV'	305	0.04047	-0.05768	256
WERE	'PAWNEE 115KV'	999	-0.00886	WERE	'GILL ENERGY CENTER 138KV'	155	0.04133	-0.05019	294
WERE	'RICE 115KV'	999	-0.00886	WERE	'GILL ENERGY CENTER 138KV'	155	0.04133	-0.05019	
WERE	'PAWNEE 115KV'	999	-0.00886	WERE	'EVANS ENERGY CENTER 138KV'	305	0.04047	-0.04933	299
WERE	'RICE 115KV'	999	-0.00886	WERE	'EVANS ENERGY CENTER 138KV'	305	0.04047	-0.04933	299
WERE	'LANG 7 345 345KV'	828	-0.0039	WERE	'GILL ENERGY CENTER 138KV'	155	0.04133	-0.04523	326
WERE	'LANG 7 345 345KV'	828		WERE	'EVANS ENERGY CENTER 138KV'	305			

Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF Redispatch Amount = Relief Amount / Factor

LINWOOD - MCWILLIE STREET 138KV CKT 1 LINWOOD - MCWILLIE STREET 138KV CKT 1 From->To HARTS ISLAND - SOUTH SHREVEPORT 138KV CKT 1 5342253425134145344611407SP 6/1/07 - 10/1/07 Upgrade: Limiting Facility: Direction: Line Outage:

Flowgate: Date Redispatch Needed:

Season Flowgate Identified: 2007 Summer Peak

Aggregate Relief Amount Reservation Relief Amount 115876 Aggregate Redispatch Amount (MW) Sink Control Maximum Source

AH-CC_ST18.0 138KV

AH-CC_ST18.0 138KV | My | GSF | Area | Sink Ct | Area | Area | Sink Ct | Area | Area | Area | Sink Ct | Area | A ncrement(MW) Decrement(MW) int(MW) GSF Factor 160 -0.00343 -0.49929 300 -0.00416 -0.49856 160 -0.00553 -0.49719 63 -0.00554 -0.49718 355 -0.0127 -0.49002 30.99999 -0.00241 -0.50031 420 -0.00346 -0.49926 420 -0.00346 -0.00346 -0.00346 -0.00346 -0.00346 -0.00346 -0.00346 -0.00346 -0.00346 -0. Factor Sink 'AEP-CT0613.8 161KV' AEP-CT0613.8 161KV
COGENTRIX 345KV'
'COMANCHE 138KV'
'COMANCHE 69KV'
EASTMAN 138KV'
'FITZHUGH 161KV'
'FLINT CREEK 161KV' 'AH-CC_ST18.0 138KV 550 -0.50272 AEPW 'KNOXLEE 138KV' 164 -0.00881 -0.49391 550 -0.50272 AEPW 550 -0.50272 AEPW 550 -0.50272 AEPW 'L&D13 69KV' 'LEBROCK 345KV' 'NARROWS 69KV' 11 -0.00278 -0.49994 515 -0.0179 -0.48482 22 -0.01482 -0.4879 515 22

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

AEPW	'AH-CC ST18.0 138KV'	550 -0.50272 AEPW	'NORTHEASTERN STATION 138KV'	95 -0.00386 -0.49886 12
AEPW	'AH-CC ST18.0 138KV'	550 -0.50272 AEPW	'NORTHEASTERN STATION 138KV'	405 -0.00386 -0.49886 12
AEPW	'AH-CC ST18.0 138KV'	550 -0.50272 AEPW	'NORTHEASTERN STATION 345KV'	645 -0.00384 -0.49888 12
AEPW	'AH-CC_ST18.0_138KV'	550 -0.50272 AEPW	'OEC 345KV'	369 -0.00404 -0.49868 12
AEPW	'AH-CC_ST18.0_138KV'	550 -0.50272 AEPW	'PIRKEY GENERATION 138KV'	475 -0.02418 -0.47854 12
AEPW	'AH-CC_ST18.0 138KV'	550 -0.50272 AEPW	'RIVERSIDE STATION 138KV'	495.5 -0.00417 -0.49855 12
AEPW	'AH-CC_ST18.0_138KV'	550 -0.50272 AEPW	'SOUTHWESTERN STATION 138KV'	257 -0.00547 -0.49725 12
AEPW	'AH-CC_ST18.0 138KV'	550 -0.50272 AEPW	'TULSA POWER STATION 138KV'	77 -0.00413 -0.49859 12
AEPW	'AH-CC_ST18.0 138KV'	550 -0.50272 AEPW	'TULSA POWER STATION 138KV'	75 -0.00413 -0.49859 12
AEPW	'AH-CC_ST18.0_138KV'	550 -0.50272 AEPW	'WEATHERFORD 34KV'	148 -0.00519 -0.49753 12
AEPW	'AH-CC ST18.0 138KV'	550 -0.50272 AEPW	'WELEETKA 138KV'	70 -0.00504 -0.49768 12
AEPW	'AH-CC_ST18.0 138KV'	550 -0.50272 AEPW	'WELSH 345KV'	990 -0.01226 -0.49046 12
AEPW	'AH-CC_ST18.0 138KV'	550 -0.50272 AEPW	'WILKES 138KV'	189.1239 -0.02818 -0.47454 12
AEPW	'AH-CC_ST18.0 138KV'	550 -0.50272 AEPW	'WILKES 345KV'	286.3495 -0.01614 -0.48658 12
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'AEP-CT0613.8 161KV'	160 -0.00343 -0.35694 16
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'COGENTRIX 345KV'	300 -0.00416 -0.35621 16
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'COMANCHE 138KV'	160 -0.00553 -0.35484 16
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'COMANCHE 69KV'	63 -0.00554 -0.35483 16
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'FITZHUGH 161KV'	30.99999 -0.00241 -0.35796 16
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'FLINT CREEK 161KV'	420 -0.00346 -0.35691 16
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'L&D13 69KV'	11 -0.00278 -0.35759 16
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'NORTHEASTERN STATION 138KV'	95 -0.00386 -0.35651 16
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'NORTHEASTERN STATION 138KV'	405 -0.00386 -0.35651 16
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'NORTHEASTERN STATION 345KV'	645 -0.00384 -0.35653 16
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'OEC 345KV'	369 -0.00404 -0.35633 16
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'RIVERSIDE STATION 138KV'	495.5 -0.00417 -0.3562 16
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'SOUTHWESTERN STATION 138KV'	257 -0.00547 -0.3549 16
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'TULSA POWER STATION 138KV'	77 -0.00413 -0.35624 16
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'TULSA POWER STATION 138KV'	75 -0.00413 -0.35624 16
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'WEATHERFORD 34KV'	148 -0.00519 -0.35518 16
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	WELEETKA 138KV'	70 -0.00504 -0.35533 16
AEPW AEPW	'ARSENAL HILL 69KV' 'ARSENAL HILL 69KV'	99 -0.36037 AEPW 99 -0.36037 AEPW	'EASTMAN 138KV' 'KNOXLEE 138KV'	355 -0.0127 -0.34767 17 164 -0.00881 -0.35156 17
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'LEBROCK 345KV'	515 -0.0179 -0.34247 17
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'NARROWS 69KV'	22 -0.01482 -0.34555 17
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	PIRKEY GENERATION 138KV	475 -0.02418 -0.33619 17
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'WELSH 345KV'	990 -0.01226 -0.34811 17
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'WILKES 345KV'	286.3495 -0.01614 -0.34423 17
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	WILKES 138KV'	189.1239 -0.02818 -0.33219 18
AEPW	'AH-CC ST18.0 138KV'	550 -0.50272 AEPW	'LIEBERMAN 138KV'	73.99999 -0.21155 -0.29117 20
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'AEP-CT0613.8 161KV'	160 -0.00343 -0.20812 28
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'COGENTRIX 345KV'	300 -0.00416 -0.20739 28
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'COMANCHE 138KV'	160 -0.00553 -0.20602 28
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'COMANCHE 69KV'	63 -0.00554 -0.20601 28
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'FITZHUGH 161KV'	30.99999 -0.00241 -0.20914 28
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'FLINT CREEK 161KV'	420 -0.00346 -0.20809 28
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'L&D13 69KV'	11 -0.00278 -0.20877 28
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'NORTHEASTERN STATION 138KV'	95 -0.00386 -0.20769 28
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'NORTHEASTERN STATION 138KV'	405 -0.00386 -0.20769 28
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'NORTHEASTERN STATION 345KV'	645 -0.00384 -0.20771 28
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'OEC 345KV'	369 -0.00404 -0.20751 28
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'RIVERSIDE STATION 138KV'	495.5 -0.00417 -0.20738 28
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'SOUTHWESTERN STATION 138KV'	257 -0.00547 -0.20608 28
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'TULSA POWER STATION 138KV'	75 -0.00413 -0.20742 28
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'TULSA POWER STATION 138KV'	77 -0.00413 -0.20742 28
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'WEATHERFORD 34KV'	148 -0.00519 -0.20636 28
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'WELEETKA 138KV'	70 -0.00504 -0.20651 28
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'EASTMAN 138KV'	355 -0.0127 -0.19885 29
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'KNOXLEE 138KV'	164 -0.00881 -0.20274 29
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'WELSH 345KV'	990 -0.01226 -0.19929 29
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'LEBROCK 345KV'	515 -0.0179 -0.19365 30
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'NARROWS 69KV'	22 -0.01482 -0.19673 30
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'WILKES 345KV'	286.3495 -0.01614 -0.19541 30
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'PIRKEY GENERATION 138KV'	475 -0.02418 -0.18737 31
AEPW	'LIEBERMAN 138KV'	154 -0.21155 AEPW	'WILKES 138KV'	189.1239 -0.02818 -0.18337 32
AEPW	'ARSENAL HILL 69KV'	99 -0.36037 AEPW	'LIEBERMAN 138KV'	73.99999 -0.21155 -0.14882 39

Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified.

Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

_		Aggregate Relief							
Reservation		Amount							
1162649	4.3	4.3			1				Τ.
		Maximum		Sink Control		Maximum			Aggregate Redispatch
Source Control Area	Source		GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
MIPU	'ARIES 161KV'	295	-0.0451	MIPU	'SOUTH HARPER 161KV'	315	0.39783	-0.44293	
MIPU	'GREENWOOD 161KV'	218,4158	-0.04811	MIPU	'SOUTH HARPER 161KV'	315	0.39783	-0.44594	1
MIPU	'LAKE ROAD 161KV'	91	-0.01573	MIPU	'SOUTH HARPER 161KV'	315	0.39783	-0.41356	
MIPU	'NEVADA 69KV'	20.3	-0.01068	MIPU	'SOUTH HARPER 161KV'	315	0.39783	-0.40851	1
MIPU	'SIBLEY 161KV'	15.23874	-0.0335	MIPU	'SOUTH HARPER 161KV'	315	0.39783	-0.43133	
MIPU	'TWA 161KV'	32.1	-0.02448	MIPU	'SOUTH HARPER 161KV'	315	0.39783	-0.42231	1
MIPU	'RALPH GREEN 69KV'	73.7	0.07367	MIPU	'SOUTH HARPER 161KV'	315	0.39783	-0.32416	
KACP	'NORTHEAST 13KV'	33.16309	-0.02906	KACP	'LACYGNE UNIT 345KV'	958	0.04156	-0.07062	
KACP	'NORTHEAST 13KV'	58	-0.02906	KACP	'LACYGNE UNIT 345KV'	958	0.04156	-0.07062	
KACP	'NORTHEAST 13KV'	59	-0.02906	KACP	'LACYGNE UNIT 345KV'	958	0.04156	-0.07062	
KACP	'NORTHEAST 161KV'	58	-0.02906	KACP	'LACYGNE UNIT 345KV'	958		-0.07062	
KACP	'NORTHEAST 161KV'	58	-0.02906	KACP	'LACYGNE UNIT 345KV'	958		-0.07062	
KACP	'NORTHEAST 161KV'	58	-0.02906		'LACYGNE UNIT 345KV'	958		-0.07062	
KACP	'GRAND AVENUE 161KV'	65	-0.02871	KACP	'LACYGNE UNIT 345KV'	958		-0.07027	
KACP	'MONTROSE 161KV'	23.85394	-0.02083	KACP	'LACYGNE UNIT 345KV'	958		-0.06239	
KACP	'MARSHALL 161KV'	54.1	-0.01571	KACP	'LACYGNE UNIT 345KV'	958		-0.05727	
KACP	'NORTHEAST 13KV'	58	-0.02906	KACP	'SPEARVILLE WIND 34KV'	101	0.0113	-0.04036	10
KACP	'NORTHEAST 13KV'	59	-0.02906		'SPEARVILLE WIND 34KV'	101		-0.04036	
KACP	'NORTHEAST 161KV'	58	-0.02906	KACP	'SPEARVILLE WIND 34KV'	101		-0.04036	
KACP	'NORTHEAST 161KV'	58	-0.02906		'SPEARVILLE WIND 34KV'	101		-0.04036	
KACP	'NORTHEAST 161KV'	58	-0.02906		'SPEARVILLE WIND 34KV'	101		-0.04036	
KACP	'GRAND AVENUE 161KV'	65	-0.02871	KACP	'SPEARVILLE WIND 34KV'	101	0.0113	-0.04001	10
MIPU	'GREENWOOD 161KV'	218.4158	-0.04811		'LAKE ROAD 34KV'	92		-0.03238	
KACP	'NORTHEAST 13KV'	58	-0.02906		'PAOLA COMBUSTION TURBINES 161KV'	77		-0.03055	
KACP	'NORTHEAST 13KV'	59	-0.02906		'PAOLA COMBUSTION TURBINES 161KV'	77		-0.03055	
KACP	'NORTHEAST 161KV'	58	-0.02906		'PAOLA COMBUSTION TURBINES 161KV'	77		-0.03055	
KACP	'NORTHEAST 161KV'	58	-0.02906		'PAOLA COMBUSTION TURBINES 161KV'	77		-0.03055	
KACP	'NORTHEAST 161KV'	58	-0.02906		'PAOLA COMBUSTION TURBINES 161KV'	77		-0.03055	
KACP	'GRAND AVENUE 161KV'	65	-0.02871	KACP	'PAOLA COMBUSTION TURBINES 161KV'	77	0.00149	-0.0302	1-

Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified.

Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

 Upgrade:
 MARTIN CITY - TURNER ROAD SUBSTATION 161KV CKT 1

 Limiting Facility:
 MARTIN CITY - TURNER ROAD SUBSTATION 161KV CKT 1

 Direction:
 To--From

 Line Outage:
 59198 PECULR 7 345 59200 PHILL 7 345 1'

 Flowgate:
 5921059259 1591985920013108SP

 Date Redispatch Needed:
 Starting 2008 6/1 - 10/1 Until EOC of Upgrade

 Season Flowgate Identified:
 2008 Summer Peak

Season riowyate identilied.	2000 Sullillel Feak	
		Aggregate Relief
Reservation	Relief Amount	Amount

1162	649 4.2								Aggregate
0	0	Maximum	005	Sink Control	Ola I	Maximum	005		Redispatch
Source Control Area	Source		GSF	Area	Sink		GSF		Amount (MW)
MIPU	'GREENWOOD 161KV'	188.8042			'SOUTH HARPER 161KV'	315		-0.44606	
MIPU MIPU	'ARIES 161KV'	295 91			'SOUTH HARPER 161KV'	315		-0.44305 -0.41446	1
MIPU	'LAKE ROAD 161KV'		-0.01636		'SOUTH HARPER 161KV'	315			1
MIPU	'NEVADA 69KV'	20.3	-0.01034 -0.03357		SOUTH HARPER 161KV	315		-0.40844	
MIPU	'SIBLEY 161KV'	20.64313			SOUTH HARPER 161KV	315 315		-0.43167	1
MIPU	'TWA 161KV'	32.1	-0.02459 0.07389		SOUTH HARPER 161KV	315		-0.42269	1
KACP	'RALPH GREEN 69KV'	73.7				958		-0.32421	1
	'NORTHEAST 13KV'	36			'LACYGNE UNIT 345KV'	958			
KACP KACP	'NORTHEAST 13KV'	58	-0.02926 -0.02926		'LACYGNE UNIT 345KV' 'LACYGNE UNIT 345KV'	958		-0.07005 -0.07005	
KACP		59 58	-0.02926			958		-0.07005	
KACP	'NORTHEAST 161KV'				'LACYGNE UNIT 345KV'				
KACP	'NORTHEAST 161KV'	58	-0.02926		'LACYGNE UNIT 345KV'	958 958		-0.07005	
KACP	'NORTHEAST 161KV'	58 65			'LACYGNE UNIT 345KV'			-0.07005 -0.06971	
KACP	'GRAND AVENUE 161KV'		-0.02892		'LACYGNE UNIT 345KV'	958			
	'MONTROSE 161KV'	24.86508	-0.02053		'LACYGNE UNIT 345KV'	958		-0.06132	
KACP KACP	'MARSHALL 161KV'	54.1	-0.01573		'LACYGNE UNIT 345KV' 'PAOLA COMBUSTION TURBINES 161KV'	958 77		-0.05652 -0.04167	10
	'NORTHEAST 13KV'	36					0.0.2		
KACP	'NORTHEAST 13KV'	58			'PAOLA COMBUSTION TURBINES 161KV'	77		-0.04167	10
KACP	'NORTHEAST 13KV'	59			'PAOLA COMBUSTION TURBINES 161KV'	77		-0.04167	10
KACP	'NORTHEAST 161KV'	58			'PAOLA COMBUSTION TURBINES 161KV'	77			10
KACP	'NORTHEAST 161KV'	58			'PAOLA COMBUSTION TURBINES 161KV'	77		-0.04167	10
KACP	'NORTHEAST 161KV'	58	-0.02926		'PAOLA COMBUSTION TURBINES 161KV'	77		-0.04167	
KACP	'GRAND AVENUE 161KV'	65	-0.02892		'PAOLA COMBUSTION TURBINES 161KV'	77		-0.04133	10
KACP	'GRAND AVENUE 161KV'	65	-0.02892		'SPEARVILLE WIND 34KV'	101	0.01116		
KACP	'NORTHEAST 13KV'	36	-0.02926		'SPEARVILLE WIND 34KV'	101	0.01116		
KACP	'NORTHEAST 13KV'	58			'SPEARVILLE WIND 34KV'	101			
KACP	'NORTHEAST 13KV'	59			'SPEARVILLE WIND 34KV'	101	0.01116		
KACP	'NORTHEAST 161KV'	58			'SPEARVILLE WIND 34KV'	101			
KACP	'NORTHEAST 161KV'	58			'SPEARVILLE WIND 34KV'	101		-0.04042	10
KACP	'NORTHEAST 161KV'	58			'SPEARVILLE WIND 34KV'	101	0.01116	-0.04042	
MIPU	'GREENWOOD 161KV'	188.8042			'LAKE ROAD 34KV'	92	-0.01636	-0.0316	13

Maximum Decrement and Maximum Increme Factor = Source GSF - Sink GSF Redispatch Amount = Relief Amount / Factor num Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified.

Reservation		Aggregate Relief Amount
1162649	4.2	4.2

11626	649 4.2	4.2							
		Maximum		Sink Control		Maximum			Aggregate Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF		Amount (MW)
MIPU	'GREENWOOD 161KV'	247.4621			'SOUTH HARPER 161KV'	315		-0.44612	
MIPU	'ARIES 161KV'	595			'SOUTH HARPER 161KV'	315		-0.44311	
MIPU	'LAKE ROAD 161KV'	91			'SOUTH HARPER 161KV'	315		-0.41379	
MIPU	'NEVADA 69KV'	20.3			'SOUTH HARPER 161KV'	315		-0.40866	
MIPU	'SIBLEY 161KV'	13.3699			'SOUTH HARPER 161KV'	315		-0.43159	
MIPU	'TWA 161KV'	32.1	-0.02461		'SOUTH HARPER 161KV'	315		-0.42252	
MIPU	'RALPH GREEN 69KV'	73.7			'SOUTH HARPER 161KV'	315		-0.32431	
KACP	'HAWTHORN 161KV'	423			'LACYGNE UNIT 345KV'	962		-0.07361	
KACP	'NORTHEAST 13KV'	56			'LACYGNE UNIT 345KV'	962			
KACP	'NORTHEAST 13KV'	56			'LACYGNE UNIT 345KV'	962		-0.07105	
KACP	'NORTHEAST 13KV'	58	-0.02939	KACP	'LACYGNE UNIT 345KV'	962	0.04166	-0.07105	5
KACP	'NORTHEAST 13KV'	59	-0.02939	KACP	'LACYGNE UNIT 345KV'	962	0.04166	-0.07105	5
KACP	'NORTHEAST 161KV'	55	-0.02939	KACP	'LACYGNE UNIT 345KV'	962	0.04166	-0.07105	5
KACP	'NORTHEAST 161KV'	58	-0.02939	KACP	'LACYGNE UNIT 345KV'	962	0.04166	-0.07105	5
KACP	'NORTHEAST 161KV'	58	-0.02939	KACP	'LACYGNE UNIT 345KV'	962	0.04166	-0.07105	5
KACP	'NORTHEAST 161KV'	58	-0.02939	KACP	'LACYGNE UNIT 345KV'	962	0.04166	-0.07105	5
KACP	'GRAND AVENUE 161KV'	65	-0.02898	KACP	'LACYGNE UNIT 345KV'	962	0.04166	-0.07064	6
KACP	'MONTROSE 161KV'	125.9585	-0.02094	KACP	'LACYGNE UNIT 345KV'	962	0.04166	-0.0626	6
KACP	'CITY OF HIGGINSVILLE 69KV'	36	-0.02043	KACP	'LACYGNE UNIT 345KV'	962	0.04166	-0.06209	6
KACP	'MARSHALL 161KV'	54.1	-0.01608	KACP	'LACYGNE UNIT 345KV'	962	0.04166	-0.05774	7
KACP	'BULL CREEK 161KV'	308	-0.00395	KACP	'LACYGNE UNIT 345KV'	962	0.04166	-0.04561	9
KACP	'HAWTHORN 161KV'	423	-0.03195	KACP	'SPEARVILLE WIND 34KV'	101	0.01139	-0.04334	
KACP	'NORTHEAST 13KV'	56	-0.02939	KACP	'SPEARVILLE WIND 34KV'	101	0.01139	-0.04078	10
KACP	'NORTHEAST 13KV'	56	-0.02939	KACP	'SPEARVILLE WIND 34KV'	101	0.01139	-0.04078	10
KACP	'NORTHEAST 13KV'	58	-0.02939	KACP	'SPEARVILLE WIND 34KV'	101	0.01139	-0.04078	10
KACP	'NORTHEAST 13KV'	59	-0.02939	KACP	'SPEARVILLE WIND 34KV'	101	0.01139	-0.04078	10
KACP	'NORTHEAST 161KV'	55	-0.02939	KACP	'SPEARVILLE WIND 34KV'	101	0.01139	-0.04078	10
KACP	'NORTHEAST 161KV'	58	-0.02939	KACP	'SPEARVILLE WIND 34KV'	101	0.01139	-0.04078	10
KACP	'NORTHEAST 161KV'	58	-0.02939	KACP	'SPEARVILLE WIND 34KV'	101	0.01139	-0.04078	10
KACP	'NORTHEAST 161KV'	58	-0.02939	KACP	'SPEARVILLE WIND 34KV'	101	0.01139	-0.04078	10
KACP	'GRAND AVENUE 161KV'	65	-0.02898	KACP	'SPEARVILLE WIND 34KV'	101	0.01139	-0.04037	10
KACP	'PAOLA COMBUSTION TURBINES 161KV'	77	0.00156	KACP	'LACYGNE UNIT 345KV'	962	0.04166	-0.0401	
MIPU	'GREENWOOD 161KV'	247.4621	-0.04821	MIPU	'LAKE ROAD 34KV'	92	-0.01588	-0.03233	
KACP	'MONTROSE 161KV'	125.9585	-0.02094	KACP	'SPEARVILLE WIND 34KV'	101	0.01139	-0.03233	13

MAXIMUM Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF
Redispatch Amount = Relief Amount / Factor

Upgrade: Limiting Facility: Direction: Line Outage: Flowgate: MEDICINE LODGE - SUN CITY 115KV CKT 1
MEDICINE LODGE - SUN CITY 115KV CKT 1
To->From
'58779 MULGREN6 230 58795 SPEARVL6 230 1'
58773587971587795879511107SH
6/1 - 10/1 Until EOC of Upgrade
2007 Summer Shoulder

Date Redispatch Needed: Season Flowgate Identified: 2007 Summer Shoulder

Aggregate Relief Amount

116264	13.2	13.2							
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source		GSF	Area	Sink			Factor	Amount (MW)
WEPL	'HARPER 138KV'	17.21	-0.12651		'GRAY COUNTY WIND FARM 115KV'	63	0.23705	-0.36356	
WEPL	'HARPER 138KV'	17.21	-0.12651		'JUDSON LARGE 115KV'	115.8174		-0.36522	
WEPL	'RUSSELL 115KV'	27.9	-0.02558		'GRAY COUNTY WIND FARM 115KV'	63	0.23705	-0.26263	
WEPL	'RUSSELL 115KV'	27.9	-0.02558		'JUDSON LARGE 115KV'	115.8174	0.23871	-0.26429	
WEPL	'CLIFTON 115KV'	23.50055	-0.00909		'JUDSON LARGE 115KV'	115.8174		-0.2478	
WEPL	'CLIFTON 115KV'	23.50055	-0.00909		'GRAY COUNTY WIND FARM 115KV'	63		-0.24614	
KACP	'BULL CREEK 161KV'	171.8679			'SPEARVILLE WIND 34KV'	101	0.12671	-0.13151	
KACP	'PAOLA COMBUSTION TURBINES 161KV'	77			'SPEARVILLE WIND 34KV'	101	0.12671	-0.13147	
KACP	'GRAND AVENUE 161KV'	65			'SPEARVILLE WIND 34KV'	101	0.12671	-0.13034	
KACP	'NORTHEAST 13KV'	56			'SPEARVILLE WIND 34KV'	101	0.12671	-0.1303	
KACP	'NORTHEAST 13KV'	56			'SPEARVILLE WIND 34KV'	101	0.12671	-0.1303	
KACP	'NORTHEAST 13KV'	58			'SPEARVILLE WIND 34KV'	101	0.12671	-0.1303	
KACP	'NORTHEAST 13KV'	59	-0.00359		'SPEARVILLE WIND 34KV'	101	0.12671	-0.1303	
KACP	'NORTHEAST 161KV'	55	-0.00359		'SPEARVILLE WIND 34KV'	101	0.12671	-0.1303	
KACP	'NORTHEAST 161KV'	58	-0.00359		'SPEARVILLE WIND 34KV'	101	0.12671	-0.1303	
KACP	'NORTHEAST 161KV'	58	-0.00359		'SPEARVILLE WIND 34KV'	101	0.12671	-0.1303	
KACP	'NORTHEAST 161KV'	58	-0.00359		'SPEARVILLE WIND 34KV'	101	0.12671	-0.1303	
KACP	'CITY OF HIGGINSVILLE 69KV'	36			'SPEARVILLE WIND 34KV'	101	0.12671	-0.12964	
KACP	'MARSHALL 161KV'	54.1	-0.00187	KACP	'SPEARVILLE WIND 34KV'	101	0.12671	-0.12858	
WEPL	'CIMARRON RIVER 115KV'	72	0.14609	WEPL	'JUDSON LARGE 115KV'	115.8174	0.23871	-0.09262	143
WEPL	'CIMARRON RIVER 115KV'	72	0.14609	WEPL	'GRAY COUNTY WIND FARM 115KV'	63	0.23705	-0.09096	145
WERE	'PAWNEE 115KV'	999	-0.09134	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	-0.00663	-0.08471	
WERE	'RICE 115KV'	999	-0.09134	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	-0.00663	-0.08471	156
WERE	'PAWNEE 115KV'	999	-0.09134	WERE	'LAWRENCE ENERGY CENTER 230KV'	219.1565	-0.00701	-0.08433	157
WERE	'PAWNEE 115KV'	999	-0.09134	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	-0.00734	-0.084	157
WERE	'RICE 115KV'	999	-0.09134	WERE	'LAWRENCE ENERGY CENTER 230KV'	219.1565	-0.00701	-0.08433	157
WERE	'RICE 115KV'	999	-0.09134	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	-0.00734	-0.084	157
WERE	'PAWNEE 115KV'	999	-0.09134	WERE	'JEFFREY ENERGY CENTER 230KV'	470	-0.00863	-0.08271	160
WERE	'PAWNEE 115KV'	999	-0.09134	WERE	'JEFFREY ENERGY CENTER 345KV'	940	-0.00856	-0.08278	160
WERE	'RICE 115KV'	999	-0.09134	WERE	'JEFFREY ENERGY CENTER 230KV'	470	-0.00863	-0.08271	160
WERE	'RICE 115KV'	999	-0.09134	WERE	'JEFFREY ENERGY CENTER 345KV'	940	-0.00856	-0.08278	160
WERE	'PAWNEE 115KV'	999	-0.09134		'EVANS ENERGY CENTER 138KV'	340		-0.07574	
WERE	'RICE 115KV'	999	-0.09134		'EVANS ENERGY CENTER 138KV'	340		-0.07574	
WERE	'PAWNEE 115KV'	999	-0.09134		'BPU - CITY OF MCPHERSON 115KV'	127.7656	-0.02186	-0.06948	
WERE	'RICE 115KV'	999			'BPU - CITY OF MCPHERSON 115KV'	127.7656		-0.06948	
WERE	'PAWNEE 115KV'	999			'GILL ENERGY CENTER 138KV'	155		-0.06651	
WERE	'RICE 115KV'	999	-0.09134		'GILL ENERGY CENTER 138KV'	155		-0.06651	
WERE	'PAWNEE 115KV'	999	-0.09134		'HUTCHINSON ENERGY CENTER 115KV'	120		-0.06349	
WERE	'RICE 115KV'	999			'HUTCHINSON ENERGY CENTER 115KV'	120		-0.06349	

| Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

Upgrade: Limiting Facility: Direction: Line Outage: Flowgate: Date Redispatch MEDICINE LODGE - SUN CITY 115KV CKT 1 MEDICINE LODGE - SUN CITY 115KV CKT 1 To-From '58779 MULCREN6 230 58795 SPEARVL6 230 1' 5877587971587795879511107SP

Date Redispatch Needed:	6/1/07 - 10/1/07			
Season Flowgate Identified:	2007 Summer Peak			
			Aggregate Relief	
Reservation	Relief Amount		Amount	
1162649		13.2	13.2	
			Maximum	

Reservation 1162	Relier Amount	13.2 13.2	+						
11021	043								Aggregate
	_	Maximum		Sink Control		Maximum		_	Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink			Factor	Amount (MW)
WEPL	'HARPER 138KV'	17.21			'GRAY COUNTY WIND FARM 115KV'	63			
WEPL	'HARPER 138KV'	17.21	-0.12651		'JUDSON LARGE 115KV'	116.5146		-0.36522	
WEPL	'HARPER 138KV'	17.21	-0.12651		'CIMARRON RIVER 115KV'	32.22301	0.14609	-0.2726	
WEPL	'RUSSELL 115KV'	27.9			'GRAY COUNTY WIND FARM 115KV'	63			
WEPL	'RUSSELL 115KV'	27.9			'JUDSON LARGE 115KV'	116.5146		-0.26429	
WEPL	'RUSSELL 115KV'	27.9			'CIMARRON RIVER 115KV'	32.22301	0.14609		
KACP	'GRAND AVENUE 161KV'	65			'SPEARVILLE WIND 34KV'	101	0.12671	-0.13034	
KACP	'NORTHEAST 13KV'	59			'SPEARVILLE WIND 34KV'	101	0.12671	-0.1303	
KACP	'NORTHEAST 161KV'	58			'SPEARVILLE WIND 34KV'	101	0.12671	-0.1303	
KACP	'NORTHEAST 161KV'	58			'SPEARVILLE WIND 34KV'	101	0.12671	-0.1303	
KACP	'MARSHALL 161KV'	54.1	-0.00187	KACP	'SPEARVILLE WIND 34KV'	101	0.12671	-0.12858	10
WERE	'PAWNEE 115KV'	999	-0.09134	WERE	'CHANUTE 69KV'	56.723	-0.00543	-0.08591	15
WERE	'RICE 115KV'	999			'CHANUTE 69KV'	56.723		-0.08591	15
WERE	'PAWNEE 115KV'	999	-0.09134	WERE	'LAWRENCE ENERGY CENTER 115KV'	105	-0.00663	-0.08471	15
WERE	'RICE 115KV'	999	-0.09134	WERE	'LAWRENCE ENERGY CENTER 115KV'	105	-0.00663	-0.08471	15
WERE	'PAWNEE 115KV'	999	-0.09134	WERE	'LAWRENCE ENERGY CENTER 230KV'	229.2843	-0.00701	-0.08433	15
WERE	'PAWNEE 115KV'	999	-0.09134	WERE	'TECUMSEH ENERGY CENTER 115KV'	158	-0.00734	-0.084	15
WERE	'RICE 115KV'	999	-0.09134	WERE	'LAWRENCE ENERGY CENTER 230KV'	229.2843	-0.00701	-0.08433	
WERE	'RICE 115KV'	999	-0.09134	WERE	'TECUMSEH ENERGY CENTER 115KV'	158	-0.00734	-0.084	15
WERE	'PAWNEE 115KV'	999	-0.09134	WERE	'JEFFREY ENERGY CENTER 230KV'	470	-0.00863	-0.08271	16
WERE	'PAWNEE 115KV'	999	-0.09134	WERE	'JEFFREY ENERGY CENTER 345KV'	940	-0.00856	-0.08278	16
WERE	'RICE 115KV'	999	-0.09134	WERE	'JEFFREY ENERGY CENTER 230KV'	470	-0.00863	-0.08271	16
WERE	'RICE 115KV'	999	-0.09134	WERE	'JEFFREY ENERGY CENTER 345KV'	940	-0.00856	-0.08278	16
WERE	'PAWNEE 115KV'	999	-0.09134	WERE	'EVANS ENERGY CENTER 138KV'	565	-0.0156	-0.07574	17
WERE	'RICE 115KV'	999	-0.09134	WERE	'EVANS ENERGY CENTER 138KV'	565	-0.0156	-0.07574	17
WERE	'PAWNEE 115KV'	999	-0.09134	WERE	'BPU - CITY OF MCPHERSON 115KV'	152,9351	-0.02186	-0.06948	19
WERE	'RICE 115KV'	999	-0.09134	WERE	'BPU - CITY OF MCPHERSON 115KV'	152,9351	-0.02186	-0.06948	1:
WERE	'PAWNEE 115KV'	999			'GILL ENERGY CENTER 69KV'	75			19
WERE	'RICE 115KV'	999			'GILL ENERGY CENTER 69KV'	75			19
WERE	'PAWNEE 115KV'	999			'GILL ENERGY CENTER 138KV'	171	-0.02483	-0.06651	19
WERE	'RICE 115KV'	999			'GILL ENERGY CENTER 138KV'	171	-0.02483	-0.06651	19
WERE	'PAWNEE 115KV'	999			'HUTCHINSON ENERGY CENTER 115KV'	210		-0.06349	
WERE	'RICE 115KV'	999			'HUTCHINSON ENERGY CENTER 115KV'	210		-0.06349	

Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified.

Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

Upgrade: Limiting Facility: Direction: Line Outage: Flowgate: Date Redispatch Needed: ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER Displacement ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1 From->TO ROSE HILL (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1 ROSEHL1X2741ROSESEHL3X7412207SP 6/107-10/107 2007 Summer Peak

Season Flowgate Identified:

Aggregate Relief Amount Reservation Relief Amount Aggregate Redispatch Sink Control Maximum Source Control Area WERE WERE Source 'CITY OF MULVANE 69KV' 'CITY OF MULVANE 69KV' ncrement(MW) Decrement(MW) Amount (MW) 7.502 -0.28341 WERE 7.502 -0.28341 WERE 'CITY OF BURLINGTON 69KV'
'COFFEY COUNTY NO. 2 SHARPE 69KV'

luene	LOUTE OF LUMBER D. AND C.			ene	LOOSEST COUNTY NO A CHARDS AND				
WERE	'CITY OF WINFIELD 69KV'	40			'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.045		25
WERE	'GILL ENERGY CENTER 69KV'	118			'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.045	-0.25603	25
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2085		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.045	-0.2535	26
WERE	'GETTY 69KV'	35	-0.18751		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.045	-0.23251	28
WERE	'CITY OF WINFIELD 69KV'	40	-0.21371	WERE	'CITY OF IOLA 69KV'	24.267	-0.00501	-0.2087	31
WERE	'CITY OF WINFIELD 69KV'	40		WERE	'JEFFREY ENERGY CENTER 230KV'	470	-0.00519	-0.20852	31
WERE	'CITY OF WINFIELD 69KV'	40	-0.21371		'JEFFREY ENERGY CENTER 345KV'	940	-0.00487	-0.20884	31
WERE	'CITY OF WINFIELD 69KV'	40	-0.21371	WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00262	-0.21109	31
WERE	'CITY OF WINFIELD 69KV'	40	-0.21371	WERE	'LAWRENCE ENERGY CENTER 230KV'	235.4582	-0.00316	-0.21055	31
WERE	'CITY OF WINFIELD 69KV'	40	-0.21371	WERE	'TECUMSEH ENERGY CENTER 115KV'	122.7222	-0.00749	-0.20622	31
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2085	WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00262	-0.20588	31
WERE	'GILL ENERGY CENTER 69KV'	118	-0.21103		'CITY OF IOLA 69KV'	24.267		-0.20602	31
WERE	'GILL ENERGY CENTER 69KV'	118	-0.21103		'JEFFREY ENERGY CENTER 230KV'	470	-0.00519	-0.20584	31
WERE	'GILL ENERGY CENTER 69KV'	118	-0.21103		'JEFFREY ENERGY CENTER 345KV'	940		-0.20616	31
WERE	'GILL ENERGY CENTER 69KV'	118	-0.21103		'LAWRENCE ENERGY CENTER 115KV'	85		-0.20841	31
WERE	'GILL ENERGY CENTER 69KV'	118	-0.21103		'LAWRENCE ENERGY CENTER 230KV'	235.4582	-0.00316	-0.20787	31
WERE	'CITY OF WINFIELD 69KV'	40	-0.21371		'ABILENE ENERGY CENTER 115KV'	40		-0.20431	32
WERE	'CITY OF WINFIELD 69KV'	40			BPU - CITY OF MCPHERSON 115KV	135		-0.19965	32
WERE	'CITY OF WINFIELD 69KV'	40			'CHANUTE 69KV'	56.723		-0.20266	32
WERE	'CITY OF WINFIELD 69KV'	40	-0.21371		'CITY OF ERIE 69KV'	23.27	-0.01105	-0.20266	32
WERE	'CITY OF WINFIELD 69KV'	40	-0.21371		'CLAY CENTER JUNCTION 115KV'	22.939	-0.00847	-0.20200	32
		17.99999	-0.21371					-0.20324	
WERE	'GILL ENERGY CENTER 138KV'			WERE	'CITY OF IOLA 69KV' 'CLAY CENTER JUNCTION 115KV'	24.267	-0.00501		32 32
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2085			22.939 470	-0.00847	-0.20003	
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2085		'JEFFREY ENERGY CENTER 230KV'		-0.00519	-0.20331	32
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2085		'JEFFREY ENERGY CENTER 345KV'	940	-0.00487	-0.20363	32
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2085		'LAWRENCE ENERGY CENTER 230KV'	235.4582	-0.00316	-0.20534	32
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2085		'TECUMSEH ENERGY CENTER 115KV'	122.7222		-0.20101	32
WERE	'GILL ENERGY CENTER 69KV'	118	-0.21103		'ABILENE ENERGY CENTER 115KV'	40	-0.0094	-0.20163	32
WERE	'GILL ENERGY CENTER 69KV'	118	-0.21103		'CHANUTE 69KV'	56.723	-0.01105	-0.19998	32
WERE	'GILL ENERGY CENTER 69KV'	118	-0.21103		'CITY OF ERIE 69KV'	23.27	-0.01105	-0.19998	32 32
WERE	'GILL ENERGY CENTER 69KV'	118	-0.21103		'CLAY CENTER JUNCTION 115KV'	22.939	-0.00847	-0.20256	32
WERE	'GILL ENERGY CENTER 69KV'	118	-0.21103		'TECUMSEH ENERGY CENTER 115KV'	122.7222	-0.00749	-0.20354	32
WERE	'CITY OF WINFIELD 69KV'	40	-0.21371		'HUTCHINSON ENERGY CENTER 115KV'	120		-0.19678	33
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2085	WERE	'ABILENE ENERGY CENTER 115KV'	40	-0.0094	-0.1991	33
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2085		'BPU - CITY OF MCPHERSON 115KV'	135	-0.01406	-0.19444	33
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2085		'CHANUTE 69KV'	56.723		-0.19745	33
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2085		'CITY OF ERIE 69KV'	23.27	-0.01105	-0.19745	33
WERE	'GILL ENERGY CENTER 69KV'	118	-0.21103		'BPU - CITY OF MCPHERSON 115KV'	135	-0.01406	-0.19697	33
WERE	'GILL ENERGY CENTER 69KV'	118	-0.21103		'HUTCHINSON ENERGY CENTER 115KV'	120	-0.01693	-0.1941	33
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2085		'HUTCHINSON ENERGY CENTER 115KV'	120	-0.01693	-0.19157	34
WERE	'GETTY 69KV'	35	-0.18751		'CITY OF IOLA 69KV'	24.267		-0.1825	35
WERE	'GETTY 69KV'	35			'JEFFREY ENERGY CENTER 230KV'	470	-0.00519	-0.18232	35
WERE	'GETTY 69KV'	35	-0.18751		'JEFFREY ENERGY CENTER 345KV'	940		-0.18264	35
WERE	'GETTY 69KV'	35				85	-0.00467	-0.18489	
	'GETTY 69KV'				'LAWRENCE ENERGY CENTER 115KV'				35
WERE		35	-0.18751		'LAWRENCE ENERGY CENTER 230KV'	235.4582	-0.00316	-0.18435	35
WERE	'GETTY 69KV'	35	-0.18751		'ABILENE ENERGY CENTER 115KV'	40	-0.0094	-0.17811	36
WERE	'GETTY 69KV'	35	-0.18751		'CLAY CENTER JUNCTION 115KV'	22.939	-0.00847	-0.17904	36
WERE	'GETTY 69KV'	35	-0.18751	WERE	'TECUMSEH ENERGY CENTER 115KV'	122.7222		-0.18002	36
WERE	'GETTY 69KV'	35	-0.18751		'BPU - CITY OF MCPHERSON 115KV'	135	-0.01406	-0.17345	37
WERE	'GETTY 69KV'	35			'CHANUTE 69KV'	56.723		-0.17646	37
WERE	'GETTY 69KV'	35	-0.18751		'CITY OF ERIE 69KV'	23.27		-0.17646	37
WERE	'GETTY 69KV'	35			'HUTCHINSON ENERGY CENTER 115KV'	120		-0.17058	38
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09828	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.045	-0.14328	45
WERE	'EVANS N4 138 16KV'	360	-0.09763	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.045	-0.14263	45
WEPL	'HARPER 138KV'	17.21	-0.15495	WEPL	'CLIFTON 115KV'	42.84259	-0.00958	-0.14537	45
WEPL	'HARPER 138KV'	17.21	-0.15495	WEPL	'A. M. MULLERGREN GENERATOR 115KV'	63	-0.02307	-0.13188	49
WERE	'CITY OF WINFIELD 69KV'	40	-0.21371	WERE	'EVANS ENERGY CENTER 138KV'	340	-0.09828	-0.11543	56
WERE	'GILL ENERGY CENTER 69KV'	118	-0.21103	WERE	'EVANS ENERGY CENTER 138KV'	340	-0.09828	-0.11275	57
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09828	WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00262	-0.09566	68
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09828	WERE	'LAWRENCE ENERGY CENTER 230KV'	235.4582	-0.00316	-0.09512	68
WERE	'EVANS N4 138 16KV'	360	-0.09763		'LAWRENCE ENERGY CENTER 115KV'	85		-0.09501	68
WERE	'EVANS N4 138 16KV'	360	-0.09763		'LAWRENCE ENERGY CENTER 230KV'	235.4582	-0.00316	-0.09447	68
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09828		'CITY OF IOLA 69KV'	24.267	-0.00501	-0.09327	69
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09828		'JEFFREY ENERGY CENTER 345KV'	940		-0.09341	69
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09828		'JEFFREY ENERGY CENTER 230KV'	470		-0.09309	70
WERE	'EVANS N4 138 16KV'	360	-0.09763		'CITY OF IOLA 69KV'	24.267	-0.00501	-0.09262	70
WERE	'EVANS N4 138 16KV'	360	-0.09763		'JEFFREY ENERGY CENTER 230KV'	470		-0.09244	70
WERE	'EVANS N4 138 16KV'	360	-0.09763		'JEFFREY ENERGY CENTER 345KV'	940		-0.09276	70
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09828		TECUMSEH ENERGY CENTER 115KV'	122.7222		-0.09079	71
WERE	'EVANS N4 138 16KV'	360	-0.09763		TECUMSEH ENERGY CENTER 115KV	122.7222	-0.00749	-0.09014	72
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09828		'ABILENE ENERGY CENTER 115KV'	40	-0.0094	-0.08888	73
WERE	'EVANS N4 138 16KV'	360	-0.09763		'ABILENE ENERGY CENTER 115KV'	40	-0.0094	-0.08823	73
WERE	'GETTY 69KV'	35	-0.09763		'EVANS ENERGY CENTER 138KV'	340		-0.08923	73
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.18751		'CHANUTE 69KV'	56.723		-0.08723	74
WERE	'EVANS N4 138 16KV'	360	-0.09828		'CHANUTE 69KV'	56.723		-0.08658	75
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09763		BPU - CITY OF MCPHERSON 115KV	135	-0.01105	-0.08422	75
WERE		360			BPU - CITY OF MCPHERSON 115KV			-0.08422	
EMDE	'EVANS N4 138 16KV'	189.4348	-0.09763 0.00674	TALLE	ELK RIVER 345KV	135 150		-0.08357	77 77
	'LARUSSEL 161KV'								
EMDE	'RIVERTON 161KV'	216		EMDE	'ELK RIVER 345KV'	150		-0.08334	78
EMDE	'RIVERTON 161KV'	34	0.00776		'ELK RIVER 345KV'	150			78
EMDE	STATE LINE 161KV	103	0.00732		'ELK RIVER 345KV'	150			78
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09828		'HUTCHINSON ENERGY CENTER 115KV'	120		-0.08135	80
WERE	'EVANS N4 138 16KV'	360	-0.09763		'HUTCHINSON ENERGY CENTER 115KV'	120		-0.0807	80
WERE	'PAWNEE 115KV'	999	-0.04114		'LAWRENCE ENERGY CENTER 115KV'	85		-0.03852	168
WERE	'RICE 115KV'	999	-0.04114		'LAWRENCE ENERGY CENTER 115KV'	85			168
WERE	'PAWNEE 115KV'	999	-0.04114	WERE	'LAWRENCE ENERGY CENTER 230KV'	235.4582		-0.03798	170
WERE	'RICE 115KV'	999	-0.04114		'LAWRENCE ENERGY CENTER 230KV'	235.4582	-0.00316	-0.03798	170
WERE	'PAWNEE 115KV'	999	-0.04114		'JEFFREY ENERGY CENTER 345KV'	940		-0.03627	178
WERE	'RICE 115KV'	999	-0.04114	WERE	'JEFFREY ENERGY CENTER 345KV'	940	-0.00487	-0.03627	178
WERE	'PAWNEE 115KV'	999	-0.04114	WERE	'JEFFREY ENERGY CENTER 230KV'	470		-0.03595	180
WERE	'RICE 115KV'	999	-0.04114	WERE	'JEFFREY ENERGY CENTER 230KV'	470	-0.00519	-0.03595	180
WERE	'PAWNEE 115KV'	999	-0.04114		'TECUMSEH ENERGY CENTER 115KV'	122.7222		-0.03365	192
WERE	'RICE 115KV'	999			'TECUMSEH ENERGY CENTER 115KV'	122.7222	-0.00749		192
	aximum Increment were determine from the Source and								

WERE | RICE 115KV | 999 | -0.04114|WERE | TECUMSEH ENERGY CENTER Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF Redispatch Amount = Relief Amount / Factor

Upgrade:
Limiting Facility:
Direction:
Limourage:
ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER Displacement
Direction:
From->T0
ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1
From->T0
ROSEHLIX (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1
ROSEHLIX (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1
ROSEHL1X2741ROSESEHL3X7414206SP
Starting 2008 601 - 10/1 Until ECC of Upgrade
2008 Summer Peak

[Aggregate Relief]

Aggregate Relief Amount Relief Amount

									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	'CITY OF WINFIELD 69KV'	40	-0.21374	WERE	'CLR_3 .575 34KV'	100	0.09039	-0.30413	84
WERE	'GILL ENERGY CENTER 69KV'	118	-0.21109	WERE	'CLR 3 575 34KV'	100	0.09039	-0.30148	85

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

WEDE	IOSTER / BOLG #	05 0.44		LOUD & FEE CHAIR	100	0.00000		
WERE	'GETTY 69KV'		3758 WERE	'CLR_3 .575 34KV'	100	0.09039	-0.27797	92
WERE	'GILL ENERGY CENTER 69KV'		1109 WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00281	-0.20828	123
WERE	'GILL ENERGY CENTER 69KV'		1109 WERE	'LAWRENCE ENERGY CENTER 230KV'	264.507	-0.00335	-0.20774	123
WERE	'GILL ENERGY CENTER 69KV'		1109 WERE	'JEFFREY ENERGY CENTER 230KV'	494	-0.00545	-0.20564	124
WERE	'GILL ENERGY CENTER 69KV'		1109 WERE	'JEFFREY ENERGY CENTER 345KV'	982	-0.00513	-0.20596	124
WERE	'GILL ENERGY CENTER 69KV'		1109 WERE	'LANG 7 345 345KV'	310	-0.00846	-0.20263	126
WERE	'GILL ENERGY CENTER 69KV'		1109 WERE	'TECUMSEH ENERGY CENTER 115KV'	128	-0.00769	-0.2034	126
WERE	'GILL ENERGY CENTER 69KV'		1109 WERE	'CHANUTE 69KV'	55.637	-0.01078	-0.20031	127
WERE	'GILL ENERGY CENTER 69KV'		1109 WERE	'SMOKEY HILLS 34KV'	51	-0.01294	-0.19815	129
WERE	'GILL ENERGY CENTER 69KV'	118 -0.2	1109 WERE	'BPU - CITY OF MCPHERSON 115KV'	135	-0.01411	-0.19698	130
WERE	'GILL ENERGY CENTER 69KV'	118 -0.2	1109 WERE	'HUTCHINSON ENERGY CENTER 115KV'	120	-0.01678	-0.19431	131
WERE	'GILL ENERGY CENTER 69KV'	118 -0.2	1109 WERE	'KNOLL 3 115 115KV'	75	-0.01696	-0.19413	132
WERE	'EVANS ENERGY CENTER 138KV'	421.6074 -0.09	9836 WERE	'CLR_3 .575 34KV'	100	0.09039	-0.18875	135
WERE	'EVANS N4 138 16KV'	360 -0.09	9771 WERE	'CLR 3 .575 34KV'	100	0.09039	-0.1881	136
WERE	'PAWNEE 115KV'	999 -0.04	1078 WERE	'CLR 3 .575 34KV'	100	0.09039	-0.13117	195
WERE	'RICE 115KV'	999 -0.04	1078 WERE	'CLR 3 .575 34KV'	100	0.09039	-0.13117	195
WERE	'GILL ENERGY CENTER 69KV'		1109 WERE	'EVANS ENERGY CENTER 138KV'	355.3926	-0.09836	-0.11273	227
WERE	'HUTCHINSON ENERGY CENTER 115KV'		1678 WERE	'CLR 3 .575 34KV'	100	0.09039	-0.10717	238
WERE	'LANG 7 345 345KV'		0846 WERE	'CLR 3 .575 34KV'	100	0.09039	-0.09885	258
WERE	'EVANS ENERGY CENTER 138KV'		9836 WERE	'LAWRENCE ENERGY CENTER 230KV'	264.507	-0.00335	-0.09501	269
WERE	'EVANS N4 138 16KV'		9771 WERE	'LAWRENCE ENERGY CENTER 230KV'	264.507	-0.00335	-0.09436	271
WERE	'EVANS ENERGY CENTER 138KV'		9836 WERE	'JEFFREY ENERGY CENTER 345KV'	982	-0.00513	-0.09323	274
WERE	'EVANS ENERGY CENTER 138KV'		9836 WERE	'JEFFREY ENERGY CENTER 230KV'	494	-0.00545	-0.09291	275
WERE	'EVANS N4 138 16KV'		9771 WERE	'JEFFREY ENERGY CENTER 345KV'	982	-0.00513	-0.09258	276
WERE	'EVANS N4 138 16KV'		771 WERE	'JEFFREY ENERGY CENTER 230KV'	494	-0.00545	-0.09226	277
WERE	'EVANS ENERGY CENTER 138KV'		9836 WERE	'TECUMSEH ENERGY CENTER 115KV'	128	-0.00769	-0.09067	282
WERE	'EVANS ENERGY CENTER 138KV'		9836 WERE	'LANG 7 345 345KV'	310	-0.00846	-0.0899	284
WERE	'EVANS N4 138 16KV'		9771 WERE	'TECUMSEH ENERGY CENTER 115KV'	128	-0.00769	-0.09002	284
WERE	'EVANS N4 138 16KV'		9771 WERE	'LANG 7 345 345KV'	310	-0.00846	-0.08925	286
WERE	'EVANS ENERGY CENTER 138KV'		9836 WERE	'BPU - CITY OF MCPHERSON 115KV'	135	-0.01411	-0.08425	303
WERE	'EVANS N4 138 16KV'		9771 WERE	'BPU - CITY OF MCPHERSON 115KV'	135	-0.01411	-0.0836	305
EMDE	'LARUSSEL 161KV'		0686 EMDE	'ELK RIVER 345KV'	150	0.09039	-0.08353	306
EMDE	'RIVERTON 161KV'		0724 EMDE	'ELK RIVER 345KV'	150	0.09039	-0.08315	307
EMDE	'STATE LINE 161KV'		0746 EMDE	'ELK RIVER 345KV'	150	0.09039	-0.08293	308
WERE	'EVANS ENERGY CENTER 138KV'		9836 WERE	'HUTCHINSON ENERGY CENTER 115KV'	120	-0.01678	-0.08158	313
WERE	'EVANS N4 138 16KV'		771 WERE	'HUTCHINSON ENERGY CENTER 115KV'	120	-0.01678	-0.08093	316
WERE	'PAWNEE 115KV'		1078 WERE	'LAWRENCE ENERGY CENTER 230KV'	264.507	-0.00335	-0.03743	682
WERE	'RICE 115KV'		1078 WERE	'LAWRENCE ENERGY CENTER 230KV'	264.507	-0.00335	-0.03743	682
WERE	'PAWNEE 115KV'		1078 WERE	'JEFFREY ENERGY CENTER 345KV'	982	-0.00513	-0.03565	716
WERE	'RICE 115KV'		1078 WERE	'JEFFREY ENERGY CENTER 345KV'	982	-0.00513	-0.03565	716
WERE	'PAWNEE 115KV'		1078 WERE	'JEFFREY ENERGY CENTER 230KV'	494	-0.00545	-0.03533	723
WERE	'RICE 115KV'		1078 WERE	'JEFFREY ENERGY CENTER 230KV'	494	-0.00545	-0.03533	723
WERE	'PAWNEE 115KV'		1078 WERE	'LANG 7 345 345KV'	310	-0.00846		790
WERE	'RICE 115KV'		1078 WERE	'LANG 7 345 345KV'	310	-0.00846	-0.03232	790
	ent and Maximum Increment were determine from the Souce at				0.0	2.20010	J.JOZOZ	
Factor = Source GS		is on it operating i onlis in	and diddy fine	add midro minang adamy nad lacitation.				
Reuispatch Amoun	t = Relief Amount / Factor							

Upgrade:
Limiting Facility:
Direction:
Limiting Facility:
Direction:
Limiting Facility:
Direction:
Limiting Facility:
Direction:
Line Outage:
Flowgate:
Date Redispatch Needed:
Season Flowgate Identified:

ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1
ROSEHL3X2741ROSESEHL1X7412207SP
4/107-10/107.
2007 Summer Peak

Aggregate Relief

Season Flowgate Identified:	2007 Summer Peak		_						
		Aggregate Relief							
Reservation	Relief Amount	Amount							
1161997	6.7	6.7		1	1				T
									Aggregate
		Maximum		Sink Control	0.1	Maximum			Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	'CITY OF MULVANE 69KV'	7.502	-0.28354		'CITY OF BURLINGTON 69KV'	7.8		-0.32856	2
WERE	'CITY OF MULVANE 69KV'	7.502			'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97		-0.32856	
WERE	'CITY OF WINFIELD 69KV'	40			'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97		-0.25882	2
WERE	'GILL ENERGY CENTER 69KV'	118	-0.21113		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.04502	-0.25615	2
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2086		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.04502	-0.25362	2
WERE	'GETTY 69KV'	35			'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.04502	-0.23262	2
WERE	'CITY OF WINFIELD 69KV'	40			'CITY OF IOLA 69KV'	24.267	-0.00502	-0.20878	3
WERE	'CITY OF WINFIELD 69KV'	40			'JEFFREY ENERGY CENTER 230KV'	470		-0.2086	3
WERE	'CITY OF WINFIELD 69KV'	40			'JEFFREY ENERGY CENTER 345KV'	940		-0.20893	3
WERE	'CITY OF WINFIELD 69KV'	40			'LAWRENCE ENERGY CENTER 115KV'	85		-0.21118	3
WERE	'CITY OF WINFIELD 69KV'	40			'LAWRENCE ENERGY CENTER 230KV'	235.4582		-0.21064	. 3
WERE	'GILL ENERGY CENTER 69KV'	118			'LAWRENCE ENERGY CENTER 115KV'	85		-0.20851	3
WERE	'GILL ENERGY CENTER 69KV'	118			'LAWRENCE ENERGY CENTER 230KV'	235.4582		-0.20797	3
WERE	'CITY OF WINFIELD 69KV'	40			'ABILENE ENERGY CENTER 115KV'	40	-0.00941	-0.20439	3
WERE	'CITY OF WINFIELD 69KV'	40		WERE	'CHANUTE 69KV'	56.723		-0.20274	
WERE	'CITY OF WINFIELD 69KV'	40			'CITY OF ERIE 69KV'	23.27	-0.01106	-0.20274	. 3
WERE	'CITY OF WINFIELD 69KV'	40			'CLAY CENTER JUNCTION 115KV'	22.939		-0.20533	3
WERE	'CITY OF WINFIELD 69KV'	40	-0.2138		'TECUMSEH ENERGY CENTER 115KV'	122.7222	-0.00749	-0.20631	3
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2086		'CITY OF IOLA 69KV'	24.267	-0.00502	-0.20358	
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2086		'JEFFREY ENERGY CENTER 230KV'	470		-0.2034	. 3
WERE	'GILL ENERGY CENTER 138KV'	17.99999		WERE	'JEFFREY ENERGY CENTER 345KV'	940		-0.20373	3
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2086		'LAWRENCE ENERGY CENTER 115KV'	85		-0.20598	3
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2086		'LAWRENCE ENERGY CENTER 230KV'	235.4582		-0.20544	. 3
WERE	'GILL ENERGY CENTER 69KV'	118			'ABILENE ENERGY CENTER 115KV'	40		-0.20172	3
WERE	'GILL ENERGY CENTER 69KV'	118			'CITY OF IOLA 69KV'	24.267		-0.20611	3
WERE	'GILL ENERGY CENTER 69KV'	118			'CLAY CENTER JUNCTION 115KV'	22.939		-0.20266	
WERE	'GILL ENERGY CENTER 69KV'	118			'JEFFREY ENERGY CENTER 230KV'	470		-0.20593	3
WERE	'GILL ENERGY CENTER 69KV'	118			'JEFFREY ENERGY CENTER 345KV'	940		-0.20626	
WERE	'GILL ENERGY CENTER 69KV'	118			'TECUMSEH ENERGY CENTER 115KV'	122.7222		-0.20364	. 3
WERE	'CITY OF WINFIELD 69KV'	40			'BPU - CITY OF MCPHERSON 115KV'	135		-0.19974	. 3
WERE	'CITY OF WINFIELD 69KV'	40			'HUTCHINSON ENERGY CENTER 115KV'	120		-0.19686	
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2086		'ABILENE ENERGY CENTER 115KV'	40		-0.19919	3
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2086		'CHANUTE 69KV'	56.723		-0.19754	
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2086		'CITY OF ERIE 69KV'	23.27	-0.01106	-0.19754	
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2086		'CLAY CENTER JUNCTION 115KV'	22.939		-0.20013	3
WERE	'GILL ENERGY CENTER 138KV'	17.99999			'TECUMSEH ENERGY CENTER 115KV'	122.7222		-0.20111	3
WERE	'GILL ENERGY CENTER 69KV'	118			'BPU - CITY OF MCPHERSON 115KV'	135		-0.19707	
WERE	'GILL ENERGY CENTER 69KV'	118			'CHANUTE 69KV'	56.723		-0.20007	
WERE	'GILL ENERGY CENTER 69KV'	118	-0.21113		'CITY OF ERIE 69KV'	23.27		-0.20007	
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2086		BPU - CITY OF MCPHERSON 115KV	135		-0.19454	. 3
WERE	'GILL ENERGY CENTER 138KV'	17.99999	-0.2086		'HUTCHINSON ENERGY CENTER 115KV'	120		-0.19166	
WERE	'GILL ENERGY CENTER 69KV'	118			'HUTCHINSON ENERGY CENTER 115KV'	120		-0.19419	3
WERE	'GETTY 69KV'	35			'LAWRENCE ENERGY CENTER 115KV'	85		-0.18498	3
WERE	'GETTY 69KV'	35			'CITY OF IOLA 69KV'	24.267		-0.18258	3
WERE	'GETTY 69KV'	35		WERE	'JEFFREY ENERGY CENTER 230KV'	470		-0.1824	3
WERE	'GETTY 69KV'	35			'JEFFREY ENERGY CENTER 345KV'	940		-0.18273	
WERE	'GETTY 69KV'	35			'LAWRENCE ENERGY CENTER 230KV'	235.4582	-0.00316	-0.18444	
WERE	'GETTY 69KV'	35		WERE	'TECUMSEH ENERGY CENTER 115KV'	122.7222		-0.18011	
WERE	'GETTY 69KV'	35			'ABILENE ENERGY CENTER 115KV'	40		-0.17819	
WERE	'GETTY 69KV'	35		WERE	'CHANUTE 69KV'	56.723		-0.17654	
WERE	'GETTY 69KV'	35			'CITY OF ERIE 69KV'	23.27	-0.01106	-0.17654	
WERE	'GETTY 69KV'	35	-0.1876	WERE	'CLAY CENTER JUNCTION 115KV'	22.939	-0.00847	-0.17913	:

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

WERE	'GETTY 69KV'	35	-0.1876 WERE	'BPU - CITY OF MCPHERSON 115KV'	135	-0.01406	-0.17354	39
WERE	'GETTY 69KV'	35	-0.1876 WERE	'HUTCHINSON ENERGY CENTER 115KV'	120	-0.01694	-0.17066	40
WEPL	'HARPER 138KV'	17.21	-0.15502 WEPL	'CLIFTON 115KV'	42.84259	-0.00958	-0.14544	46
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09833 WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.04502	-0.14335	47
WERE	'EVANS N4 138 16KV'	360	-0.09768 WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.97	0.04502	-0.1427	47
WEPL	'HARPER 138KV'	17.21	-0.15502 WEPL	'A. M. MULLERGREN GENERATOR 115KV'	63	-0.02308	-0.13194	51
WERE	'CITY OF WINFIELD 69KV'	40	-0.2138 WERE	'EVANS ENERGY CENTER 138KV'	340	-0.02300	-0.11547	58
WERE	'GILL ENERGY CENTER 69KV'	118		'EVANS ENERGY CENTER 138KV'	340	-0.09833	-0.1128	60
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09833 WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00262	-0.09571	71
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09833 WERE	'LAWRENCE ENERGY CENTER 230KV'	235,4582	-0.00202	-0.09517	71
WERE	'EVANS N4 138 16KV'	360	-0.09768 WERE	'LAWRENCE ENERGY CENTER 115KV'	255.4582	-0.00310	-0.09506	71
WERE	'EVANS N4 138 16KV'	360	-0.09768 WERE	'LAWRENCE ENERGY CENTER 115KV	235,4582	-0.00262	-0.09306	71
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09766 WERE	'CITY OF IOLA 69KV'	235.4562	-0.00516	-0.09432	72
WERE			-0.09833 WERE	'JEFFREY ENERGY CENTER 230KV'				72
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09833 WERE		470 940	-0.0052 -0.00487	-0.09313 -0.09346	72
	'EVANS ENERGY CENTER 138KV'	233		'JEFFREY ENERGY CENTER 345KV'		-0.00487	-0.09346	12
WERE	'EVANS N4 138 16KV'	360	-0.09768 WERE	'JEFFREY ENERGY CENTER 230KV'	470			73
WERE	'EVANS N4 138 16KV'	360	-0.09768 WERE	'JEFFREY ENERGY CENTER 345KV'	940	-0.00487	-0.09281	73
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09833 WERE	'TECUMSEH ENERGY CENTER 115KV'	122.7222	-0.00749	-0.09084	74
WERE	'EVANS N4 138 16KV'	360	-0.09768 WERE	'TECUMSEH ENERGY CENTER 115KV'	122.7222	-0.00749	-0.09019	75
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09833 WERE	'ABILENE ENERGY CENTER 115KV'	40	-0.00941	-0.08892	76
WERE	'EVANS N4 138 16KV'	360	-0.09768 WERE	'ABILENE ENERGY CENTER 115KV'	40	-0.00941	-0.08827	76
WERE	'GETTY 69KV'	35	-0.1876 WERE	'EVANS ENERGY CENTER 138KV'	340	-0.09833	-0.08927	76
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09833 WERE	'CHANUTE 69KV'	56.723	-0.01106	-0.08727	77
WERE	'EVANS N4 138 16KV'	360	-0.09768 WERE	'CHANUTE 69KV'	56.723	-0.01106	-0.08662	78
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09833 WERE	'BPU - CITY OF MCPHERSON 115KV'	135	-0.01406	-0.08427	80
WERE	'EVANS N4 138 16KV'	360	-0.09768 WERE	'BPU - CITY OF MCPHERSON 115KV'	135	-0.01406	-0.08362	81
EMDE	'LARUSSEL 161KV'	189.4348	0.00674 EMDE	'ELK RIVER 345KV'	150	0.09048	-0.08374	81
EMDE	'RIVERTON 161KV'	216	0.00711 EMDE	'ELK RIVER 345KV'	150	0.09048	-0.08337	81
EMDE	'STATE LINE 161KV'	103	0.00732 EMDE	'ELK RIVER 345KV'	150	0.09048	-0.08316	81
EMDE	'RIVERTON 161KV'	34	0.00776 EMDE	'ELK RIVER 345KV'	150	0.09048	-0.08272	82
WERE	'EVANS ENERGY CENTER 138KV'	233	-0.09833 WERE	'HUTCHINSON ENERGY CENTER 115KV'	120	-0.01694	-0.08139	83
WERE	'EVANS N4 138 16KV'	360	-0.09768 WERE	'HUTCHINSON ENERGY CENTER 115KV'	120	-0.01694	-0.08074	84
WERE	'PAWNEE 115KV'	999	-0.04116 WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00262	-0.03854	175
WERE	'RICE 115KV'	999	-0.04116 WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00262	-0.03854	175
WERE	'PAWNEE 115KV'	999	-0.04116 WERE	'LAWRENCE ENERGY CENTER 230KV'	235.4582	-0.00316	-0.038	178
WERE	'RICE 115KV'	999	-0.04116 WERE	'LAWRENCE ENERGY CENTER 230KV'	235.4582	-0.00316	-0.038	178
WERE	'PAWNEE 115KV'	999	-0.04116 WERE	'JEFFREY ENERGY CENTER 345KV'	940	-0.00487	-0.03629	186
WERE	'RICE 115KV'	999	-0.04116 WERE	'JEFFREY ENERGY CENTER 345KV'	940	-0.00487	-0.03629	186
WERE	'PAWNEE 115KV'	999	-0.04116 WERE	'JEFFREY ENERGY CENTER 230KV'	470	-0.0052	-0.03596	188
WERE	'RICE 115KV'	999	-0.04116 WERE	'JEFFREY ENERGY CENTER 230KV'	470	-0.0052	-0.03596	188
WERE	'PAWNEE 115KV'			'TECUMSEH ENERGY CENTER 115KV'	122.7222	-0.00749	-0.03367	200
WERE	'RICE 115KV'		-0.04116 WERE	TECUMSEH ENERGY CENTER 115KV	122.7222	-0.00749	-0.03367	200
	at and Maximum Increment were determine from the Souce							
Factor = Source GSF			,	,				
Redispatch Amount :	= Relief Amount / Factor							
,								

Upgrade: ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER Displacement Limiting Facility: ROSE HILL (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1 From-5-To Line Outage: ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1 ROSEHL3X/2741ROSESEHL1X/7414208SP Starting 2008 6/1 - 10/1 Until EOC of Upgrade 2008 Summer Peak

Reservation	Relief Amount	Amount							
116150		25.8	Ì						
116199	13.8	25.8							
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source	Increment(MW)		Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	'CITY OF WINFIELD 69KV'	40			'CLR_3 .575 34KV'	100		-0.30427	
WERE	'GILL ENERGY CENTER 69KV'	118			'CLR_3 .575 34KV'	100		-0.30162	
WERE	'GETTY 69KV'	35			'CLR_3 .575 34KV'	100		-0.2781	
WERE	'GILL ENERGY CENTER 69KV'	118			'LAWRENCE ENERGY CENTER 115KV'	85		-0.20838	
WERE	'GILL ENERGY CENTER 69KV'	118			'LAWRENCE ENERGY CENTER 230KV'	264.507	-0.00335	-0.20784	
WERE	'GILL ENERGY CENTER 69KV'	118			'JEFFREY ENERGY CENTER 230KV'	494		-0.20574	
WERE	'GILL ENERGY CENTER 69KV'	118			'JEFFREY ENERGY CENTER 345KV'	982	-0.00513	-0.20606	
WERE	'GILL ENERGY CENTER 69KV'	118			'LANG 7 345 345KV'	310		-0.20272	
WERE	'GILL ENERGY CENTER 69KV'	118			'TECUMSEH ENERGY CENTER 115KV'	128	-0.0077	-0.20349	1
WERE	'GILL ENERGY CENTER 69KV'	118			'CHANUTE 69KV'	55.637	-0.01078	-0.20041	12
WERE	'GILL ENERGY CENTER 69KV'	118			'SMOKEY HILLS 34KV'	51	-0.01295	-0.19824	1:
WERE	'GILL ENERGY CENTER 69KV'	118			'BPU - CITY OF MCPHERSON 115KV'	135		-0.19707	1:
WERE	'GILL ENERGY CENTER 69KV'	118			'HUTCHINSON ENERGY CENTER 115KV'	120		-0.1944	1
WERE	'GILL ENERGY CENTER 69KV'	118	-0.21119		'KNOLL 3 115 115KV'	75		-0.19422	1
WERE	'EVANS ENERGY CENTER 138KV'	421.6074		WERE	'CLR_3 .575 34KV'	100	0.09043	-0.18883	. 1
WERE	'EVANS N4 138 16KV'	360	-0.09775	WERE	'CLR_3 .575 34KV'	100	0.09043	-0.18818	1
WERE	'PAWNEE 115KV'	999	-0.0408	WERE	'CLR_3 .575 34KV'	100	0.09043	-0.13123	1
WERE	'RICE 115KV'	999	-0.0408	WERE	'CLR_3 .575 34KV'	100	0.09043	-0.13123	
WERE	'GILL ENERGY CENTER 69KV'	118	-0.21119	WERE	'EVANS ENERGY CENTER 138KV'	355.3926	-0.0984	-0.11279	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.01679	WERE	'CLR_3 .575 34KV'	100	0.09043	-0.10722	2-
WERE	'LANG 7 345 345KV'	518	-0.00847	WERE	'CLR_3 .575 34KV'	100	0.09043	-0.0989	2
WERE	'EVANS ENERGY CENTER 138KV'	421.6074		1 WERE	'LAWRENCE ENERGY CENTER 230KV'	264.507	-0.00335	-0.09505	
WERE	'EVANS N4 138 16KV'	360	-0.09775	WERE	'LAWRENCE ENERGY CENTER 230KV'	264.507	-0.00335	-0.0944	. 2
WERE	'EVANS ENERGY CENTER 138KV'	421.6074	-0.0984	1 WERE	'JEFFREY ENERGY CENTER 230KV'	494	-0.00545	-0.09295	2
WERE	'EVANS ENERGY CENTER 138KV'	421.6074	-0.0984	1 WERE	'JEFFREY ENERGY CENTER 345KV'	982	-0.00513	-0.09327	2
WERE	'EVANS N4 138 16KV'	360	-0.09775	WERE	'JEFFREY ENERGY CENTER 345KV'	982	-0.00513	-0.09262	2
WERE	'EVANS N4 138 16KV'	360	-0.09775	WERE	'JEFFREY ENERGY CENTER 230KV'	494	-0.00545	-0.0923	2
WERE	'EVANS ENERGY CENTER 138KV'	421.6074	-0.0984	1 WERE	'TECUMSEH ENERGY CENTER 115KV'	128	-0.0077	-0.0907	2
WERE	'EVANS N4 138 16KV'	360	-0.09775	WERE	'TECUMSEH ENERGY CENTER 115KV'	128	-0.0077	-0.09005	2
WERE	'EVANS ENERGY CENTER 138KV'	421.6074	-0.0984	1 WERE	'LANG 7 345 345KV'	310	-0.00847	-0.08993	2
WERE	'EVANS N4 138 16KV'	360	-0.09775	WERE	'LANG 7 345 345KV'	310	-0.00847	-0.08928	2
WERE	'EVANS ENERGY CENTER 138KV'	421.6074	-0.0984	1 WERE	'BPU - CITY OF MCPHERSON 115KV'	135	-0.01412	-0.08428	3
WERE	'EVANS N4 138 16KV'	360	-0.09775	WERE	'BPU - CITY OF MCPHERSON 115KV'	135	-0.01412	-0.08363	3
EMDE	'LARUSSEL 161KV'	180	0.00686	EMDE	'ELK RIVER 345KV'	150	0.09043	-0.08357	3
EMDE	'RIVERTON 161KV'	199.0941	0.00724	1 EMDE	'ELK RIVER 345KV'	150	0.09043	-0.08319	3
WERE	'EVANS ENERGY CENTER 138KV'	421.6074	-0.0984	1 WERE	'HUTCHINSON ENERGY CENTER 115KV'	120		-0.08161	3
WERE	'EVANS N4 138 16KV'	360	-0.09775		'HUTCHINSON ENERGY CENTER 115KV'	120	-0.01679	-0.08096	3
WERE	'PAWNEE 115KV'	999		WERE	'LAWRENCE ENERGY CENTER 230KV'	264.507	-0.00335	-0.03745	
WERE	'RICE 115KV'	999		WERE	'LAWRENCE ENERGY CENTER 230KV'	264.507	-0.00335	-0.03745	
WERE	'PAWNEE 115KV'	999		WERE	'JEFFREY ENERGY CENTER 345KV'	982	-0.00513	-0.03567	7
WERE	'RICE 115KV'	999		WERE	'JEFFREY ENERGY CENTER 345KV'	982		-0.03567	7
WERE	'PAWNEE 115KV'	999		WERE	'JEFFREY ENERGY CENTER 230KV'	494		-0.03535	7
WERE	'RICE 115KV'	999		WERE	'JEFFREY ENERGY CENTER 230KV'	494		-0.03535	7
WERE	'PAWNEE 115KV'	999		WERE	'LANG 7 345 345KV'	310		-0.03233	7
WERE	'RICE 115KV'	999		WERE	'LANG 7 345 345KV'	310		-0.03233	7

Factor = Source GSF - Sink GSF Redispatch Amount = Relief Amount / Factor

SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1 Expedite SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1 From->To Upgrade: Limiting Facility: Direction:

Line Outage: SOUTHWEST SHREVEPORT (SW SHV 2) 345/138/13.8KV TRANSFORMER CKT 2 Flowgate: SWSHV127415WSSHV27421408SP Date Redispatch Needed: Starting 2008 6ft - 10/11 Until EOC of Upgrade 2008 Summer Peak

			Aggregate Relief
Reservation	Relief Amount		Amount
1158760		4.2	12.4
1158761		4.2	12.4
1162763		1.4	12.4
1162766		1.4	12.4
1162768		13	12.4

1162766		12.4 12.4	1						
		Maximum		Sink Control		Maximum			Aggregate Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
AEPW AEPW	'AH-CC_ST18.0 138KV' 'AH-CC_ST18.0 138KV'	550 550		B AEPW B AEPW	'AEP-CT0613.8 161KV' 'COGENTRIX 345KV'	320 300	-0.00202 -0.00261	-0.39078 -0.39019	32
AEPW	'AH-CC_ST18.0 138KV'	550	-0.3928	8 AEPW	'COMANCHE 138KV'	160	-0.00383	-0.38897	32
AEPW AEPW	'AH-CC_ST18.0 138KV' 'AH-CC_ST18.0 138KV'	550 550		B AEPW B AEPW	'COMANCHE 69KV' 'FITZHUGH 161KV'	63 101		-0.38896 -0.39201	32
AEPW	'AH-CC_ST18.0 138KV'	550	-0.3928	3 AEPW	FLINT CREEK 161KV	428		-0.39201	32
AEPW	'AH-CC_ST18.0 138KV'	550		B AEPW B AEPW	'L&D13 69KV' 'NORTHEASTERN STATION 138KV'	11		-0.39163	32 32
AEPW AEPW	'AH-CC_ST18.0 138KV' 'AH-CC_ST18.0 138KV'	550 550		B AEPW	'NORTHEASTERN STATION 138KV'	377 95		-0.39042 -0.39042	
AEPW	'AH-CC_ST18.0 138KV'	550	-0.3928	BAEPW	'NORTHEASTERN STATION 345KV'	645	-0.00237	-0.39043	
AEPW AEPW	'AH-CC_ST18.0 138KV' 'AH-CC_ST18.0 138KV'	550 550		B AEPW B AEPW	'OEC 345KV' 'RIVERSIDE STATION 138KV'	319 422		-0.39029 -0.39018	32 32
AEPW	'AH-CC_ST18.0 138KV'	550	-0.3928	B AEPW	'SLEEPING BEAR 138KV'	80	-0.00337	-0.38943	32
AEPW AEPW	'AH-CC_ST18.0 138KV' 'AH-CC_ST18.0 138KV'	550 550		B AEPW B AEPW	'SOUTHWESTERN STATION 138KV' 'SOUTHWESTERN STATION 138KV'	168 143		-0.389 -0.389	
AEPW	'AH-CC_ST18.0 138KV'	550	-0.3928	B AEPW	'TULSA POWER STATION 138KV'	38	-0.00259	-0.39021	32
AEPW AEPW	'AH-CC_ST18.0 138KV' 'AH-CC_ST18.0 138KV'	550 550		AEPW	'WEATHERFORD 34KV' 'WELEETKA 138KV'	148		-0.38923	32
AEPW	'AH-CC_ST18.0 138KV'	550		B AEPW B AEPW	'WELSH 345KV'	1044		-0.38939 -0.38455	32
AEPW	'AH-CC_ST18.0 138KV'	550		AEPW	'WILKES 345KV'	191		-0.39177	32
AEPW AEPW	'ARSENAL HILL 69KV' 'ARSENAL HILL 69KV'	99 99			'AEP-CT0613.8 161KV' 'COGENTRIX 345KV'	320 300		-0.38932 -0.38873	32 32
AEPW	'ARSENAL HILL 69KV'	99	-0.39134	4 AEPW	'COMANCHE 138KV'	160	-0.00383	-0.38751	32
AEPW AEPW	'ARSENAL HILL 69KV' 'ARSENAL HILL 69KV'	99 99			'COMANCHE 69KV' 'FITZHUGH 161KV'	63		-0.3875 -0.39055	
AEPW	'ARSENAL HILL 69KV'	99	-0.39134	4 AEPW	'FLINT CREEK 161KV'	428	-0.00205	-0.38929	32
AEPW AEPW	'ARSENAL HILL 69KV' 'ARSENAL HILL 69KV'	99 99		AEPW	'L&D13 69KV' 'NORTHEASTERN STATION 138KV'	11 95		-0.39017	32 32
AEPW	'ARSENAL HILL 69KV'	99			'NORTHEASTERN STATION 138KV'	377		-0.38896 -0.38896	
AEPW	'ARSENAL HILL 69KV'	99	-0.39134	4 AEPW	'NORTHEASTERN STATION 345KV'	645	-0.00237	-0.38897	32
AEPW AEPW	'ARSENAL HILL 69KV' 'ARSENAL HILL 69KV'	99 99		AEPW AEPW	'OEC 345KV' 'RIVERSIDE STATION 138KV'	319 422		-0.38883 -0.38872	32
AEPW	'ARSENAL HILL 69KV'	99	-0.39134	4 AEPW	'SLEEPING BEAR 138KV'	80	-0.00337	-0.38797	32
AEPW AEPW	'ARSENAL HILL 69KV' 'ARSENAL HILL 69KV'	99 99	-0.39134 -0.39134		'SOUTHWESTERN STATION 138KV' 'SOUTHWESTERN STATION 138KV'	168 143		-0.38754 -0.38754	32
AEPW	'ARSENAL HILL 69KV'	99	-0.39134	4 AEPW	'TULSA POWER STATION 138KV'	38	-0.00259	-0.38875	32
AEPW AEPW	'ARSENAL HILL 69KV' 'ARSENAL HILL 69KV'	99 99			'WEATHERFORD 34KV' 'WELEETKA 138KV'	148 84		-0.38777 -0.38793	32 32
AEPW	'ARSENAL HILL 69KV'	99			'WELSH 345KV'	1044		-0.38309	
AEPW	'ARSENAL HILL 69KV'	99	-0.39134		'WILKES 345KV'	191		-0.39031	32
AEPW AEPW	'AH-CC_ST18.0 138KV' 'ARSENAL HILL 69KV'	550 99	-0.3928	AEPW AEPW	'NARROWS 69KV' 'NARROWS 69KV'	22		-0.37926 -0.3778	
AEPW	'AH-CC_ST18.0 138KV'	550	-0.3928	3 AEPW	'WILKES 138KV'	136.2395	-0.03012	-0.36268	34
AEPW AEPW	'ARSENAL HILL 69KV' 'AH-CC ST18.0 138KV'	99 550		AEPW AEPW	'WILKES 138KV' 'LEBROCK 345KV'	136.2395 465		-0.36122 -0.3464	34
AEPW	'ARSENAL HILL 69KV'	99	-0.39134	4 AEPW	'LEBROCK 345KV'	465	-0.0464	-0.34494	36
AEPW AEPW	'AH-CC_ST18.0 138KV' 'ARSENAL HILL 69KV'	550		A A E DW	'PIRKEY GENERATION 138KV' 'PIRKEY GENERATION 138KV'	490 490		-0.32242	38
AEPW	'AH-CC_ST18.0 138KV'	99 550	-0.39134	3 AEPW	'EASTMAN 138KV'	355		-0.32096 -0.30421	41
AEPW	'ARSENAL HILL 69KV'	99	-0.39134	4 AEPW	'EASTMAN 138KV'	355	-0.08859	-0.30275	
AEPW AEPW	'AH-CC_ST18.0 138KV' 'ARSENAL HILL 69KV'	550 99	-0.3928	AEPW AEPW	'KNOXLEE 138KV' 'KNOXLEE 138KV'	103	-0.10873 -0.10873	-0.28407 -0.28261	44
AEPW	'LIEBERMAN 138KV'	201.8359	-0.22408	8 AEPW	'AEP-CT0613.8 161KV'	320	-0.00202	-0.22206	56
AEPW AEPW	'LIEBERMAN 138KV' 'LIEBERMAN 138KV'	201.8359 201.8359			'COGENTRIX 345KV' 'COMANCHE 138KV'	300 160		-0.22147 -0.22025	56 56
AEPW	'LIEBERMAN 138KV'	201.8359	-0.22408	BAEPW	'COMANCHE 69KV'	63	-0.00384	-0.22024	56
AEPW AEPW	'LIEBERMAN 138KV' 'LIEBERMAN 138KV'	201.8359 201.8359	-0.22408 -0.22408		'FITZHUGH 161KV' 'FLINT CREEK 161KV'	101		-0.22329 -0.22203	56
AEPW	'LIEBERMAN 138KV'	201.8359	-0.22408	B AEPW	'NORTHEASTERN STATION 138KV'	95	-0.00238	-0.2217	56
AEPW AEPW	'LIEBERMAN 138KV' 'LIEBERMAN 138KV'	201.8359 201.8359	-0.22408 -0.22408		'NORTHEASTERN STATION 138KV' 'NORTHEASTERN STATION 345KV'	377 645		-0.2217 -0.22171	56 56
AEPW	'LIEBERMAN 138KV'	201.8359	-0.22408		'OEC 345KV'	319		-0.22171	56
AEPW	'LIEBERMAN 138KV'	201.8359	-0.22408		'RIVERSIDE STATION 138KV'	422		-0.22146	
AEPW AEPW	'LIEBERMAN 138KV' 'LIEBERMAN 138KV'	201.8359 201.8359	-0.22408 -0.22408	3 AEPW	'SLEEPING BEAR 138KV' 'SOUTHWESTERN STATION 138KV'	80 168		-0.22071 -0.22028	56 56
AEPW	'LIEBERMAN 138KV'	201.8359	-0.22408	B AEPW	'SOUTHWESTERN STATION 138KV'	143	-0.0038	-0.22028	56
AEPW AEPW	'LIEBERMAN 138KV' 'LIEBERMAN 138KV'	201.8359 201.8359	-0.22408 -0.22408		'TULSA POWER STATION 138KV' 'WEATHERFORD 34KV'	38 148		-0.22149 -0.22051	56 56
AEPW	'LIEBERMAN 138KV'	201.8359	-0.22408	8 AEPW	'WELEETKA 138KV'	84	-0.00341	-0.22067	56
AEPW AEPW	'LIEBERMAN 138KV' 'LIEBERMAN 138KV'	201.8359 201.8359	-0.22408 -0.22408		'WILKES 345KV' 'WELSH 345KV'	191 1044		-0.22305 -0.21583	56
AEPW	'LIEBERMAN 138KV'	201.8359	-0.22408	3 AEPW	'NARROWS 69KV'	22	-0.01354	-0.21054	59
AEPW AEPW	'LIEBERMAN 138KV' 'LIEBERMAN 138KV'	201.8359 201.8359	-0.22408 -0.22408	AEPW AEPW	'WILKES 138KV' 'LEBROCK 345KV'	136.2395 465	-0.03012 -0.0464	-0.19396 -0.17768	64 70
AEPW	'AH-CC_ST18.0 138KV'	550	-0.3928	AEPW	'LIEBERMAN 138KV'	26.16412	-0.22408	-0.16872	74
AEPW AEPW	'ARSENAL HILL 69KV'	99 201 8359	-0.39134		'LIEBERMAN 138KV'	26.16412		-0.16726	
AEPW	'LIEBERMAN 138KV' 'LIEBERMAN 138KV'	201.8359 201.8359	-0.22408	BAEPW	'PIRKEY GENERATION 138KV' 'EASTMAN 138KV'	490 355		-0.1537 -0.13549	92
AEPW	'LIEBERMAN 138KV'	201.8359	-0.22408	8 AEPW	'KNOXLEE 138KV'	103	-0.10873	-0.11535	108
AEPW AEPW	'KNOXLEE 138KV' 'KNOXLEE 138KV'	260 60	-0.10873 -0.10873		'FITZHUGH 161KV' 'FITZHUGH 161KV'	101		-0.10794 -0.10794	
AEPW	'KNOXLEE 138KV'	260	-0.10873	3 AEPW	'WILKES 345KV'	191	-0.00103	-0.1077	115
AEPW AEPW	'KNOXLEE 138KV' 'KNOXLEE 138KV'	60 260	-0.10873 -0.10873		'WILKES 345KV' 'AEP-CT0613.8 161KV'	191 320	-0.00103 -0.00202	-0.1077 -0.10671	115
AEPW	'KNOXLEE 138KV'	60	-0.10873	3 AEPW	'AEP-CT0613.8 161KV'	320	-0.00202	-0.10671	116
AEPW AEPW	'KNOXLEE 138KV' 'KNOXLEE 138KV'	260 60	-0.10873 -0.10873		'FLINT CREEK 161KV' 'FLINT CREEK 161KV'	428 428		-0.10668 -0.10668	
AEPW	'KNOXLEE 138KV'	260	-0.10873		'COGENTRIX 345KV'	300		-0.10612	117
AEPW	'KNOXLEE 138KV'	60	-0.10873	3 AEPW	'COGENTRIX 345KV'	300	-0.00261	-0.10612	117
AEPW AEPW	'KNOXLEE 138KV' 'KNOXLEE 138KV'	260 260	-0.10873 -0.10873		'NORTHEASTERN STATION 138KV' 'NORTHEASTERN STATION 138KV'	377 95		-0.10635 -0.10635	117 117
AEPW	'KNOXLEE 138KV'	60	-0.10873	3 AEPW	'NORTHEASTERN STATION 138KV'	95	-0.00238	-0.10635	117
AEPW AEPW	'KNOXLEE 138KV' 'KNOXLEE 138KV'	60 260			'NORTHEASTERN STATION 138KV' 'NORTHEASTERN STATION 345KV'	377 645		-0.10635 -0.10636	117 117
AEPW	'KNOXLEE 138KV'	60	-0.10873	3 AEPW	'NORTHEASTERN STATION 345KV'	645	-0.00237	-0.10636	117
AEPW	'KNOXLEE 138KV'	260			'OEC 345KV'	319		-0.10622	117
AEPW AEPW	'KNOXLEE 138KV' 'KNOXLEE 138KV'	60 260	-0.10873		'OEC 345KV' 'RIVERSIDE STATION 138KV'	319 422		-0.10622 -0.10611	117 117
		60	-0.10873	A EDM	'RIVERSIDE STATION 138KV'				
AEPW AEPW	'KNOXLEE 138KV' 'KNOXLEE 138KV'	260	-0.10873	AED'47	'COMANCHE 138KV'	422 160		-0.10611 -0.1049	

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF Redispatch Amount = Relief Amount / Factor

Upgrade: SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 2 Expedite Limiting Facility: SOUTHWEST SHREVEPORT (SW SHV 2) 345/138/13.8KV TRANSFORMER CKT 2 Direction: From-xTo
Line Outage: SOUTHWEST SHREVEPORT (SW SHV 2) 345/138/13.8KV TRANSFORMER CKT 2 SWSHV 2) 345/138/13.8KV TRANSFORMER CKT 1 SWSHV22742SWSSHV17411408SP
Date Redispatch Needed: Season Flowgate Identified: 2008 Summer Peak

Reservation		Aggregate Relie Amount
1158760	0.1	0.
1158761	0.1	0.
1162763	0.1	0.

1162763 1162766									
1162768	0.1	0.5		1					A
		Maximum		Sink Control		Maximum			Aggregate Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
AEPW AEPW	'AH-CC_ST18.0 138KV' 'AH-CC_ST18.0 138KV'	550 550	-0.38572 -0.38572		'AEP-CT0613.8 161KV' 'COGENTRIX 345KV'	320 300		-0.38374 -0.38316	1
AEPW	'AH-CC_ST18.0 138KV'	550	-0.38572		'COMANCHE 138KV'	160		-0.38196	1
AEPW	'AH-CC_ST18.0 138KV'	550	-0.38572		'COMANCHE 69KV'	63		-0.38195	1
AEPW AEPW	'AH-CC_ST18.0 138KV' 'AH-CC_ST18.0 138KV'	550 550	-0.38572 -0.38572		'FITZHUGH 161KV' 'FLINT CREEK 161KV'	101 428		-0.38494 -0.38371	1
AEPW	'AH-CC_ST18.0 138KV'	550	-0.38572	AEPW	'L&D13 69KV'	11	-0.00115	-0.38457	1
AEPW	'AH-CC_ST18.0 138KV'	550	-0.38572		'NARROWS 69KV'	22		-0.37242	1
AEPW AEPW	'AH-CC_ST18.0 138KV' 'AH-CC_ST18.0 138KV'	550 550	-0.38572 -0.38572		'NORTHEASTERN STATION 138KV' 'NORTHEASTERN STATION 138KV'	95 377		-0.38339 -0.38339	1
AEPW	'AH-CC_ST18.0 138KV'	550	-0.38572	AEPW	'NORTHEASTERN STATION 345KV'	645	-0.00233	-0.38339	1
AEPW	'AH-CC_ST18.0 138KV' 'AH-CC_ST18.0 138KV'	550	-0.38572		'OEC 345KV' 'RIVERSIDE STATION 138KV'	319		-0.38326	1
AEPW AEPW	'AH-CC_ST18.0 138KV'	550 550	-0.38572 -0.38572		'SLEEPING BEAR 138KV'	422 80		-0.38314 -0.38241	1
AEPW	'AH-CC_ST18.0 138KV'	550	-0.38572	AEPW	'SOUTHWESTERN STATION 138KV'	168	-0.00373	-0.38199	1
AEPW AEPW	'AH-CC_ST18.0_138KV'	550 550	-0.38572 -0.38572		'SOUTHWESTERN STATION 138KV' 'TULSA POWER STATION 138KV'	143		-0.38199 -0.38317	1
AEPW	'AH-CC_ST18.0 138KV' 'AH-CC_ST18.0 138KV'	550	-0.38572		WEATHERFORD 34KV'	148		-0.38222	1
AEPW	'AH-CC_ST18.0 138KV'	550	-0.38572	AEPW	'WELEETKA 138KV'	84	-0.00334	-0.38238	1
AEPW AEPW	'AH-CC_ST18.0 138KV' 'AH-CC_ST18.0 138KV'	550 550	-0.38572 -0.38572		'WELSH 345KV' 'WILKES 138KV'	1044 136.2395		-0.37762 -0.35614	1
AEPW	'AH-CC_ST18.0 138KV'	550	-0.38572		WILKES 138KV WILKES 345KV	136.2395		-0.35614	1
AEPW	'ARSENAL HILL 69KV'	99	-0.38429	AEPW	'AEP-CT0613.8 161KV'	320	-0.00198	-0.38231	1
AEPW AEPW	'ARSENAL HILL 69KV' 'ARSENAL HILL 69KV'	99 99	-0.38429 -0.38429		'COGENTRIX 345KV' 'COMANCHE 138KV'	300 160		-0.38173 -0.38053	1
AEPW	'ARSENAL HILL 69KV'	99	-0.38429		'COMANCHE 138KV'	63		-0.38052	1
AEPW	'ARSENAL HILL 69KV'	99	-0.38429	AEPW	'FITZHUGH 161KV'	101	-0.00078	-0.38351	1
AEPW AEPW	'ARSENAL HILL 69KV' 'ARSENAL HILL 69KV'	99	-0.38429 -0.38429		'FLINT CREEK 161KV' 'L&D13 69KV'	428		-0.38228 -0.38314	1
AEPW	'ARSENAL HILL 69KV'	99	-0.38429		'NARROWS 69KV'	22		-0.37099	1
AEPW	'ARSENAL HILL 69KV'	99	-0.38429		'NORTHEASTERN STATION 138KV'	377		-0.38196	1
AEPW AEPW	'ARSENAL HILL 69KV' 'ARSENAL HILL 69KV'	99 99	-0.38429 -0.38429		'NORTHEASTERN STATION 138KV' 'NORTHEASTERN STATION 345KV'	95 645		-0.38196 -0.38196	1
AEPW	'ARSENAL HILL 69KV'	99	-0.38429	AEPW	'OEC 345KV'	319		-0.38183	1
AEPW	'ARSENAL HILL 69KV'	99	-0.38429		'RIVERSIDE STATION 138KV'	422	-0.00258	-0.38171	1
AEPW AEPW	'ARSENAL HILL 69KV' 'ARSENAL HILL 69KV'	99 99	-0.38429 -0.38429		'SLEEPING BEAR 138KV' 'SOUTHWESTERN STATION 138KV'	80 143		-0.38098 -0.38056	1
AEPW	'ARSENAL HILL 69KV'	99	-0.38429		'SOUTHWESTERN STATION 138KV'	168		-0.38056	1
AEPW	'ARSENAL HILL 69KV'	99	-0.38429	AEPW	'TULSA POWER STATION 138KV'	38	-0.00255	-0.38174	1
AEPW AEPW	'ARSENAL HILL 69KV'	99	-0.38429		'WEATHERFORD 34KV'	148		-0.38079	1
AEPW	'ARSENAL HILL 69KV' 'ARSENAL HILL 69KV'	99	-0.38429 -0.38429		WELETKA 138KV' WELSH 345KV'	84 1044		-0.38095 -0.37619	1
AEPW	'ARSENAL HILL 69KV'	99	-0.38429		'WILKES 138KV'	136.2395		-0.35471	1
AEPW	'ARSENAL HILL 69KV'	99	-0.38429		'WILKES 345KV' 'EASTMAN 138KV'	191		-0.38327	1
AEPW AEPW	'AH-CC_ST18.0 138KV' 'AH-CC_ST18.0 138KV'	550 550	-0.38572 -0.38572		'KNOXLEE 138KV'	355 103		-0.29873 -0.27895	2
AEPW	'AH-CC_ST18.0 138KV'	550	-0.38572		'LEBROCK 345KV'	465	-0.04556	-0.34016	2
AEPW AEPW	'AH-CC_ST18.0 138KV'	550	-0.38572		'PIRKEY GENERATION 138KV'	490		-0.31661	2
AEPW	'ARSENAL HILL 69KV' 'ARSENAL HILL 69KV'	99 99	-0.38429 -0.38429		'EASTMAN 138KV' 'KNOXLEE 138KV'	355 103		-0.2973 -0.27752	2
AEPW	'ARSENAL HILL 69KV'	99	-0.38429		'LEBROCK 345KV'	465		-0.33873	2
AEPW	'ARSENAL HILL 69KV' 'LIEBERMAN 138KV'	99	-0.38429		'PIRKEY GENERATION 138KV'	490		-0.31518	2
AEPW AEPW	'LIEBERMAN 138KV'	201.8359 201.8359	-0.22004 -0.22004		'AEP-CT0613.8 161KV' 'COGENTRIX 345KV'	320 300		-0.21806 -0.21748	2
AEPW	'LIEBERMAN 138KV'	201.8359	-0.22004		'COMANCHE 138KV'	160		-0.21628	2
AEPW AEPW	'LIEBERMAN 138KV' 'LIEBERMAN 138KV'	201.8359	-0.22004 -0.22004		'COMANCHE 69KV' 'FITZHUGH 161KV'	63		-0.21627	2
AEPW	'LIEBERMAN 138KV'	201.8359 201.8359	-0.22004		'FLINT CREEK 161KV'	428		-0.21926 -0.21803	2
AEPW	'LIEBERMAN 138KV'	201.8359	-0.22004	AEPW	'L&D13 69KV'	11	-0.00115	-0.21889	2
AEPW AEPW	'LIEBERMAN 138KV' 'LIEBERMAN 138KV'	201.8359 201.8359	-0.22004 -0.22004		'NORTHEASTERN STATION 138KV' 'NORTHEASTERN STATION 138KV'	95 377		-0.21771	2
AEPW	'LIEBERMAN 138KV'	201.8359	-0.22004		'NORTHEASTERN STATION 136KV'	645		-0.21771 -0.21771	2
AEPW	'LIEBERMAN 138KV'	201.8359	-0.22004	AEPW	'OEC 345KV'	319	-0.00246	-0.21758	2
AEPW AEPW	'LIEBERMAN 138KV' 'LIEBERMAN 138KV'	201.8359	-0.22004 -0.22004		'RIVERSIDE STATION 138KV' 'SLEEPING BEAR 138KV'	422 80		-0.21746	2
AEPW	'LIEBERMAN 138KV'	201.8359 201.8359	-0.22004		SOUTHWESTERN STATION 138KV	143		-0.21673 -0.21631	2
AEPW	'LIEBERMAN 138KV'	201.8359	-0.22004	AEPW	'SOUTHWESTERN STATION 138KV'	168	-0.00373	-0.21631	2
AEPW AEPW	'LIEBERMAN 138KV' 'LIEBERMAN 138KV'	201.8359 201.8359	-0.22004 -0.22004		TULSA POWER STATION 138KV' WEATHERFORD 34KV'	38 148		-0.21749 -0.21654	2
AEPW	'LIEBERMAN 138KV'	201.8359	-0.22004		WELEETKA 138KV'	84		-0.21654	2
AEPW	'LIEBERMAN 138KV'	201.8359	-0.22004	AEPW	'WELSH 345KV'	1044	-0.0081	-0.21194	2
AEPW AEPW	'LIEBERMAN 138KV' 'AH-CC_ST18.0 138KV'	201.8359	-0.22004 -0.38572		'WILKES 345KV' 'LIEBERMAN 138KV'	191 26.16412		-0.21902	2
AEPW	'ARSENAL HILL 69KV'	550 99		AEPW	'LIEBERMAN 138KV'	26.16412		-0.16568 -0.16425	3
AEPW	'LIEBERMAN 138KV'	201.8359	-0.22004	AEPW	'LEBROCK 345KV'	465	-0.04556	-0.17448	3
AEPW AEPW	'LIEBERMAN 138KV' 'LIEBERMAN 138KV'	201.8359 201.8359	-0.22004 -0.22004		'NARROWS 69KV' 'PIRKEY GENERATION 138KV'	22 490		-0.20674 -0.15093	3
AEPW	'LIEBERMAN 138KV'	201.8359	-0.22004	AEPW	'WILKES 138KV'	136.2395		-0.19046	3
AEPW	'LIEBERMAN 138KV'	201.8359	-0.22004	AEPW	'EASTMAN 138KV'	355	-0.08699	-0.13305	4
AEPW AEPW	'NORTH MARSHALL 69KV' 'NORTH MARSHALL 69KV'	5	-0.13591 -0.13591		'AEP-CT0613.8 161KV' 'COGENTRIX 345KV'	320 300		-0.13393 -0.13335	4
AEPW	'NORTH MARSHALL 69KV'	5	-0.13591	AEPW	'COMANCHE 138KV'	160		-0.13215	4
AEPW	'NORTH MARSHALL 69KV'	5	-0.13591	AEPW	'COMANCHE 69KV'	63	-0.00377	-0.13214	4
AEPW AEPW	'NORTH MARSHALL 69KV' 'NORTH MARSHALL 69KV'	5	-0.13591 -0.13591		'FITZHUGH 161KV' 'FLINT CREEK 161KV'	101 428		-0.13513 -0.1339	4
AEPW	'NORTH MARSHALL 69KV'	5	-0.13591		'L&D13 69KV'	11		-0.13476	4
AEPW	'NORTH MARSHALL 69KV'	5	-0.13591	AEPW	'NARROWS 69KV'	22	-0.0133	-0.12261	4
AEPW AEPW	'NORTH MARSHALL 69KV' 'NORTH MARSHALL 69KV'	5	-0.13591		'NORTHEASTERN STATION 138KV'	95		-0.13358	4
AEPW	'NORTH MARSHALL 69KV'	5	-0.13591 -0.13591		'NORTHEASTERN STATION 138KV' 'NORTHEASTERN STATION 345KV'	645		-0.13358 -0.13358	4
AEPW	'NORTH MARSHALL 69KV'	5	-0.13591	AEPW	'OEC 345KV'	319	-0.00246	-0.13345	4
AEPW	'NORTH MARSHALL 69KV'	5	-0.13591	AEPW	'RIVERSIDE STATION 138KV'	422	-0.00258	-0.13333	4

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

AEPW	'NORTH MARSHALL 69KV'	5	-0.13591	AEPW	'SLEEPING BEAR 138KV'	80	-0.00331	-0.1326	4
AEPW	'NORTH MARSHALL 69KV'	5	-0.13591	AEPW	'SOUTHWESTERN STATION 138KV'	168	-0.00373	-0.13218	4
AEPW	'NORTH MARSHALL 69KV'	5	-0.13591	AEPW	'SOUTHWESTERN STATION 138KV'	143	-0.00373	-0.13218	4
AEPW	'NORTH MARSHALL 69KV'	5	-0.13591	AEPW	'TULSA POWER STATION 138KV'	38	-0.00255	-0.13336	4
AEPW	'NORTH MARSHALL 69KV'	5	-0.13591	AEPW	'WEATHERFORD 34KV'	148	-0.0035	-0.13241	4
AEPW	'NORTH MARSHALL 69KV'	5	-0.13591	AEPW	'WELEETKA 138KV'	84	-0.00334	-0.13257	4
AEPW	'NORTH MARSHALL 69KV'	5	-0.13591	AEPW	'WELSH 345KV'	1044	-0.0081	-0.12781	4
AEPW	'NORTH MARSHALL 69KV'	5	-0.13591	AEPW	'WILKES 345KV'	191	-0.00102	-0.13489	4

|AEPW | NORTH MARSHALL 69KV' 5 | -0.13591 | AEPW | WILKES 345KV' Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF Redispatch Amount = Relief Amount / Factor

		Aggregate Relief
Reservation	Relief Amount	Amount
116150	3.5	6.6
116100	2.1	6.6

Reservation 116150									
116199		Maximum	225	Sink Control		Maximum	005		Aggregate Redispatch
Source Control Area WERE	Source 'BPU - CITY OF MCPHERSON 115KV'	Increment(MW) 239	GSF -0.28454	Area	Sink 'SMOKEY HILLS 34KV'	Decrement(MW) 152	GSF 0.06209	-0.34663	Amount (MW)
WERE	'BPU - CITY OF MCPHERSON 115KV'	239			'JEFFREY ENERGY CENTER 230KV'	494	0.00203	-0.2985	2:
WERE	'BPU - CITY OF MCPHERSON 115KV'	239			'JEFFREY ENERGY CENTER 345KV'	982		-0.30421	2:
WERE WERE	'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV'	239			'LANG 7 345 345KV' 'CHANUTE 69KV'	310 55.637		-0.29184 -0.2857	2:
WERE	BPU - CITY OF MCPHERSON 115KV	239			'CITY OF AUGUSTA 69KV'	20.02		-0.28473	2
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.28454	WERE	'CITY OF BURLINGTON 69KV'	7.8	0.00213	-0.28667	2
WERE	'BPU - CITY OF MCPHERSON 115KV'	239			'CITY OF ERIE 69KV'	23.374		-0.2857	2:
WERE WERE	'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV'	239 239			'CITY OF IOLA 69KV' 'CITY OF MULVANE 69KV'	24.471 8.29	0.00138 -0.00093	-0.28592 -0.28361	2
WERE	'BPU - CITY OF MCPHERSON 115KV'	239			'CITY OF WELLINGTON 69KV'	41.45		-0.28301	2
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.28454	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	0.00213	-0.28667	2:
WERE	'BPU - CITY OF MCPHERSON 115KV'	239			'EVANS ENERGY CENTER 138KV'	320.8022		-0.28443	2:
WERE WERE	'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV'	239 239	-0.28454 -0.28454		'GILL ENERGY CENTER 138KV' 'LAWRENCE ENERGY CENTER 115KV'	155 85		-0.28167 -0.29136	2
WERE	'BPU - CITY OF MCPHERSON 115KV'	239			'LAWRENCE ENERGY CENTER 230KV'	274.2987	0.00711	-0.29165	2
WERE	'BPU - CITY OF MCPHERSON 115KV'	239			'TECUMSEH ENERGY CENTER 115KV'	108	0.00621	-0.29075	2:
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.28454		'WACO 138KV'	17.967	-0.00259	-0.28195	2:
WERE WERE	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 69KV'	263 67	-0.22292 -0.22281	WERE	'SMOKEY HILLS 34KV' 'SMOKEY HILLS 34KV'	152 152	0.06209 0.06209	-0.28501 -0.2849	2:
WERE	'BPU - CITY OF MCPHERSON 115KV'	239			'KNOLL 3 115 115KV'	75		-0.25281	2
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.22292	WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.01967	-0.24259	2
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'JEFFREY ENERGY CENTER 345KV'	982		-0.24248	2
WERE WERE	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 69KV'	263 67			JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV'	494 494	0.01396 0.01396	-0.23688 -0.23677	2
WERE	'HUTCHINSON ENERGY CENTER 69KV	263	-0.22292		'CHANUTE 69KV'	55.637	0.00116	-0.22408	2:
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.22292	WERE	'CITY OF AUGUSTA 69KV'	20.02	0.00019	-0.22311	2
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.22292		'CITY OF ERIE 69KV'	23.374	0.00116	-0.22408	2
WERE WERE	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 115KV'	263 263	-0.22292 -0.22292		'CITY OF IOLA 69KV' 'COFFEY COUNTY NO. 2 SHARPE 69KV'	24.471 19.98	0.00138 0.00213	-0.2243 -0.22505	2:
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.22292		'EVANS ENERGY CENTER 138KV'	320.8022		-0.22281	2
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.22292		'LANG 7 345 345KV'	310	0.0073	-0.23022	2
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'LAWRENCE ENERGY CENTER 115KV'	85		-0.22974	2
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.22292		'LAWRENCE ENERGY CENTER 230KV'	274.2987	0.00711	-0.23003	2:
WERE WERE	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 69KV'	263 67	-0.22292 -0.22281		'TECUMSEH ENERGY CENTER 115KV' 'CHANUTE 69KV'	108 55.637	0.00621 0.00116	-0.22913 -0.22397	2:
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'CITY OF AUGUSTA 69KV'	20.02	0.00019	-0.223	2
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'CITY OF ERIE 69KV'	23.374		-0.22397	2
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'CITY OF IOLA 69KV'	24.471	0.00138	-0.22419	2:
WERE WERE	'HUTCHINSON ENERGY CENTER 69KV' 'HUTCHINSON ENERGY CENTER 69KV'	67 67			COFFEY COUNTY NO. 2 SHARPE 69KV' 'EVANS ENERGY CENTER 138KV'	19.98 320.8022	0.00213 -0.00011	-0.22494 -0.2227	2:
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'LANG 7 345 345KV'	310		-0.23011	2
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'LAWRENCE ENERGY CENTER 115KV'	85	0.00682	-0.22963	2:
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67		WERE	'LAWRENCE ENERGY CENTER 230KV' 'TECUMSEH ENERGY CENTER 115KV'	274.2987	0.00711	-0.22992	2
WERE WERE	'HUTCHINSON ENERGY CENTER 69KV' 'HUTCHINSON ENERGY CENTER 115KV'	67 263			CITY OF WELLINGTON 69KV	108 41.45	0.00621 -0.00153	-0.22902 -0.22139	2:
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.22292		'GILL ENERGY CENTER 138KV'	155		-0.22005	3
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'WACO 138KV'	17.967	-0.00259	-0.22033	3
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'CITY OF WELLINGTON 69KV'	41.45		-0.22128	3
WERE WERE	'HUTCHINSON ENERGY CENTER 69KV' 'HUTCHINSON ENERGY CENTER 69KV'	67 67			'GILL ENERGY CENTER 138KV' 'WACO 138KV'	155 17.967	-0.00287 -0.00259	-0.21994 -0.22022	30
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.22292	WERE	'KNOLL 3 115 115KV'	75	-0.03173	-0.19119	3-
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.22281		'KNOLL 3 115 115KV'	75		-0.19108	3-
WERE WERE	'BPU - CITY OF MCPHERSON 115KV' 'PAWNEE 115KV'	239 999			'CLAY CENTER JUNCTION 115KV'	21.056 152		-0.18231 -0.17651	30
WERE	'RICE 115KV'	999			'SMOKEY HILLS 34KV' 'SMOKEY HILLS 34KV'	152		-0.17651	3
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.10223	WERE	'SMOKEY HILLS 34KV'	152	0.06209	-0.16432	4
WERE	'PAWNEE 115KV'	999	-0.11442	WERE	'JEFFREY ENERGY CENTER 345KV'	982		-0.13409	4
WERE	'RICE 115KV'	999	-0.11442 -0.11442		'JEFFREY ENERGY CENTER 345KV'	982 494	0.01967	-0.13409	4:
WERE WERE	'PAWNEE 115KV' 'RICE 115KV'	999	-0.11442		JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV'	494		-0.12838 -0.12838	5
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.28454	WERE	'ABILENE ENERGY CENTER 115KV'	40	-0.1615	-0.12304	5
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.22292	WERE	'CLAY CENTER JUNCTION 115KV'	21.056	-0.10223	-0.12069	5-
WERE WERE	'HUTCHINSON ENERGY CENTER 69KV'	67 999			'CLAY CENTER JUNCTION 115KV' 'LANG 7 345 345KV'	21.056	-0.10223	-0.12058	5-
WERE	'PAWNEE 115KV' 'PAWNEE 115KV'	999	-0.11442		'LAWRENCE ENERGY CENTER 115KV'	310 85		-0.12172 -0.12124	5-
WERE	'PAWNEE 115KV'	999	-0.11442	WERE	'LAWRENCE ENERGY CENTER 230KV'	274.2987	0.00711	-0.12153	5-
WERE	'PAWNEE 115KV'	999	-0.11442		'TECUMSEH ENERGY CENTER 115KV'	108	0.00621	-0.12063	5-
WERE WERE	'RICE 115KV' 'RICE 115KV'	999	-0.11442 -0.11442		'LANG 7 345 345KV' 'LAWRENCE ENERGY CENTER 115KV'	310	0.0073	-0.12172	5- 5-
WERE WERE	'RICE 115KV'	999			'LAWRENCE ENERGY CENTER 115KV'	85 274.2987	0.00682	-0.12124 -0.12153	5-
WERE	'RICE 115KV'	999			'TECUMSEH ENERGY CENTER 115KV'	108	0.00621	-0.12063	5-
WERE	'PAWNEE 115KV'	999			'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	0.00213	-0.11655	5
WERE	'RICE 115KV'	999		WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV' 'CHANUTE 69KV'	19.98		-0.11655	5
WERE WERE	'PAWNEE 115KV' 'PAWNEE 115KV'	999			CHANUTE 69KV	55.637 20.02	0.00116 0.00019	-0.11558 -0.11461	5
WERE	'PAWNEE 115KV'	999	-0.11442	WERE	'CITY OF ERIE 69KV'	23.374	0.00116	-0.11558	5
WERE	'PAWNEE 115KV'	999	-0.11442	WERE	'CITY OF IOLA 69KV'	24.471	0.00138	-0.1158	5
WERE	'PAWNEE 115KV'	999			'EVANS ENERGY CENTER 138KV'	320.8022		-0.11431	5
WERE WERE	'RICE 115KV' 'RICE 115KV'	999			'CHANUTE 69KV' 'CITY OF AUGUSTA 69KV'	55.637 20.02		-0.11558 -0.11461	5
WERE	'RICE 115KV'	999			'CITY OF AUGUSTA 19RV	23.374		-0.11558	5
WERE	'RICE 115KV'	999			'CITY OF IOLA 69KV'	24.471	0.00138	-0.1158	5
WERE	'RICE 115KV'	999			'EVANS ENERGY CENTER 138KV'	320.8022		-0.11431	5
WERE WERE WERE	'RICE 115KV' 'PAWNEE 115KV' 'RICE 115KV'	999 999 999	-0.11442	WERE	EVANS ENERGY CENTER 138KV' CITY OF WELLINGTON 69KV' CITY OF WELLINGTON 69KV'	320.8022 41.45 41.45	-0.00153	-0.11431 -0.11289 -0.11289	5i 5i

WERE	'RICE 115KV'	999	-0.11442	WERE	'GILL ENERGY CENTER 138KV'	155	-0.00287	-0.11155	59
WERE	'PAWNEE 115KV'	999	-0.11442	WERE	'KNOLL 3 115 115KV'	75	-0.03173	-0.08269	79
WERE	'RICE 115KV'	999	-0.11442	WERE	'KNOLL 3 115 115KV'	75	-0.03173	-0.08269	79
WERE	'GILL ENERGY CENTER 69KV'	118	-0.00215	WERE	'SMOKEY HILLS 34KV'	152	0.06209	-0.06424	102
WERE	'CITY OF WINFIELD 69KV'	40	-0.00093		'SMOKEY HILLS 34KV'	152	0.06209	-0.06302	104
WERE	'EVANS ENERGY CENTER 138KV'	486.1978	-0.00011	WERE	'SMOKEY HILLS 34KV'	152	0.06209	-0.0622	106
WERE	'EVANS N4 138 16KV'	360	-0.0001	WERE	'SMOKEY HILLS 34KV'	152	0.06209	-0.06219	106
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.28454	WERE	'HUTCHINSON ENERGY CENTER 115KV'	120	-0.22292	-0.06162	107
WERE	'CLR_3 .575 34KV'	300	0.00089	WERE	'SMOKEY HILLS 34KV'	152	0.06209	-0.0612	107
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.22292	WERE	'ABILENE ENERGY CENTER 115KV'	40	-0.1615	-0.06142	107
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.22281	WERE	'ABILENE ENERGY CENTER 115KV'	40	-0.1615	-0.06131	107
WERE	'LATHAM1234.0 345KV'	150	0.00089	WERE	'SMOKEY HILLS 34KV'	152	0.06209	-0.0612	107
WERE	'LYONS 115KV'	999	0.00089	WERE	'SMOKEY HILLS 34KV'	152	0.06209	-0.0612	107

|WERE | LYONS 115KV | 999 | 0.00089 | WERE | SMOKEY HILLS 34KV | Maximum Decrement and Maximum increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF | Redispatch Amount = Relief Amount / Factor

Aggregate Relief Amount

WICHITA - RENO 345KV
EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1
From->TO
EAST MCPHERSON - SUMMIT 230KV CKT 1
57368573721568725687312211SP
6/1/09 - 7/1/09

Upgrade: Limiting Facility: Direction: Line Outage:

Relief Amount

Flowgate: Date Redispatch Needed:

Season Flowgate Identified: 2011 Summer Peak

1161997	7.	4 23.7							Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
/ERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.28476	WERE	'SMOKEY HILLS 34KV'	152	0.06181	-0.34657	· · · · · · · · · · · · · · · · · · ·
/ERE	'BPU - CITY OF MCPHERSON 115KV'	259			'JEFFREY ENERGY CENTER 345KV'	940			
VERE	'BPU - CITY OF MCPHERSON 115KV'	259			'JEFFREY ENERGY CENTER 230KV'	470			
VERE	'BPU - CITY OF MCPHERSON 115KV'	259			'LANG 7 345 345KV'	610			
VERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.28476	WERE	'LAWRENCE ENERGY CENTER 115KV'	85	0.00644	-0.2912	
VERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.28476	WERE	'LAWRENCE ENERGY CENTER 230KV'	201.5866	0.00674	-0.2915	
VERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.28476	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00582	-0.29058	
VERE	'BPU - CITY OF MCPHERSON 115KV'	259			'CHANUTE 69KV'	58.843			
VERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.28476	WERE	'EVANS ENERGY CENTER 138KV'	331.6143	-0.00025	-0.28451	
VERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.2231	WERE	'SMOKEY HILLS 34KV'	152	0.06181	-0.28491	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.22288	WERE	'SMOKEY HILLS 34KV'	152	0.06181	-0.28469	
VERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.28476	WERE	'CITY OF WELLINGTON 69KV'	41.45	-0.00163	-0.28313	
VERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.28476	WERE	'GILL ENERGY CENTER 138KV'	155	-0.00296	-0.2818	
VERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.2231	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01916	-0.24226	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.22288	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01916	-0.24204	
VERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.2231	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01349	-0.23659	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.22288	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01349	-0.23637	
VERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.2231	WERE	'LANG 7 345 345KV'	610	0.007	-0.2301	
VERE	'HUTCHINSON ENERGY CENTER 115KV'	263		WERE	'LAWRENCE ENERGY CENTER 115KV'	85			
VERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.2231	WERE	'LAWRENCE ENERGY CENTER 230KV'	201.5866	0.00674	-0.22984	
VERE	'HUTCHINSON ENERGY CENTER 115KV'	263		WERE	'TECUMSEH ENERGY CENTER 115KV'	108			
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'LANG 7 345 345KV'	610			
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'LAWRENCE ENERGY CENTER 115KV'	85			
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'LAWRENCE ENERGY CENTER 230KV'	201.5866			
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'TECUMSEH ENERGY CENTER 115KV'	108			
VERE	'HUTCHINSON ENERGY CENTER 115KV'	263		WERE	'CHANUTE 69KV'	58.843			
VERE	'HUTCHINSON ENERGY CENTER 115KV'	263		WERE	'EVANS ENERGY CENTER 138KV'	331.6143			
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'CHANUTE 69KV'	58.843			
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'EVANS ENERGY CENTER 138KV'	331.6143			
VERE	'HUTCHINSON ENERGY CENTER 115KV'	263		WERE	'CITY OF WELLINGTON 69KV'	41.45			
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'CITY OF WELLINGTON 69KV'	41.45			
VERE	'HUTCHINSON ENERGY CENTER 115KV'	263		WERE	'GILL ENERGY CENTER 138KV'	155			
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'GILL ENERGY CENTER 138KV'	155			
VERE	'PAWNEE 115KV'	999			'SMOKEY HILLS 34KV'	152			
VERE	'RICE 115KV'	999			'SMOKEY HILLS 34KV'	152			
VERE	'PAWNEE 115KV'	999			'JEFFREY ENERGY CENTER 345KV'	940			
VERE	'RICE 115KV'	999			'JEFFREY ENERGY CENTER 345KV'	940			
VERE	'PAWNEE 115KV'	999			'JEFFREY ENERGY CENTER 230KV'	470			
VERE	'RICE 115KV'	999			'JEFFREY ENERGY CENTER 230KV'	470			
VERE	'PAWNEE 115KV'	999			'LANG 7 345 345KV'	610			
VERE	'PAWNEE 115KV'	999			'LAWRENCE ENERGY CENTER 230KV'	201.5866			
VERE	'RICE 115KV'	999			'LANG 7 345 345KV'	610			
VERE	'RICE 115KV'	999			'LAWRENCE ENERGY CENTER 230KV'	201.5866			
VERE	'PAWNEE 115KV'	999			'LAWRENCE ENERGY CENTER 115KV'	85			
VERE	'RICE 115KV'	999			'LAWRENCE ENERGY CENTER 115KV'	85			
VERE	'PAWNEE 115KV'	999			'TECUMSEH ENERGY CENTER 115KV'	108			
VERE	'RICE 115KV'	999			TECUMSEH ENERGY CENTER 115KV	108			
VERE	'PAWNEE 115KV'	999			'EVANS ENERGY CENTER 138KV'	331.6143			
VERE	'RICE 115KV'				'EVANS ENERGY CENTER 138KV'	331.6143			
VERE	'PAWNEE 115KV'	999			'GILL ENERGY CENTER 138KV'	155			
VERE	'RICE 115KV'	999			'GILL ENERGY CENTER 138KV'	155			
VERE	'EVANS ENERGY CENTER 138KV'	475.3857			'SMOKEY HILLS 34KV'	152			
VERE	'EVANS N4 138 16KV'	360			'SMOKEY HILLS 34KV'	152			
VERE	'CLR_3 .575 34KV'	300			'SMOKEY HILLS 34KV'	152			
VERE	'LATHAM1234.0 345KV'	150			'SMOKEY HILLS 34KV'	152			
VERE	'LYONS 115KV'	999	0.00084	WERE	'SMOKEY HILLS 34KV'	152	0.06181	-0.06097	1

'SMOKEY HILLS 34KV'
'SMOKEY HILLS 34KV'
where limiting facility was identified.

WICHITA - RENO 345KV
EXIDE JUNCTION - NORTH AMERICAN PHILIPS 115KV CKT 1
From-5To
NORTH/UEW - SUMMIT 115KV CKT 1
57368573721573715738112208SP
Starting 2008 6f/ - 10/1 Until EOC of Upgrade
2008 Summer Peak Upgrade: Limiting Facility: Direction: Line Outage: Flowgate: Date Redispatch Needed: Season Flowgate Identified:

Aggregate Relief Relief Amount Reservation Amount

		Maximum		Sink Control		Maximum			Aggregate Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.35542	WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.43826	14
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.35542	WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.01102	-0.36644	17
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.35542	WERE	'KNOLL 3 115 115KV'	75	0.01715	-0.37257	17
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.23392	WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.31676	20
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.23392	WERE	'KNOLL 3 115 115KV'	75	0.01715	-0.25107	25

152 0.06181 -0.06097 152 0.06181 -0.05481

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

WEDE	IRRU CITY OF MCRUERCON 115KV	220 0.462	C4 WEDE	ICMOREA FILL 6 34K/I	450	0.00004	0.24545	26
WERE	'BPU - CITY OF MCPHERSON 115KV'		61 WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.24545	26
WERE	CLAY CENTER JUNCTION 115KV' CLAY CENTER JUNCTION 115KV'	17.044 -0.233 17.044 -0.233	92 WERE 92 WERE	'JEFFREY ENERGY CENTER 345KV' 'CHANUTE 69KV'	982 55.637	0.01102	-0.24494	26
WERE						-0.00008	-0.23384	27
WERE	'CLAY CENTER JUNCTION 115KV'		92 WERE	'CITY OF AUGUSTA 69KV'	20.02	-0.00076	-0.23316	27
WERE	'CLAY CENTER JUNCTION 115KV'		92 WERE	'CITY OF ERIE 69KV'	23.374	-0.00008	-0.23384	27
WERE	'CLAY CENTER JUNCTION 115KV'		92 WERE	'CITY OF IOLA 69KV'	24.471	0	-0.23392	27
WERE	'CLAY CENTER JUNCTION 115KV'		92 WERE	'CITY OF WELLINGTON 69KV'	41.45	-0.001	-0.23292	27
WERE	'CLAY CENTER JUNCTION 115KV'		92 WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	-0.00004	-0.23388	27
WERE	'CLAY CENTER JUNCTION 115KV'		92 WERE	'EVANS ENERGY CENTER 138KV'	320.8022	-0.00076	-0.23316	27
	'CLAY CENTER JUNCTION 115KV'		92 WERE	'GILL ENERGY CENTER 138KV'	155	-0.00151	-0.23241	27
	'CLAY CENTER JUNCTION 115KV'		92 WERE	'JEFFREY ENERGY CENTER 230KV'	494	0.00237	-0.23629	27
WERE	'CLAY CENTER JUNCTION 115KV'		92 WERE	'LANG 7 345 345KV'	310	0.00063	-0.23455	27
WERE	'CLAY CENTER JUNCTION 115KV'	17.044 -0.233	92 WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00152	-0.2324	27 27 27
WERE	'CLAY CENTER JUNCTION 115KV'	17.044 -0.233	92 WERE	'LAWRENCE ENERGY CENTER 230KV'	274.2987	-0.00168	-0.23224	27
WERE	'CLAY CENTER JUNCTION 115KV'	17.044 -0.233	92 WERE	'TECUMSEH ENERGY CENTER 115KV'	108	-0.00421	-0.22971	27
WERE	'CLAY CENTER JUNCTION 115KV'	17.044 -0.233	92 WERE	'WACO 138KV'	17.967	-0.00143	-0.23249	27
WERE	'BPU - CITY OF MCPHERSON 115KV'	239 -0.162	61 WERE	'KNOLL 3 115 115KV'	75	0.01715	-0.17976	35
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263 -0.094	67 WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.17751	35
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67 -0.094	61 WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.17745	35
WERE	'BPU - CITY OF MCPHERSON 115KV'	239 -0.162	61 WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.01102	-0.17363	36
WERE	'BPU - CITY OF MCPHERSON 115KV'		61 WERE	'JEFFREY ENERGY CENTER 230KV'	494	0.00237	-0.16498	38
WERE	'BPU - CITY OF MCPHERSON 115KV'	239 -0.162	61 WERE	'LANG 7 345 345KV'	310	0.00063	-0.16324	38
	'BPU - CITY OF MCPHERSON 115KV'		61 WERE	'CHANUTE 69KV'	55.637	-0.00008	-0.16253	39
WERE	'BPU - CITY OF MCPHERSON 115KV'		61 WERE	'CITY OF AUGUSTA 69KV'	20.02	-0.00076	-0.16185	39
WERE	'BPU - CITY OF MCPHERSON 115KV'		61 WERE	'CITY OF ERIE 69KV'	23.374	-0.00008	-0.16253	39
WERE	'BPU - CITY OF MCPHERSON 115KV'		61 WERE	'CITY OF IOLA 69KV'	24.471	0	-0.16261	39
WERE	'BPU - CITY OF MCPHERSON 115KV'		61 WERE	'CITY OF WELLINGTON 69KV'	41.45	-0.001	-0.16161	39
WERE	'BPU - CITY OF MCPHERSON 115KV'		61 WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	-0.0004	-0.16257	39
WERE	'BPU - CITY OF MCPHERSON 115KV'		61 WERE	'EVANS ENERGY CENTER 138KV'	320.8022	-0.00076	-0.16185	39
WERE	'BPU - CITY OF MCPHERSON 115KV'		61 WERE	'GILL ENERGY CENTER 138KV'	155	-0.00070	-0.1611	39
	'BPU - CITY OF MCPHERSON 115KV'		61 WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00151	-0.16109	39
	'BPU - CITY OF MCPHERSON 115KV'		61 WERE	'LAWRENCE ENERGY CENTER 230KV'	274.2987	-0.00152	-0.16093	39
WERE	'BPU - CITY OF MCPHERSON 115KV'		61 WERE	'WACO 138KV'	17.967	-0.00168	-0.16118	39
					17.967		-0.1584	
	BPU - CITY OF MCPHERSON 115KV		61 WERE	'TECUMSEH ENERGY CENTER 115KV'		-0.00421		40
	'CLAY CENTER JUNCTION 115KV'		92 WERE	'HUTCHINSON ENERGY CENTER 115KV'	120	-0.09467	-0.13925	45
	'PAWNEE 115KV'		06 WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.1189	53
WERE	'RICE 115KV'		06 WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.1189	53
WERE	'HUTCHINSON ENERGY CENTER 115KV'		67 WERE	'KNOLL 3 115 115KV'	75	0.01715	-0.11182	56
WERE	'HUTCHINSON ENERGY CENTER 69KV'		61 WERE	'KNOLL 3 115 115KV'	75	0.01715	-0.11176	56
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263 -0.094	67 WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.01102	-0.10569	59
	'HUTCHINSON ENERGY CENTER 69KV'		61 WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.01102	-0.10563	59
	'HUTCHINSON ENERGY CENTER 115KV'		67 WERE	'JEFFREY ENERGY CENTER 230KV'	494	0.00237	-0.09704	65
	'HUTCHINSON ENERGY CENTER 69KV'	67 -0.094	61 WERE	'JEFFREY ENERGY CENTER 230KV'	494	0.00237	-0.09698	65
WERE	'HUTCHINSON ENERGY CENTER 115KV'		67 WERE	'CHANUTE 69KV'	55.637	-0.00008	-0.09459	66
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263 -0.094	67 WERE	'CITY OF ERIE 69KV'	23.374	-0.00008	-0.09459	66
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263 -0.094	67 WERE	'CITY OF IOLA 69KV'	24.471	0	-0.09467	66
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263 -0.094	67 WERE	'LANG 7 345 345KV'	310	0.00063	-0.0953	66
	'HUTCHINSON ENERGY CENTER 69KV'		61 WERE	'CHANUTE 69KV'	55.637	-0.00008	-0.09453	66
WERE	'HUTCHINSON ENERGY CENTER 69KV'		61 WERE	'CITY OF ERIE 69KV'	23.374	-0.00008	-0.09453	66
WERE	'HUTCHINSON ENERGY CENTER 69KV'		61 WERE	'CITY OF IOLA 69KV'	24.471	0	-0.09461	66
	'HUTCHINSON ENERGY CENTER 69KV'		61 WERE	'LANG 7 345 345KV'	310	0.00063	-0.09524	66
	'HUTCHINSON ENERGY CENTER 115KV'		67 WERE	'CITY OF WELLINGTON 69KV'	41.45	-0.001	-0.09367	67
WERE	'HUTCHINSON ENERGY CENTER 115KV'		67 WERE	'EVANS ENERGY CENTER 138KV'	320.8022	-0.00076	-0.09391	67
WERE	'HUTCHINSON ENERGY CENTER 115KV'		67 WERE	'GILL ENERGY CENTER 138KV'	155	-0.00070	-0.09316	67
	'HUTCHINSON ENERGY CENTER 115KV'		67 WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00151	-0.09315	67
	'HUTCHINSON ENERGY CENTER 69KV'		61 WERE	'CITY OF WELLINGTON 69KV'	41.45	-0.00132	-0.09361	67
WERE	'HUTCHINSON ENERGY CENTER 69KV'		61 WERE	'EVANS ENERGY CENTER 138KV'	320.8022	-0.00076	-0.09385	67
	'HUTCHINSON ENERGY CENTER 69KV'		61 WERE	'GILL ENERGY CENTER 138KV'	155	-0.00070	-0.0931	67
	'HUTCHINSON ENERGY CENTER 69KV'		61 WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00151	-0.09309	67
					274.2987			68
	'HUTCHINSON ENERGY CENTER 115KV'		67 WERE	'LAWRENCE ENERGY CENTER 230KV'		-0.00168	-0.09299	
	'HUTCHINSON ENERGY CENTER 69KV'		61 WERE	'LAWRENCE ENERGY CENTER 230KV'	274.2987	-0.00168	-0.09293	68
WERE	'HUTCHINSON ENERGY CENTER 115KV'		67 WERE	TECUMSEH ENERGY CENTER 115KV	108	-0.00421	-0.09046	69
WERE	'HUTCHINSON ENERGY CENTER 69KV'		61 WERE	'TECUMSEH ENERGY CENTER 115KV'	108	-0.00421	-0.0904	69
WERE	TECUMSEH ENERGY CENTER 115KV		21 WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.08705	72
WERE	TECUMSEH ENERGY CENTER 69KV'	41 -0.004	69 WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.08753	72
WERE	'LAWRENCE ENERGY CENTER 115KV'		52 WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.08436	74
WERE	'CITY OF WINFIELD 69KV'		79 WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.08363	75
WERE	'EVANS ENERGY CENTER 138KV'		76 WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.0836	75
	'EVANS N4 138 16KV'		75 WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.08359	75
WERE	'GETTY 69KV'		78 WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.08362	75
WERE	'GILL ENERGY CENTER 69KV'		13 WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.08414	75
WERE	'CHANUTE 69KV'		08 WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.08292	76
WERE	'CLR_3 .575 34KV'		35 WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.08319	76
WERE	'LANG 7 345 345KV'		63 WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.08221	76
	'LATHAM1234.0 345KV'		35 WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.08319	76
WERE	'LYONS 115KV'	999 0.000	05 WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.08279	76
WERE	'NEOSHO ENERGY CENTER 138KV'		06 WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.0829	76
	'BPU - CITY OF MCPHERSON 115KV'		61 WERE	'HUTCHINSON ENERGY CENTER 115KV'	120	-0.09467	-0.06794	92
WERE	'PAWNEE 115KV'	999 -0.036	06 WERE	'KNOLL 3 115 115KV'	75	0.01715	-0.05321	118
WERE	'RICE 115KV'	999 -0.036	06 WERE	'KNOLL 3 115 115KV'	75	0.01715	-0.05321	118
WERE	'PAWNEE 115KV'	999 -0.036	06 WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.01102	-0.04708	133
	'RICE 115KV'		06 WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.01102	-0.04708	133
	'PAWNEE 115KV'		06 WERE	'JEFFREY ENERGY CENTER 230KV'	494	0.00237	-0.03843	163
	'RICE 115KV'		06 WERE	'JEFFREY ENERGY CENTER 230KV'	494	0.00237	-0.03843	163
	'PAWNEE 115KV'		06 WERE	'LANG 7 345 345KV'	310	0.00063	-0.03669	171
	'RICE 115KV'		06 WERE	'LANG 7 345 345KV'	310	0.00063	-0.03669	171
WERE	'PAWNEE 115KV'		06 WERE	'EVANS ENERGY CENTER 138KV'	320.8022	-0.00076	-0.0353	178
WERE	'RICE 115KV'		06 WERE	'EVANS ENERGY CENTER 138KV'	320.8022	-0.00076	-0.0353	178
	'PAWNEE 115KV'		06 WERE	'GILL ENERGY CENTER 138KV'	155	-0.00076	-0.0335	182
WERE	'PAWNEE 115KV'		06 WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00151	-0.03454	182
	'RICE 115KV'		06 WERE	'GILL ENERGY CENTER 138KV'	155	-0.00152	-0.03454	182
	'RICE 115KV'		06 WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00151	-0.03455	182
			06 WERE	'LAWRENCE ENERGY CENTER 115KV'	274,2987	-0.00152	-0.03454	
	'PAWNEE 115KV'							183
	'RICE 115KV'	999 -0.036	06 WERE	'LAWRENCE ENERGY CENTER 230KV' 'TECUMSEH ENERGY CENTER 115KV'	274.2987	-0.00168	-0.03438	183
	PAWNEE 115KV' ximum Increment were determine from the Souce and	999 -0.036	06 WERE		108	-0.00421	-0.03185	197

| PAWNEE 115KV | 999 | -0.03606|WERE | TECUMSEH ENERGY CENTER | Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF | Sink GSF | Redispatch Amount = Relief Amount / Factor

Reservation		Aggregate Relief Amount
1140120	6.1	18.5
1161506	6.3	18.5
1161997	6.1	18.5

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

		Maximum		Sink Control		Maximum			Aggregate Redispatch
Source Control Area	Source	Increment(MW)		Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			'SMOKEY HILLS 34KV'	152		-0.24544	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'SMOKEY HILLS 34KV'	152		-0.17749	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'SMOKEY HILLS 34KV'	152		-0.17737	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.16271		'JEFFREY ENERGY CENTER 345KV'	940		-0.17357	107
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			'JEFFREY ENERGY CENTER 230KV'	470		-0.16496	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.16271		'LANG 7 345 345KV'	610		-0.16328	113
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			'CHANUTE 69KV'	58.843	-0.00011	-0.1626	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			'CITY OF WELLINGTON 69KV'	41.45		-0.16168	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.16271	WERE	'EVANS ENERGY CENTER 138KV'	331.6143	-0.00079	-0.16192	114
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.16271	WERE	'GILL ENERGY CENTER 138KV'	155	-0.00153	-0.16118	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.16271	WERE	'LAWRENCE ENERGY CENTER 115KV'	85		-0.16123	115
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.16271	WERE	'LAWRENCE ENERGY CENTER 230KV'	201.5866	-0.00167	-0.16104	115
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.16271	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	-0.00428	-0.15843	117
WERE	'PAWNEE 115KV'	999	-0.03611	WERE	'SMOKEY HILLS 34KV'	152	0.08273	-0.11884	156
WERE	'RICE 115KV'	999	-0.03611	WERE	'SMOKEY HILLS 34KV'	152	0.08273	-0.11884	156
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.09476	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01086	-0.10562	175
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.09464	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01086	-0.1055	175
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.09476	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.00225	-0.09701	191
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.09464	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.00225	-0.09689	191
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.09476		'LANG 7 345 345KV'	610		-0.09533	194
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.09464		'LANG 7 345 345KV'	610		-0.09521	194
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.09476	WERE	'EVANS ENERGY CENTER 138KV'	331,6143	-0.00079	-0.09397	197
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.09464	WERE	'EVANS ENERGY CENTER 138KV'	331,6143	-0.00079	-0.09385	197
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.09476	WERE	'GILL ENERGY CENTER 138KV'	155	-0.00153	-0.09323	198
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.09476		'LAWRENCE ENERGY CENTER 115KV'	85		-0.09328	198
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'LAWRENCE ENERGY CENTER 115KV'	85		-0.09316	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.09476		'LAWRENCE ENERGY CENTER 230KV'	201.5866		-0.09309	199
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.09464		'GILL ENERGY CENTER 138KV'	155		-0.09311	199
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.09464		'LAWRENCE ENERGY CENTER 230KV'	201.5866		-0.09297	199
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.09476		'TECUMSEH ENERGY CENTER 115KV'	108		-0.09048	
WERE	'GILL ENERGY CENTER 69KV'	118			'SMOKEY HILLS 34KV'	152		-0.08406	
WERE	'EVANS ENERGY CENTER 138KV'	475.3857			'SMOKEY HILLS 34KV'	152		-0.08352	221
WERE	'EVANS N4 138 16KV'	360			'SMOKEY HILLS 34KV'	152		-0.08352	
WERE	'CLR 3 .575 34KV'	300	-0.00073		'SMOKEY HILLS 34KV'	152		-0.08312	
WERE	'LATHAM1234.0 345KV'	150			'SMOKEY HILLS 34KV'	152		-0.08312	
WERE	'LYONS 115KV'	999	0.00004		'SMOKEY HILLS 34KV'	152		-0.08269	
WERE	'LANG 7 345 345KV'	218			'SMOKEY HILLS 34KV'	152		-0.08216	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			'HUTCHINSON ENERGY CENTER 115KV'	120		-0.06795	
WERE	'PAWNEE 115KV'	999	-0.10271		'JEFFREY ENERGY CENTER 345KV'	940		-0.00793	394
WERE	'RICE 115KV'	999			'JEFFREY ENERGY CENTER 345KV'	940		-0.04697	394
WERE	'PAWNEE 115KV'	999	-0.03611		'JEFFREY ENERGY CENTER 230KV'	470		-0.04037	
WERE	'RICE 115KV'	999	-0.03611		'JEFFREY ENERGY CENTER 230KV'	470		-0.03836	482
WERE	'PAWNEE 115KV'	999	-0.03611		'LANG 7 345 345KV'	610		-0.03668	504
WERE	'RICE 115KV'	999	-0.03611		'LANG 7 345 345KV'	610		-0.03668	504
WERE	'PAWNEE 115KV'	999	-0.03611		'EVANS ENERGY CENTER 138KV'	331.6143		-0.03532	504
WERE		999	-0.03611			331.6143		-0.03532	
WERE	'RICE 115KV' 'PAWNEE 115KV'	999			'EVANS ENERGY CENTER 138KV' 'LAWRENCE ENERGY CENTER 230KV'	201.5866		-0.03532	
WERE	'RICE 115KV'							-0.03444	
	Maximum Increment were determine from the Souce	999			'LAWRENCE ENERGY CENTER 230KV'	201.5866	-0.00167	-0.03444	537

| 1939 | 0.03611|WERE | LAWKENCE ENERGY CENTER | 939 | 0.03611|WERE | LAWKENCE ENERGY CENTER | Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF | Redispatch Amount = Relief Amount / Factor

Aggregate Relief

Reservation	Relief Amount	Amount							
1161	997 12.2	12.2							
		Maximum		Sink Control		Maximum			Aggregate Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.02299		3
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01718	-0.3128	3
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			'LAWRENCE ENERGY CENTER 115KV'	60	0.0088		4
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562	WERE	'LAWRENCE ENERGY CENTER 230KV'	235.3866	0.00919	-0.30481	4
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			'TECUMSEH ENERGY CENTER 115KV'	108	0.00844	-0.30406	4
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562	WERE	'CHANUTE 69KV'	46.617	0.00149	-0.29711	4
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562	WERE	'CITY OF AUGUSTA 69KV'	20.02	0.00049	-0.29611	4
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562	WERE	'CITY OF ERIE 69KV'	23.258	0.00149	-0.29711	4
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562	WERE	'CITY OF IOLA 69KV'	19.865	0.00174	-0.29736	4
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562	WERE	'CITY OF WELLINGTON 69KV'	31.07001	-0.00165	-0.29397	4
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.00282	-0.29844	4
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562	WERE	'EVANS ENERGY CENTER 138KV'	269.2019	0.00013	-0.29575	4
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562	WERE	'GILL ENERGY CENTER 138KV'	77	-0.00315	-0.29247	4
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562	WERE	'WACO 138KV'	17.947	-0.00282	-0.2928	4
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.02299	-0.26093	4
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.02299	-0.26082	4
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01718	-0.25512	4
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01718	-0.25501	4
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.0088	-0.24674	4
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303			'LAWRENCE ENERGY CENTER 230KV'	235,3866	0.00919		4
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00844	-0.24638	4
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783		'LAWRENCE ENERGY CENTER 115KV'	60	0.0088	-0.24663	4
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783	WERE	'LAWRENCE ENERGY CENTER 230KV'	235,3866	0.00919	-0.24702	4
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00844	-0.24627	4
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303			'CHANUTE 69KV'	46,617	0.00149		5
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794	WERE	'CITY OF AUGUSTA 69KV'	20.02	0.00049	-0.23843	5
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303			'CITY OF ERIE 69KV'	23,258	0.00149		5
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794	WERE	'CITY OF IOLA 69KV'	19.865	0.00174	-0.23968	5
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.00282	-0.24076	5
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794	WERE	'EVANS ENERGY CENTER 138KV'	269.2019	0.00013	-0.23807	5
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67		WERE	'CHANUTE 69KV'	46.617	0.00149	-0.23932	5
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'CITY OF AUGUSTA 69KV'	20.02	0.00049		5
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783		'CITY OF ERIE 69KV'	23.258	0.00149	-0.23932	5
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783	WERE	'CITY OF IOLA 69KV'	19.865	0.00174	-0.23957	5
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.00282	-0.24065	5
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783	WERE	'EVANS ENERGY CENTER 138KV'	269.2019	0.00013	-0.23796	5
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794	WERE	'CITY OF WELLINGTON 69KV'	31.07001	-0.00165	-0.23629	5
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794	WERE	'GILL ENERGY CENTER 138KV'	77	-0.00315	-0.23479	5
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303			'WACO 138KV'	17.947	-0.00282	-0.23512	5
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783	WERE	'CITY OF WELLINGTON 69KV'	31.07001	-0.00165	-0.23618	5
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'GILL ENERGY CENTER 138KV'	77	-0.00315	-0.23468	5
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783	WERE	'WACO 138KV'	17.947	-0.00282	-0.23501	
WERE	'ABILENE ENERGY CENTER 115KV'	66			'JEFFREY ENERGY CENTER 345KV'	940			6
WERE	'ABILENE ENERGY CENTER 115KV'	66			'JEFFREY ENERGY CENTER 230KV'	470			7
WERE	'ABILENE ENERGY CENTER 115KV'	66			'LAWRENCE ENERGY CENTER 115KV'	60			7

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.15727	WERE	'LAWRENCE ENERGY CENTER 230KV'	235.3866	0.00919	-0.16646	73
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.15727	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00844	-0.16571	74
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.15727	WERE	'CHANUTE 69KV'	46.617	0.00149	-0.15876	77
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.15727	WERE	'EVANS ENERGY CENTER 138KV'	269.2019	0.00013	-0.1574	77
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.15727		'CITY OF WELLINGTON 69KV'	31.07001	-0.00165	-0.15562	78
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.15727	WERE	'GILL ENERGY CENTER 138KV'	77	-0.00315	-0.15412	79
WERE	'PAWNEE 115KV'	999	-0.13182	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.02299	-0.15481	79
WERE	'RICE 115KV'	999	-0.13182		'JEFFREY ENERGY CENTER 345KV'	940	0.02299	-0.15481	79
WERE	'PAWNEE 115KV'	999	-0.13182	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01718	-0.149	82
WERE	'RICE 115KV'	999	-0.13182	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01718	-0.149	82
WERE	'PAWNEE 115KV'	999	-0.13182	WERE	'LAWRENCE ENERGY CENTER 230KV'	235.3866	0.00919	-0.14101	86
WERE	'RICE 115KV'	999	-0.13182	WERE	'LAWRENCE ENERGY CENTER 230KV'	235.3866	0.00919	-0.14101	86
WERE	'PAWNEE 115KV'	999	-0.13182	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.0088	-0.14062	87
WERE	'PAWNEE 115KV'	999	-0.13182	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00844	-0.14026	87
WERE	'RICE 115KV'	999	-0.13182	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.0088	-0.14062	87
WERE	'RICE 115KV'	999	-0.13182	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00844	-0.14026	87
WERE	'PAWNEE 115KV'	999	-0.13182	WERE	'CHANUTE 69KV'	46.617	0.00149	-0.13331	91
WERE	'RICE 115KV'	999	-0.13182		'CHANUTE 69KV'	46.617	0.00149	-0.13331	91
WERE	'PAWNEE 115KV'	999	-0.13182		'EVANS ENERGY CENTER 138KV'	269.2019	0.00013	-0.13195	92
WERE	'RICE 115KV'	999	-0.13182		'EVANS ENERGY CENTER 138KV'	269.2019	0.00013	-0.13195	92
WERE	'PAWNEE 115KV'	999	-0.13182		'GILL ENERGY CENTER 138KV'	77	-0.00315	-0.12867	95
WERE	'RICE 115KV'	999	-0.13182		'GILL ENERGY CENTER 138KV'	77	-0.00315	-0.12867	95
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562	WERE	'HUTCHINSON ENERGY CENTER 115KV'	80.00001	-0.23794	-0.05768	211

Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified.

Aggregate Relie

Factor = Source GSF - Sink GSF

Season Flowgate Identified:

WERE

'RICE 115KV

Redispatch Amount = Relief Amount / Factor

Upgrade

WICHITA - RENO 345KV EXIDE JUNCTION - SUMMIT 115KV CKT 1 Limiting Facility: Direction:

To->From EAST MCPHERSON - SUMMIT 230KV CKT 1 Line Outage: 57368573811568725687312207WP 2007 Winter Peal

Flowgate: Date Redispatch Needed: 12/1/07 - 4/1/08

Relief Amount Reservation Amount 1161997 /aximum Sink Control Maximum Source Control Area
WERE
WERE Decrement(MW) GSF Factor 152 0.06208 -0.3466: 470 0.01396 -0.2985 940 0.01966 -0.3042 ncrement(MW) GSF Amount (MW) Source

BPU - CITY OF MCPHERSON 115KV
SINK
'SMOKEY HILLS 34KV'
'JEFFREY ENERGY CENTER 230KV
'JEFFREY ENERGY CENTER 345KV 'CHANUTE 69KV 34.818 0.00116 -0.2857 -0.28455 WERE BPU - CITY OF MCPHERSON 115KV
BPU - CITY OF MCPHERSON 115KV
BPU - CITY OF MCPHERSON 115KV
BPU - CITY OF MCPHERSON 115KV
BPU - CITY OF MCPHERSON 115KV
BPU - CITY OF MCPHERSON 115KV
BPU - CITY OF MCPHERSON 115KV
BPU - CITY OF MCPHERSON 115KV
BPU - CITY OF MCPHERSON 115KV
BPU - CITY OF MCPHERSON 115KV
BPU - CITY OF MCPHERSON 115KV
BPU - CITY OF MCPHERSON 115KV
BPU - CITY OF MCPHERSON 115KV
BPU - CITY OF MCPHERSON 115KV CHANUTE 69KV'
CITY OF AUGUSTA 69KV'
CITY OF BURLINGTON 69KV'
CITY OF IOLA 69KV'
CITY OF WELLINGTON 69KV'
COFFEY COUNTY NO. 2 SHARPE 69KV'
EVANS ENERGY CENTER 138KV'
LAWDENICE ENERGY CENTER 138KV 259 -0.28455 WERE 34.818 0.00116 -0.2857* 14.628 0.00021 -0.2847* 14.555 0.00137 -0.2867; 14.565 0.00137 -0.2859; 20 -0.00151 -0.2830 19.95 0.00217 -0.2867; 46.66499 -0.00009 -0.2844* 138.6866 0.0071 -0.29165 WERE LAWRENCE ENERGY CENTER 230KV 136.4686 6.4686 0.0071 -0.29165 17.93 -0.00257 -0.28198 -0.28455 WERE 'WACO 138KV' WACO 138KV'
SMOKEY HILLS 34KV'
SMOKEY HILLS 34KV'
COLBY 115KV'
JEFFREY ENERGY CENTER 230KV'
JEFFREY ENERGY CENTER 345KV'
LAWRENCE ENERGY CENTER 230KV'
JEFFREY ENERGY CENTER 230KV' BPU - CITY OF MCPHERSON 115KV'
HUTCHINSON ENERGY CENTER 115KV'
HUTCHINSON ENERGY CENTER 69KV'
BPU - CITY OF MCPHERSON 115KV'
HUTCHINSON ENERGY CENTER 115KV' 259 -0.28455 WERE 423 -0.22293 WERE 67 -0.22282 WERE 259 -0.28455 WERE 423 -0.22293 WERE 423 -0.22293 WERE 423 -0.22293 WERE 67 -0.22282 WERE WERE WERE WERE WERE WERE WERE 'HUTCHINSON ENERGY CENTER 69K\ -0.22282 WERE HUI CHINSON ENERGY CENTER 98KV
HUTCHINSON ENERGY CENTER 68KV
ABILENE ENERGY CENTER 115KV
HUTCHINSON ENERGY CENTER 115KV 67 -0.22282 WERE 66 -0.1615 WERE 423 -0.22293 WERE 940 0.01966 -0.24244 152 0.06208 -0.22358 34.818 0.00116 -0.22409 14.628 0.00021 -0.22312 JEFFREY ENERGY CENTER 345KV JEFFREY ENERGY CENTER
'SMOKEY HILLS 34KV'
'CHANUTE 69KV'
'CITY OF AUGUSTA 69KV'
'CITY OF IOLA 69KV'
'CITY OF WELLINGTON 69KV 423 -0.22293 WERE WERE 423 -0.22293 WERE 423 -0.22293 WERE 14.565 0.00137 665 0.00137 -0.224 20 -0.00151 -0.2214 HUTCHINSON ENERGY CENTER 115KV
HUTCHINSON ENERGY CENTER 115KV
HUTCHINSON ENERGY CENTER 115KV
HUTCHINSON ENERGY CENTER 115KV
HUTCHINSON ENERGY CENTER 61KV
HUTCHINSON ENERGY CENTER 69KV
COTFEY COUNTY NO. 2 SHARPE 69KV'
'EVANS ENERGY CENTER 138KV' 20 -0.00151 -0.22151 19.95 -0.00217 -0.2251 46.66499 -0.00009 -0.2284 17.93 -0.00257 -0.2203 34.818 -0.00116 -0.22398 14.628 -0.00021 -0.22303 14.565 -0.00137 -0.22419 20 -0.00151 -0.22318 19.95 0.00217 423 -0.22293 WERE 423 -0.22293 WERE WER EVANS ENERGY CENTER 138KV

WACO 138KV

CHANUTE 69KV

CITY OF AUGUSTA 69KV

CITY OF OLA 69KV

CITY OF OLA 69KV

CITY OF WELLINGTON 69KV

COFFEY COUNTY NO. 2 SHARPE 69KV

EVANS ENERGY CENTER 138KV

LAWRENCE ENERGY CENTER 230KV

WACO 138KV

COLBY 115KV

JEFFREY ENERGY CENTER 345KV

JEFFREY ENERGY CENTER 345KV

JEFFREY ENERGY CENTER 230KV 423 -0.22293 WERE 67 -0.22282 WERE 67 -0.22282 WERE 67 -0.22282 WERE WERE WERE WERE WERE 67 -0.22282 WERE 67 -0.22282 WERE 20 -0.00151 -0.2213 19.95 0.00217 -0.2249 HUICHINSON ENERGY CENTER 59KV
HUTCHINSON ENERGY CENTER 69KV
ABILENE ENERGY CENTER 115KV
ABILENE ENERGY CENTER 115KV
ABILENE ENERGY CENTER 115KV 67 -0.22282 WERE 67 -0.22282 WERE 67 -0.22282 WERE 423 -0.22283 WERE 66 -0.1615 WERE 66 -0.1615 WERE 19.95 0.00217 -0.22478 46.66499 -0.0009 -0.22273 136.4686 0.0071 -0.22923 17.93 -0.00257 -0.22025 7.230198 -0.03493 -0.188 7.230198 -0.03493 -0.1876 940 0.01966 -0.18116 470 0.01396 -0.17548 WER -0.11443 WERE SMOKEY HILLS 34KV'
SMOKEY HILLS 34KV'
LAWRENGE ENERGY CENTER 230KV'
SMOKEY HILLS 34KV'
CHANUTE 69KV'
CITY OF AUGUSTA 69KV'
CITY OF 10L 69KV'
CITY OF 10L 69KV'
CITY OF 10L 01KY'
COFFEY COUNTY NO. 2 SHARPE 69KV'
EVANS ENERGY CENTER 138KV'
WACO 138KV'
SMOKEY HILLS 34KV'
JEFFREY ENERGY CENTER 345KV'
JEFFREY ENERGY CENTER 345KV'
JEFFREY ENERGY CENTER 336KV'
JEFFREY ENERGY CENTER 336KV'
JEFFREY ENERGY CENTER 336KV' 'PAWNEE 115KV' 999 'SMOKEY HILLS 34KV 152 0.06208 -0.1765 WERE WERE -0.11443 WERE -0.1615 WERE -0.10224 WERE -0.1615 WERE 0.06208 -0.17651 0.06208 -0.17651 0.0071 -0.1663 0.06208 -0.16432 0.00116 -0.16266 'RICF 115KV 'RICE 115KV'
'ABILENE ENERGY CENTER 115KV'
'CLAY CENTER JUNCTION 115KV'
'CHAUSE ENERGY CENTER 115KV'
'ABILENE ENERGY CENTER 115KV'
'ABILENE ENERGY CENTER 115KV'
'ABILENE ENERGY CENTER 115KV' 136.4686 WERE 34.818 WERE WERE -0.1615 WERE -0.1615 WERE 14.628 0.00021 -0.1617 14.565 0.00137 -0.1628 ABILENE ENERGY CENTER 115KV'
ABILENE ENERGY CENTER 115KV'
ABILENE ENERGY CENTER 115KV'
ABILENE ENERGY CENTER 115KV'
ABILENE ENERGY CENTER 115KV'
GREAT BEND PLANT 69KV'
PAWNEE 115KV'
PAWNEE 115KV'
PAWNEE 115KV'
PAWNEE 115KV' -0.1615 WERE -0.1615 WERE -0.1615 WERE -0.1615 WERE -0.09113 WERE 14.565 0.00137 -0.15287 20 -0.00151 -0.15999 19.95 0.00217 -0.16367 .66499 -0.00009 -0.16141 17.93 -0.00257 -0.15893 152 0.06208 -0.15321 940 0.01966 -0.13409 940 0.01966 -0.13409 940 0.01966 -0.13409 WERE 999 -0.11443 WERE 999 -0.11443 WERE -0.11443 WER 470 0.01396 -0.1283 'RICE 115KV -0.11443 WERE JEFFREY ENERGY CENTER 230KV 470 0.01396 -0.1283 RICE 115KV'
PAWNEE 115KV
PICLAY CENTER JUNCTION 115KV
PAWNEE 115KV
RICE 115KV
PAWNEE 115KV
PAWNEE 115KV
PAWNEE 115KV
PAWNEE 115KV 999 -0.11443 WERE 31.4 -0.10224 WERE 999 -0.11443 WERE 999 -0.11443 WERE 999 -0.11443 WERE 999 -0.11443 WERE JEFFREY ENERGY CENTER 230KV'
'JEFFREY ENERGY CENTER 345KV'
'LAWRENCE ENERGY CENTER 230KV'
'LAWRENCE ENERGY CENTER 230KV'
'CHANUTE 69KV'
'CHANUTE 69KV'
'CITY OF AUGUSTA 69KV' 470 0.01396 -0.12839 940 0.01966 -0.12191 136.4686 0.0071 -0.12153 136.4686 0.0071 -0.12153 470 0.01396 -0.11622 34.818 0.0016 -0.11559 14.628 0.00021 -0.11462 WERE WERE WERE WERE PAWNEE 115K 999 -0.11443 WER 'CITY OF IOLA 69KV'
'COFFEY COUNTY NO. 2 SHARPE 69KV' 14.565 0.00137 -0.115 -0.116 999 -0.11443 WERE PAWNEE 115KV 19.95 0.00217 COFFEY COUNTY NO. 2 SHARPE 69KV'
EVANS ENERGY CENTER 138KV'
EVANS ENERGY CENTER 138KV'
CHANUTE 69KV'
CITY OF AUGUSTA 69KV'
COFFEY COUNTY NO. 2 SHARPE 69KV' 999 -0.11443 WERE 999 -0.11443 WERE 999 -0.11443 WERE 999 -0.11443 WERE 15.59 0.00217 0.1163 34.818 0.00116 -0.11559 14.628 0.00021 -0.11464 14.565 0.00137 -0.1158

'EVANS ENERGY CENTER 138KV'

'CITY OF WELLINGTON 69KV'
'WACO 138KV' 'CITY OF WELLINGTON 69KV

0.0021

20 -0.00151 -0.11292 17.93 -0.00257 -0.11186 20 -0.00151 -0.11292

-0.00009 -0.11434

46.66499

-0.11443 WER

999 -0.11443 WERE

999 -0.11443 WERE 999 -0.11443 WERE 999 -0.11443 WERE

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

WERE	'RICE 115KV'	999	-0.11443	WERE	'WACO 138KV'	17.93	-0.00257	-0.11186	36
WERE	'CLAY CENTER JUNCTION 115KV'	31.4	-0.10224	WERE	'LAWRENCE ENERGY CENTER 230KV'	136.4686	0.0071	-0.10934	37
WERE	'CLAY CENTER JUNCTION 115KV'	31.4	-0.10224	WERE	'CHANUTE 69KV'	34.818	0.00116	-0.1034	39
WERE	'CLAY CENTER JUNCTION 115KV'	31.4	-0.10224	WERE	'CITY OF AUGUSTA 69KV'	14.628	0.00021	-0.10245	39
WERE	'CLAY CENTER JUNCTION 115KV'	31.4	-0.10224	WERE	'CITY OF IOLA 69KV'	14.565	0.00137	-0.10361	39
WERE	'CLAY CENTER JUNCTION 115KV'	31.4	-0.10224	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.95	0.00217	-0.10441	39
WERE	'CLAY CENTER JUNCTION 115KV'	31.4	-0.10224		'EVANS ENERGY CENTER 138KV'	46.66499	-0.00009	-0.10215	39
WERE	'CLAY CENTER JUNCTION 115KV'	31.4	-0.10224		'CITY OF WELLINGTON 69KV'	20	-0.00151	-0.10073	40
WERE	'CLAY CENTER JUNCTION 115KV'	31.4	-0.10224	WERE	'WACO 138KV'	17.93	-0.00257	-0.09967	40
WERE	'KNOLL 3 115 115KV'	84.35999	-0.03174	WERE	'SMOKEY HILLS 34KV'	152	0.06208	-0.09382	43
WERE	'GILL ENERGY CENTER 138KV'	218	-0.00285	WERE	'SMOKEY HILLS 34KV'	152	0.06208	-0.06493	62
WERE	'CITY OF WELLINGTON 69KV'	23.5	-0.00151	WERE	'SMOKEY HILLS 34KV'	152	0.06208	-0.06359	63
WERE	'GILL ENERGY CENTER 69KV'	118	-0.00213	WERE	'SMOKEY HILLS 34KV'	152	0.06208	-0.06421	63
WERE	'CITY OF WINFIELD 69KV'	40	-0.00091	WERE	'SMOKEY HILLS 34KV'	152	0.06208	-0.06299	64
WERE	'EVANS ENERGY CENTER 138KV'	746.335	-0.00009	WERE	'SMOKEY HILLS 34KV'	152	0.06208	-0.06217	65
WERE	'EVANS N4 138 16KV'	360	-0.00008	WERE	'SMOKEY HILLS 34KV'	152	0.06208	-0.06216	65
WERE	'GETTY 69KV'	35	0.00049	WERE	'SMOKEY HILLS 34KV'	152	0.06208	-0.06159	65
WERE	'CHANUTE 69KV'	52.982	0.00116	WERE	'SMOKEY HILLS 34KV'	152	0.06208	-0.06092	66
WERE	'CITY OF ERIE 69KV'	24.535	0.00116	WERE	'SMOKEY HILLS 34KV'	152	0.06208	-0.06092	66
WERE	'CITY OF IOLA 69KV'	23.063	0.00137	WERE	'SMOKEY HILLS 34KV'	152	0.06208	-0.06071	66
WERE	'CLR_3 .575 34KV'	300	0.00091	WERE	'SMOKEY HILLS 34KV'	152	0.06208	-0.06117	66
WERE	'LATHAM1234.0 345KV'	150	0.00091	WERE	'SMOKEY HILLS 34KV'	152	0.06208	-0.06117	66
WERE	'LYONS 115KV'	999	0.0009	WERE	'SMOKEY HILLS 34KV'	152	0.06208	-0.06118	66
WERE	'NEOSHO ENERGY CENTER 138KV'	67	0.00112	WERE	'SMOKEY HILLS 34KV'	152	0.06208	-0.06096	66
WERE	'TECUMSEH ENERGY CENTER 115KV'	243	0.00621		'SMOKEY HILLS 34KV'	152	0.06208	-0.05587	72
WERE	'TECUMSEH ENERGY CENTER 69KV'	41		WERE	'SMOKEY HILLS 34KV'	152	0.06208	-0.05592	72
WERE	'LANG 7 345 345KV'	828		WERE	'SMOKEY HILLS 34KV'	152	0.06208	-0.05478	73

| WERE | LANG 7345 345KV | 828 | 0.0073|WERE | SMOKEY HILLS 34KV | Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF | Redispatch Amount = Relief Amount / Factor

		Aggregate Relief	1						
Reservation 1161506	Relief Amount 8.2	Amount 15.5							
1161997									
									Aggregate
		Maximum		Sink Control	0.1	Maximum			Redispatch
Source Control Area WERE	Source 'BPU - CITY OF MCPHERSON 115KV'	Increment(MW) 239	GSF -0.28454	Area	Sink 'SMOKEY HILLS 34KV'	Decrement(MW) 152	GSF 0.06209	-0.34663	Amount (MW) 45
WERE	BPU - CITY OF MCPHERSON 115KV	239			'JEFFREY ENERGY CENTER 345KV'	982	0.06209	-0.34663	51
WERE	'BPU - CITY OF MCPHERSON 115KV'	239			'JEFFREY ENERGY CENTER 230KV'	494		-0.2985	52
WERE	'BPU - CITY OF MCPHERSON 115KV'	239			'LANG 7 345 345KV'	310		-0.29184	53
WERE	'BPU - CITY OF MCPHERSON 115KV'	239			'LAWRENCE ENERGY CENTER 115KV'	85		-0.29136	53
WERE WERE	'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV'	239 239			'LAWRENCE ENERGY CENTER 230KV' 'TECUMSEH ENERGY CENTER 115KV'	274.2987		-0.29165 -0.29075	53
WERE	BPU - CITY OF MCPHERSON 115KV	239			CHANUTE 69KV	108 55.637		-0.29075	53 54
WERE	'BPU - CITY OF MCPHERSON 115KV'	239			'CITY OF ERIE 69KV'	23.374		-0.2857	54
WERE	'BPU - CITY OF MCPHERSON 115KV'	239			'CITY OF IOLA 69KV'	24.471		-0.28592	54
WERE	'BPU - CITY OF MCPHERSON 115KV'	239			'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98		-0.28667	54
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'SMOKEY HILLS 34KV'	152		-0.28501	54
WERE WERE	'HUTCHINSON ENERGY CENTER 69KV' 'BPU - CITY OF MCPHERSON 115KV'	67 239			'SMOKEY HILLS 34KV' 'CITY OF AUGUSTA 69KV'	152 20.02	0.06209	-0.2849 -0.28473	54 55
WERE	BPU - CITY OF MCPHERSON 115KV	239			'CITY OF WELLINGTON 69KV'	41.45		-0.28301	55
WERE	'BPU - CITY OF MCPHERSON 115KV'	239			'EVANS ENERGY CENTER 138KV'	320.8022		-0.28443	55
WERE	'BPU - CITY OF MCPHERSON 115KV'	239			'GILL ENERGY CENTER 138KV'	155		-0.28167	55
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.28454	WERE	'KNOLL 3 115 115KV'	75	-0.03173	-0.25281	61
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'JEFFREY ENERGY CENTER 345KV'	982		-0.24259	64
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'JEFFREY ENERGY CENTER 345KV'	982		-0.24248	64
WERE WERE	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 69KV'	263 67			'JEFFREY ENERGY CENTER 230KV' 'JEFFREY ENERGY CENTER 230KV'	494 494		-0.23688 -0.23677	66 66
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'LANG 7 345 345KV'	310		-0.23022	67
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'LAWRENCE ENERGY CENTER 230KV'	274.2987		-0.23003	67
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67		WERE	'LANG 7 345 345KV'	310		-0.23011	67
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'LAWRENCE ENERGY CENTER 115KV'	85		-0.22974	68
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			TECUMSEH ENERGY CENTER 115KV	108	0.00621	-0.22913	68
WERE WERE	'HUTCHINSON ENERGY CENTER 69KV' 'HUTCHINSON ENERGY CENTER 69KV'	67 67			'LAWRENCE ENERGY CENTER 115KV' 'LAWRENCE ENERGY CENTER 230KV'	85 274.2987		-0.22963 -0.22992	68 68
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67		WERE	'TECUMSEH ENERGY CENTER 115KV'	108		-0.22992	68
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'CHANUTE 69KV'	55.637		-0.22408	69
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'CITY OF ERIE 69KV'	23.374	0.00116	-0.22408	69
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'CITY OF IOLA 69KV'	24.471		-0.2243	69
WERE WERE	'HUTCHINSON ENERGY CENTER 69KV' 'HUTCHINSON ENERGY CENTER 69KV'	67			'CHANUTE 69KV'	55.637	0.00116	-0.22397	69
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67 67			'CITY OF ERIE 69KV'	23.374		-0.22397 -0.22419	69 69
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'CITY OF WELLINGTON 69KV'	41.45		-0.22139	70
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.22292	WERE	'EVANS ENERGY CENTER 138KV'	320.8022	-0.00011	-0.22281	70
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'CITY OF WELLINGTON 69KV'	41.45		-0.22128	70
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'EVANS ENERGY CENTER 138KV'	320.8022		-0.2227	70
WERE WERE	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 69KV'	263 67			'GILL ENERGY CENTER 138KV' 'GILL ENERGY CENTER 138KV'	155 155		-0.22005 -0.21994	71 71
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'KNOLL 3 115 115KV'	75		-0.21994	81
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'KNOLL 3 115 115KV'	75		-0.19108	81
WERE	'PAWNEE 115KV'	999			'SMOKEY HILLS 34KV'	152		-0.17651	88
WERE	'RICE 115KV'	999			'SMOKEY HILLS 34KV'	152		-0.17651	88
WERE	'PAWNEE 115KV'	999			'JEFFREY ENERGY CENTER 345KV'	982		-0.13409	116
WERE WERE	'RICE 115KV' 'PAWNEE 115KV'	999			'JEFFREY ENERGY CENTER 345KV' 'JEFFREY ENERGY CENTER 230KV'	982 494		-0.13409 -0.12838	116 121
WERE	'RICE 115KV'	999			'JEFFREY ENERGY CENTER 230KV'	494		-0.12838	121
WERE	'PAWNEE 115KV'	999			'LANG 7 345 345KV'	310		-0.12172	
WERE	'PAWNEE 115KV'	999			'LAWRENCE ENERGY CENTER 115KV'	85		-0.12124	
WERE	'PAWNEE 115KV'	999			'LAWRENCE ENERGY CENTER 230KV'	274.2987		-0.12153	128
WERE WERE	'RICE 115KV'	999			'LANG 7 345 345KV' 'LAWRENCE ENERGY CENTER 115KV'	310		-0.12172	128 128
WERE	'RICE 115KV'	999			'LAWRENCE ENERGY CENTER 115KV'	85 274.2987		-0.12124 -0.12153	128
WERE	'PAWNEE 115KV'	999			TECUMSEH ENERGY CENTER 115KV	108		-0.12163	129
WERE	'RICE 115KV'	999	-0.11442	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00621	-0.12063	129
WERE	'PAWNEE 115KV'	999			'CHANUTE 69KV'	55.637			134
WERE	'RICE 115KV'	999			'CHANUTE 69KV'	55.637			134
WERE WERE	'PAWNEE 115KV' 'RICE 115KV'	999			'EVANS ENERGY CENTER 138KV' 'EVANS ENERGY CENTER 138KV'	320.8022 320.8022		-0.11431 -0.11431	136 136
WERE	'PAWNEE 115KV'	999			GILL ENERGY CENTER 138KV	320.8022		-0.11431	136
WERE	'RICE 115KV'	999			'GILL ENERGY CENTER 138KV'	155		-0.11155	139
WERE	'PAWNEE 115KV'	999		WERE	'KNOLL 3 115 115KV'	75	-0.03173	-0.08269	188
WERE	'RICE 115KV'	999			'KNOLL 3 115 115KV'	75		-0.08269	188
WERE	'GILL ENERGY CENTER 69KV'	118			'SMOKEY HILLS 34KV'	152		-0.06424	242
WERE	'EVANS ENERGY CENTER 138KV'	486.1978	-0.00011	WEKE	'SMOKEY HILLS 34KV'	152	0.06209	-0.0622	250

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

WERE	'EVANS N4 138 16KV'	360	-0.0001	WERE	'SMOKEY HILLS 34KV'	152	0.06209	-0.06219	250
	'BPU - CITY OF MCPHERSON 115KV'	239	-0.28454	WERE	'HUTCHINSON ENERGY CENTER 115KV'	120	-0.22292	-0.06162	252
WERE	'CLR_3 .575 34KV'	300	0.00089	WERE	'SMOKEY HILLS 34KV'	152	0.06209	-0.0612	254
WERE	'LATHAM1234.0 345KV'	150	0.00089	WERE	'SMOKEY HILLS 34KV'	152	0.06209	-0.0612	254
WERE	'LYONS 115KV'	999	0.00089	WERE	'SMOKEY HILLS 34KV'	152	0.06209	-0.0612	254
WERE	'LANG 7 345 345KV'	518	0.0073	WERE	'SMOKEY HILLS 34KV'	152	0.06209	-0.05479	283

| WERE | LANG / 345 345KV | 518 | 0.0073|WERE | SMOKEY HILLS 34KV | Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF | Redispatch Amount = Relief Amount / Factor

 Upgrade:
 WICHITA - RENO 345KV

 Limiting Facility:
 EXIDE JUNCTION - SUMMIT 115KV CKT 1

 Direction:
 To->From

 Line Outage:
 EAST MCPHERSON - SUMMIT 230KV CKT 1

 Flowgate:
 57368573811568725687312211SP

 Date Redispatch Needed:
 6/1/09 - 7/100

 Season Flowgate Identified:
 2011 Summer Peak

		Aggregate Relief
Reservation	Relief Amount	Amount
1140120	11.8	35.2
1161506	12.2	35.2
1161997	11.2	35.2

1161506	12.2	35.2							
1161997	11.2								Aggregate
0	0	Maximum	005	Sink Control	Ol- I	Maximum	005	F	Redispatch
Source Control Area WERE	Source 'BPU - CITY OF MCPHERSON 115KV'	Increment(MW) 259	GSF -0.28476	Area	Sink 'SMOKEY HILLS 34KV'	Decrement(MW) 152	GSF 0.06181	Factor -0.34657	Amount (MW)
WERE	BPU - CITY OF MCPHERSON 115KV	259			'JEFFREY ENERGY CENTER 345KV'	940			
WERE	BPU - CITY OF MCPHERSON 115KV	259			JEFFREY ENERGY CENTER 345KV	470		-0.30392	
WERE	BPU - CITY OF MCPHERSON 115KV					610			
WERE	BPU - CITY OF MCPHERSON 115KV	259 259			'LANG 7 345 345KV' 'LAWRENCE ENERGY CENTER 115KV'	85		-0.29176 -0.2912	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			'LAWRENCE ENERGY CENTER 115KV	201.5866		-0.2912	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			TECUMSEH ENERGY CENTER 115KV	108		-0.2915	
WERE	BPU - CITY OF MCPHERSON 115KV	259			'CHANUTE 69KV'	58.843		-0.29030	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.2231		'SMOKEY HILLS 34KV'	152		-0.28491	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			'CITY OF WELLINGTON 69KV'	41.45		-0.28313	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			'EVANS ENERGY CENTER 138KV'	331.6143		-0.28451	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'SMOKEY HILLS 34KV'	152		-0.28469	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			'GILL ENERGY CENTER 138KV'	155		-0.2818	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'JEFFREY ENERGY CENTER 345KV'	940		-0.24226	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'JEFFREY ENERGY CENTER 345KV'			-0.24204	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'JEFFREY ENERGY CENTER 230KV'	470		-0.23659	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'JEFFREY ENERGY CENTER 230KV'	470		-0.23637	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'LANG 7 345 345KV'	610		-0.2301	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'LAWRENCE ENERGY CENTER 115KV'	85		-0.22954	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'LAWRENCE ENERGY CENTER 230KV'	201.5866		-0.22984	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'LANG 7 345 345KV'	610		-0.22988	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'LAWRENCE ENERGY CENTER 115KV'	85		-0.22932	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'LAWRENCE ENERGY CENTER 230KV'	201.5866		-0.22962	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'TECUMSEH ENERGY CENTER 115KV'	108		-0.22892	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.22288		'TECUMSEH ENERGY CENTER 115KV'	108		-0.2287	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'CHANUTE 69KV'	58.843		-0.22416	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'CHANUTE 69KV'	58.843		-0.22394	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'EVANS ENERGY CENTER 138KV'	331.6143		-0.22285	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'EVANS ENERGY CENTER 138KV'	331.6143		-0.22263	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'GILL ENERGY CENTER 138KV'	155		-0.22014	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'GILL ENERGY CENTER 138KV'	155			
WERE	'PAWNEE 115KV'	999			'SMOKEY HILLS 34KV'	152		-0.17633	
WERE	'RICE 115KV'	999			'SMOKEY HILLS 34KV'	152		-0.17633	
WERE	'PAWNEE 115KV'	999			'JEFFREY ENERGY CENTER 345KV'	940		-0.13368	
WERE	'RICE 115KV'	999			'JEFFREY ENERGY CENTER 345KV'	940		-0.13368	
WERE	'PAWNEE 115KV'	999			'JEFFREY ENERGY CENTER 230KV'	470			
WERE	'RICE 115KV'	999			'JEFFREY ENERGY CENTER 230KV'	470			
WERE	'PAWNEE 115KV'	999			'LANG 7 345 345KV'	610		-0.12152	
WERE	'RICE 115KV'	999			'LANG 7 345 345KV'	610		-0.12152	
WERE	'PAWNEE 115KV'	999			'LAWRENCE ENERGY CENTER 230KV'	201.5866		-0.12126	
WERE	'RICE 115KV'	999			'LAWRENCE ENERGY CENTER 230KV'	201.5866		-0.12126	
WERE	'PAWNEE 115KV'	999			TECUMSEH ENERGY CENTER 115KV	108		-0.12034	
WERE	'RICE 115KV'	999			TECUMSEH ENERGY CENTER 115KV	108		-0.12034	
WERE	'PAWNEE 115KV'	999			'EVANS ENERGY CENTER 138KV'	331.6143		-0.11427	
WERE	'RICE 115KV'	999			'EVANS ENERGY CENTER 138KV'	331.6143		-0.11427	
WERE	'PAWNEE 115KV'	999			'GILL ENERGY CENTER 138KV'	155		-0.11156	
WERE	'RICE 115KV'	999			'GILL ENERGY CENTER 138KV'	155	-0.00296	-0.11156	31

NUMBER | NUMBER | NUMBER | 105KV | 999 | -0.11452 | WERE | GILL ENERGY CENTER 138KV | Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF | Redispatch Amount = Relief Amount / Factor

Upgrade: Limiting Facility: Direction: Line Outage:

WICHITA - RENO 345KV
EXIDE JUNCTION - SUMMIT 115KV CKT 1
To->From
EAST MCPHERSON - SUMMIT 230KV CKT 1
57368573811568725687314206WP
Starting 2008 12/1 - 4/1 Until EOC of Upgrade
2008 Winter Peak Flowgate: Date Redispatch Needed:

Season Flowgate Identified:

Season Flowgate Identifie	d: 2008 Winter Peak									
			Aggregate Relief							
Reservation	Relief Amount		Amount							
1161		2.8	4.9							
11619	997	2.1	4.9							
			Maximum		Sink Control		Maximum			Aggregate Redispatch
Source Control Area	Source		Increment(MW)		Area	Sink			Factor	Amount (MW)
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.28453		'SMOKEY HILLS 34KV'	51			
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.28453		'JEFFREY ENERGY CENTER 230KV'	490			
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.28453		'JEFFREY ENERGY CENTER 345KV'	974.2261	0.01966		
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.28453		'CHANUTE 69KV'	34.903			
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.28453		'CITY OF AUGUSTA 69KV'	15.285			
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.28453	WERE	'CITY OF IOLA 69KV'	19.902			
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.28453	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00153		
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.28453	WERE	'CLR_3 .575 34KV'	100	0.00089	-0.28542	
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.28453		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.61	0.00213	-0.28666	
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.28453	WERE	'LANG 7 345 345KV'	380	0.0073	-0.29183	
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.28453		'LAWRENCE ENERGY CENTER 230KV'	154.9715			
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.28453	WERE	'WACO 138KV'	17.414	-0.00259	-0.28194	17
WERE	'HUTCHINSON ENERGY CENTER 115KV'		423	-0.22291	WERE	'SMOKEY HILLS 34KV'	51	0.0621	-0.28501	17
WERE	'HUTCHINSON ENERGY CENTER 69KV'		67	-0.22268	WERE	'SMOKEY HILLS 34KV'	51	0.0621	-0.28478	
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.28453	WERE	'KNOLL 3 115 115KV'	39.9	-0.0317	-0.25283	
WERE	'HUTCHINSON ENERGY CENTER 115KV'		423	-0.22291	WERE	'JEFFREY ENERGY CENTER 345KV'	974.2261	0.01966	-0.24257	20
WERE	'HUTCHINSON ENERGY CENTER 69KV'		67	-0.22268		'JEFFREY ENERGY CENTER 345KV'	974.2261	0.01966		
WERE	'HUTCHINSON ENERGY CENTER 115KV'		423	-0.22291	WERE	'JEFFREY ENERGY CENTER 230KV'	490	0.01395	-0.23686	21
WERE	'HUTCHINSON ENERGY CENTER 115KV'		423	-0.22291	WERE	'LANG 7 345 345KV'	380	0.0073	-0.23021	21
WERE	'HUTCHINSON ENERGY CENTER 115KV'		423	-0.22291	WERE	'LAWRENCE ENERGY CENTER 230KV'	154.9715	0.0071	-0.23001	21
WERE	'HUTCHINSON ENERGY CENTER 69KV'		67	-0.22268	WERE	'JEFFREY ENERGY CENTER 230KV'	490	0.01395	-0.23663	21
WERE	'HUTCHINSON ENERGY CENTER 69KV'		67	-0.22268	WERE	'LANG 7 345 345KV'	380	0.0073	-0.22998	21

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

WERE HUTCHINSON ENERGY CENTER 115KV 423 -022291 WERE CHANTER C	WEDE	THE TOTAL PROPERTY OF LIFE AND A			lwene	I AMPENDE ENERGY OFFITER AND A		0.00=1		
WEST		'HUTCHINSON ENERGY CENTER 69KV'	67			'LAWRENCE ENERGY CENTER 230KV'	154.9715	0.0071	-0.22978	21
WEET										22
WEED NOT COMMON PRINTS 1999										22
WEST WITCHISCON DEPROY CENTER 1185/V 423 02231 WEST WITCHISCON DEPROY CENTER 1185/V 424 02231 WEST WITCHISCON DEPROY CENTER 1185/V 423 02231 WEST WITCHISCON DEPROY CENTER 1185/V 423 02231 WEST WITCHISCON DEPROY CENTER 1185/V 424 02231 WEST WITCHISCON DEPROY CENTER 1185/V 424 02231 WEST WITCHISCON DEPROY CENTER 866/V	WERE							0.00019		22
WEST STUTINGS STUTINGS 1.00	WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.22291	WERE	'CITY OF IOLA 69KV'	19.902	0.00139	-0.2243	22
WERE	WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.22291	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00153	-0.22138	22
WERE	WFRF	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.22291	WERE	'CLR 3 .575 34KV'	100	0.00089	-0.2238	22
VERT VICTORISON DEREGO CENTER 1195V 423 0.2229 VERT VICTORISON DEREGO CENTER 195V 4.0229 VERT V			423				19.61			22
WERE										22
WERE HUTCHISON DERGY CENTER SINV P. 0.2228/WERE CITY OF MULTINATION 1.528 0.0019 0.0221 0.0019										
WERE HUTCHISON DERGY CENTER 180V 07 -0.2228 WERE CLR 2 by 3 sev 19.00 0.0038 -0.2267		HUTCHINSON ENERGY CENTER 69KV		-0.22268	WERE					22
WERE MUTCH-SIGN NERGY CENTRE 889V 97 - 0.2228 WERE COLVE - 30.00 MUTCH-SIGN NERGY CENTRE 889V 97 - 0.2228 WERE COLVE - 30.00 MUTCH-SIGN NERGY CENTRE 889V 97 - 0.2228 WERE MUTCH-SIGN NERGY CENTRE 1156V 40 - 0.1615 WERE MUTCH-SIGN NERGY CENTRE 3160V 40 - 0.1615 W				-0.22268	WERE	'CITY OF AUGUSTA 69KV'				22
WERE HUTCH-BISON BERGY CENTRE 180V 07 - 0.2228 WERE CORFET COR	WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.22268	WERE	'CITY OF IOLA 69KV'	19.902	0.00139	-0.22407	22
WERE HUTCH-BISON BERGY CENTRE 180V 07 - 0.2228 WERE CORFET COR	WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.22268	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00153	-0.22115	22
WERE HUTCHISONE PERFOY CENTER 68V." OF 2,22289 WERE WAS 100 CONTROL SHAWPE 68V." WERE HUTCHISONE PERFOY CENTER 68V." OF 2,22289 WERE WAS 115 THE			67				100	0.00089	-0.22357	22
WARD SHOW CHIEF BROY 97 0.2299 WARD 1880Y 17.41 0.0299 2.2998 WARD 1880Y WAR						'COFFEY COUNTY NO. 2 SHARPE 69KV'				22
WERE HUTOINGONERROY CENTER 11907 423 -2.2291 WERE WOOL 110 1180 393 -0.0371 -0.1912 WERE HUTOINGONERROY CENTER 11907 67 -2.2291 WERE WOOL 110 1180 393 -0.0371 -0.1912 WERE ALLEME ENERGY CENTER 11907 60 -0.1615 WERE SWINGLY RESIDENCY (1.000 1.000										22
WERE HAITOMROON ENRROY CENTER 1990/ 0.1403 1998										26
WERE ABLENE ENROY CENTRE 1195V 66 0.1615 WERE JEFFRY LENGOY CENTRE 205V 400 0.0155 0.0156 0.1716										
WERE										26
WERE PAWNEE 1190V 999										27
WERE RICE 1186V								0.01395		28
WREE ABLENE BERGY CENTER 1156V 66 0.1615 WREE LANG 7345 ASSAY 300 00077 0.1686	WERE	'PAWNEE 115KV'	999	-0.11443	WERE	'SMOKEY HILLS 34KV'	51	0.0621	-0.17653	28
WREE ABLENE BERGY CENTER 1156V 66 0.1615 WREE LANG 7345 ASSAY 300 00077 0.1686			999							28
WERE ABLINE ENERGY CENTER 1180V 66 0.1615 WERE CANTER 200V 154.9715 0.0071 0.16867 WERE ABLINE ENERGY CENTER 1180V 66 0.1615 WERE CANTER 200V 15.902 0.00717 0.16867 WERE ABLINE ENERGY CENTER 1180V 66 0.1615 WERE CANTER 1180V 158.902 0.00719 0.16269 WERE ABLINE ENERGY CENTER 1180V 66 0.1615 WERE CANTER 1180V 158.902 0.00719 0.16269 WERE ABLINE ENERGY CENTER 1180V 66 0.1615 WERE CANTER 1180V 159.902 0.00719 0.16269 WERE ABLINE ENERGY CENTER 1180V 66 0.1615 WERE CANTER 1180V 159.902 0.00719 0.16269 WERE ABLINE ENERGY CENTER 1180V 66 0.1615 WERE CANTER 1180V 159.902 0.00719 0.16269 WERE CANTER 1180V 159.902 0.00719 0.16269 WERE CANTER 1180V 159.902 0.16269 0.162										29
WERE ABLENE EWERGY CENTER 118V7 66 -0.1615/WERE CHANNTE GROV 1.285 0.0017] -0.16067 WERE ABLENE EWERGY CENTER 118V7 66 -0.1615/WERE CHY OF LOLA BROV 1.285 0.0017] -0.16169 WERE ABLENE EWERGY CENTER 118V7 66 -0.1615/WERE CHY OF LOLA BROV 1.285 0.0017] -0.16069 WERE ABLENE EWERGY CENTER 118V7 66 -0.1615/WERE CHY OF LOLA BROV 1.1980 0.0017] -0.16089 WERE CLAV CENTER JUNCTION 118VV 31-1 -0.1022/WERE MOMENTALS 348VV 51.00231 0.16089 WERE CLAV CENTER JUNCTION 118VV 31-1 -0.1022/WERE MOMENTALS 348VV 51.00231 0.16089 WERE CLAV CENTER JUNCTION 118VV 31-1 -0.1022/WERE MOMENTALS 348VV 51.00231 0.16089 WERE RESPONSE THAT THE STATE ABLE TO THE STA				-0.1616	WERE					29
WERE ABLEME ENRROY CENTER 1156V 60 -0.1619/WERE CITY OF AUGUSTA 666V 15.00019 -0.16299 -0.00199 -0.16299 -0.00199 -0.16299 -0.00199 -0.16299 -0.16299 -0.00199 -0.16299 -0.16299 -0.16299 -0.00199 -0.162										30
WREE ABILEME ENERGY CENTER 1156V 60 -0.1615/WREE CITY OF IOLA 696V 19.902 0.0193 -0.1629 WREE ABILEME ENERGY CENTER 1156V 60 -0.1615/WREE COPYL COUNTY NO.2 SHARPE 696V 16.11 0.0023 -0.1625 WREE ABILEME ENERGY CENTER 1156V 60 -0.1615/WREE COPYL COUNTY NO.2 SHARPE 696V 16.11 0.0023 -0.1625 WREE ABILEME ENERGY CENTER 1156V 60 -0.1615/WREE COPYL COUNTY NO.2 SHARPE 696V 16.11 0.0023 -0.1625 WREE ABILEME ENERGY CENTER 1156V 96 -0.1615/WREE WAGO 1386V 17.41 0.0023 -0.1693 WREE ABILEME ENERGY CENTER 1156V 99 -0.1414/WREE WAGO 1386V 17.41 0.0023 -0.1693 WREE ABILEME ENERGY CENTER 1156V 99 -0.1414/WREE WAGO 1386V 97.250 0.0963 -0.1693 WREE ABILEME ENERGY CENTER 1156V 99 -0.1414/WREE WAGO 1386V 97.250 0.0963 -0.1693 WREE ABILEME ENERGY CENTER 1156V 99 -0.1414/WREE WAGO 1386V 97.250 0.0969 0.1406/WREE WAGO 1386V 97.250 0.0969										
WREE ABLENE ENERGY CENTER 1196V 66 0.1619 WREE CR. 3 .575 346V 10.0 0.00009 0.16230 WREE ABLENE ENERGY CENTER 1196V 66 0.1619 WREE COPPET COUNTY NO.2 SHARPE 688V 19.6 1 0.00213 0.0633 0.1639 WREE ABLENE ENERGY CENTER 1196V 66 0.3 1615 WREE CR. 3 .675 346V 10.00213 0.1659 WREE ABLENE ENERGY CENTER 1196V 66 0.3 1615 WREE WRO 1386V 17.4 4 0.00229 0.1699 WREE PANNEE 1196V 990 0.11440 WREE SEPREY ENERGY CENTER 3496V 974.2261 0.1969 0.13490 WREE ABLENE ENERGY CENTER 1196V 990 0.11440 WREE SEPREY ENERGY CENTER 3496V 974.2261 0.1969 0.13490 WREE ABLENE ENERGY CENTER 1196V 990 0.11440 WREE SEPREY ENERGY CENTER 3496V 974.2261 0.1969 0.13490 WREE ABLENE ENERGY CENTER 1196V 990 0.11440 WREE SEPREY ENERGY CENTER 3496V 974.2261 0.1969 0.13490 WREE ABLENE ENERGY CENTER 1196V 990 0.11440 WREE SEPREY ENERGY CENTER 3496V 974.2261 0.1969 0.13490 WREE CR. 1196V 990 0.11440 WREE SEPREY ENERGY CENTER 3496V 974.2261 0.1969 0.13490 WREE CR. 1196V 990 0.11440 WREE SEPREY ENERGY CENTER 3496V 974.2261 0.1969 0.1219 WREE CR. 1196V 990 0.11440 WREE SEPREY ENERGY CENTER 3496V 974.2261 0.1969 0.1219 WREE CR. 1196V 990 0.11440 WREE SEPREY ENERGY CENTER 3496V 974.2261 0.1969 0.1219 WREE CR. 1196V 990 0.11440 WREE SEPREY ENERGY CENTER 3496V 974.2261 0.1969 0.1219 WREE CR. 1196V 990 0.11440 WREE SEPREY ENERGY CENTER 3496V 974.2261 0.1969 0.1219 WREE CR. 1196V 990 0.11440 WREE SEPREY ENERGY CENTER 3496V 974.2261 0.1969 0.1219 WREE CR. 1196V 990 0.11440 WREE SEPREY ENERGY CENTER 3496V 974.2261 0.1969 0.1219 WREE CR. 1196V 990 0.11440 WREE SEPREY ENERGY CENTER 3496V 974.2261 0.1969 0.1219 WREE CR. 1196V 990 0.11440 WREE SEPREY ENERGY CENTER 3496V 990 0.11440 WREE SEPREY ENERGY CENTER 3496V 990 0.11440 WREE SE										30
WREE ABILENE ENERGY CENTER 119KV 66 -0.161 WREE SMOKEY HILLS 34KV 51 0.0021 -0.1635 WREE ABILENE ENERGY CENTER 119KV 31.4 -0.10224 WREE SMOKEY HILLS 34KV 51 0.0021 -0.1643 WREE ABILENE ENERGY CENTER 119KV 66 -0.161 WREE WROE 119KV 7.164 0.00259 -0.1639 WREE REGISTER 119KV 990 -0.11443 WREE WROE 119KV 970 -0.11		'ABILENE ENERGY CENTER 115KV'		-0.1615	WERE					30
WREE ABILENE ENERGY CENTER 119KV 66 -0.161 WREE SMOKEY HILLS 34KV 51 0.0021 -0.1635 WREE ABILENE ENERGY CENTER 119KV 31.4 -0.10224 WREE SMOKEY HILLS 34KV 51 0.0021 -0.1643 WREE ABILENE ENERGY CENTER 119KV 66 -0.161 WREE WROE 119KV 7.164 0.00259 -0.1639 WREE REGISTER 119KV 990 -0.11443 WREE WROE 119KV 970 -0.11		'ABILENE ENERGY CENTER 115KV'								30
WERE CLAY CENTER JUNCTION 119NV	WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.1615	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.61	0.00213	-0.16363	30
WERE ABILENE ENRRGY CENTER 119KY 66 0, 01619/WERE VACO 19KY 7, 17414 0,0025 0,01987 WERE PAWNEE 116KY 969 0,01619/WERE WACO 19KY 17414 0,0025 0,01589 VERE PAWNEE 116KY 969 0,011449/WERE JEFFRY ENRRGY CENTER 34KY 97,2281 0,01986 0,13409 WERE REPORTED FOR THE STATE OF THE STATE O										30
WREE PAWNEL 115KV 999 -0.1144_WERE LEFREY CENTER 345KV 974.2251 0.01560 0.13500 WERE RICE 115KV 999 -0.1144_WERE LEFREY CENTER 345KV 974.2251 0.01560 0.13400 WERE RICE 115KV 999 -0.1144_WERE LEFREY ENREGY CENTER 345KV 974.2251 0.01560 0.13400 WERE RICE 115KV 999 -0.1144_WERE LEFREY ENREGY CENTER 345KV 974.2251 0.01560 0.13400 WERE RICE 115KV 999 -0.1144_WERE LEFREY ENREGY CENTER 345KV 974.2251 0.01560 0.13400 WERE RICE 115KV 999 -0.1144_WERE LEFREY ENREGY CENTER 230KV 400 0.01350 0.1358 0.13580 WERE RICE 115KV 999 -0.1144_WERE LEFREY ENREGY CENTER 230KV 400 0.01350 0.1258 WERE PAWNEL 115KV 999 -0.1144_WERE LAWRENGY CENTER 330KV 930 0.0073 0.1259 WERE PAWNEL 115KV 999 -0.1144_WERE LAWRENGY CENTER 230KV 154.9715 0.0071 0.1253 WERE RICE 115KV 999 -0.1144_WERE LAWRENGY CENTER 330KV 154.9715 0.0071 0.1253 WERE RICE 115KV 999 -0.1144_WERE LAWRENGY CENTER 320KV 154.9715 0.0071 0.1253 WERE RICE 115KV 999 -0.1144_WERE LAWRENGY CENTER 320KV 154.9715 0.0071 0.1253 WERE RICE 115KV 999 -0.1144_WERE LAWRENGY CENTER 320KV 154.9715 0.0071 0.1253 WERE RICE 115KV 999 -0.1144_WERE LAWRENGY CENTER 230KV 154.9715 0.0071 0.1253 WERE RICE 115KV 999 -0.1144_WERE LAWRENGY CENTER 320KV 154.9715 0.0071 0.1253 WERE RICE 115KV 999 -0.1144_WERE LAWRENGY CENTER 320KV 154.9715 0.0071 0.1253 WERE PAWNEL 115KV 999 -0.1144_WERE LAWRENGY CENTER 230KV 154.9715 0.0071 0.1253 WERE PAWNEL 115KV 999 -0.1144_WERE CENTER 250KV 154.9715 0.0071 0.1253 WERE PAWNEL 115KV 999 -0.1144_WERE CENTER 250KV 154.9715 0.0071 0.1253 WERE PAWNEL 115KV 999 -0.1144_WERE CENTER 250KV 154.9715 0.0071 0.1156 WERE PAWNEL 115KV 999 -0.1144_WERE CENTER 250KV 154.9715 0.0071 0.1156 WERE PAWNEL 115KV 999 -0.1144_WERE CENTER 250KV 154.9715 0.0071 0.1156 WERE PAWNEL 115KV 999 -0.1144_WERE CENTER 250KV 154.9715 0.0071 0.1156 WERE PAWNEL 115KV 999 -0.1144_WERE CENTER 250KV 154.9715 0.0071 0.1156 WERE PAWNEL 115KV 999 -0.1144_WERE CENTER 250KV 154.9715 0.0071 0.1156 WERE PAWNEL 115KV 999 -0.1144_WERE CENTER 250KV 154.9715 0.0071 0.1156 WERE PAWNEL 115KV 999 -0.1144_WERE CENTER 250KV										31
WERE PAWNEE 1156V 999 -0.11443/WERE WERFEY ENERGY CENTER 345KV 974.2261 0.01969 0.13409 WERE ABILENE ENERGY CENTER 115KV 999 -0.11443/WERE WORL 3.115.115KV 99.0 -0.0317 -0.1238 WERE ABILENE ENERGY CENTER 115KV 966 -0.11615/WERE WORL 3.115.115KV 99.0 -0.0317 -0.1238 WERE PAWNEE 115KV 999 -0.11443/WERE WORL 3.115.115KV 99.0 -0.0317 -0.1238 WERE CLAY CENTER JUNCTION 115KV 934 -0.11443/WERE WORL 3.115.115KV 974.2261 0.01569 0.1238 WERE CLAY CENTER JUNCTION 115KV 939 -0.11443/WERE WORL 15KV 999 -0.11443/WERE LAWRENGE ENERGY CENTER 345KV 974.2261 0.01569 0.01237 WERE PAWNEE 115KV 999 -0.11443/WERE LAWRENGE ENERGY CENTER 345KV 974.2261 0.01569 0.0723 0.12173 WERE ROLL 115KV 999 -0.11443/WERE LAWRENGE ENERGY CENTER 345KV 974.2261 0.01569 0.0723 0.12173 WERE ROLL 115KV 999 -0.11443/WERE LAWRENGE ENERGY CENTER 345KV 974.2261 0.01569 0.0723 0.12173 WERE ROLL 115KV 999 -0.11443/WERE LAWRENGE ENERGY CENTER 345KV 974.2261 0.01569 0.0723 0.12173 WERE ROLL 115KV 999 -0.11443/WERE LAWRENGE ENERGY CENTER 230KV 194.715 0.0073 0.12173 WERE ROLL 115KV 999 -0.11443/WERE LAWRENGE ENERGY CENTER 230KV 194.715 0.0073 0.12173 WERE ROLL 115KV 999 -0.11443/WERE LAWRENGE ENERGY CENTER 230KV 194.715 0.0073 0.12173 WERE PAWNEE 115KV 999 -0.11443/WERE CLAY 194.715 0.0071 0.12153 WERE ROLL 115KV 999 -0.11443/WERE CLAY 194.715 0.0071 0.12153 WERE ROLL 115KV 999 -0.11443/WERE CONFERE 230KV 194.715 0.0071 0.11552 WERE ROLL 115KV 999 -0.11443/WERE CONFERE 230KV 194.715 0.0071 0.11552 WERE ROLL 115KV 999 -0.11443/WERE CONFERE 230KV 194.715 0.0071 0.11552 WERE ROLL 115KV 999 -0.11443/WERE CONFERE 230KV 194.715 0.0071 0.11552 WERE ROLL 115KV 999 -0.11443/WERE CONFERE 230KV 194.715 0.0071 0.11552 WERE ROLL 115KV 999 -0.11443/WERE CONFERE 230KV 194.715 0.0071 0.11562 WERE ROLL 115KV 999 -0.11443/WERE CONFERE 230KV 194.715 0.0071 0.11562 WERE ROLL 115KV 999 -0.11443/WERE CONFERE 230KV 194.715 0.0071 0.11562 WERE ROLL 115KV 999 -0.11443/WERE CONFERE 230KV 194.715 0.0071 0.11562 WERE ROLL 115KV 999 -0.11443/WERE CONFERE 230KV 194.715 0.0071 0.11562 WERE RO										31
WERE MICE 115KV 990 0.11443 WERE WEFFEEV ENERGY CENTER 345KV 974.2261 0.01966 0.1340 WERE PANNEE 115KV 990 0.11443 WERE WEFFEEV ENERGY CENTER 230KV 490 0.01395 0.12838 WERE PANNEE 115KV 990 0.11443 WERE WEFFEEV ENERGY CENTER 230KV 490 0.01395 0.12838 WERE CLAY CENTER JUNCTION 115KV 31.4 0.10224 WERE WEFFEEV ENERGY CENTER 230KV 490 0.01395 0.12838 WERE CLAY CENTER JUNCTION 115KV 31.4 0.10224 WERE WEFFEEV ENERGY CENTER 345KV 974.2261 0.01966 0.1239 WERE RICE 115KV 990 0.11443 WERE WEFFEEV ENERGY CENTER 345KV 974.2261 0.01966 0.1219 WERE RICE 115KV 990 0.11443 WERE WEFFEEV ENERGY CENTER 230KV 154.9716 0.0071 0.1215 WERE RICE 115KV 990 0.11443 WERE WEFFEEV ENERGY CENTER 230KV 390 0.0073 0.12173 WERE CLAY CENTER JUNCTION 115KV 31.4 0.10224 WERE WEFFEEV ENERGY CENTER 230KV 154.9716 0.0071 0.1215 WERE CLAY CENTER JUNCTION 115KV 31.4 0.10224 WERE WEFFEEV ENERGY CENTER 230KV 19.902 0.00139 0.1145 WERE PANNEE 115KV 990 0.11443 WERE WEFFEEV ENERGY CENTER 230KV 19.902 0.00139 0.1169 WERE PANNEE 115KV 990 0.11443 WERE WEFFEEV ENERGY CENTER 230KV 19.902 0.00139 0.1169 WERE PANNEE 115KV 990 0.11443 WERE WEFFEEV ENERGY CENTER 230KV 19.902 0.00139 0.1165 WERE PANNEE 115KV 990 0.11443 WERE WEFFEEV ENERGY CENTER 230KV 19.902 0.00139 0.1165 WERE PANNEE 115KV 990 0.11443 WERE WEFFEEV ENERGY CENTER 230KV 19.902 0.00139 0.1165 WERE PANNEE 115KV 990 0.11443 WERE WEFFEEV ENERGY CENTER 230KV 19.902 0.00139 0.1165 WERE PANNEE 115KV 990 0.11443 WERE WEFFEEV ENERGY CENTER 230KV 19.903 0.00171 0.1166 WERE PANNEE 115KV 990 0.11443 WERE WEFFEEV ENERGY CENTER 230KV 19.903 0.00171 0.1166 WERE PANNEE 115KV 990 0.11443 WERE WEFFEEV ENERGY CENTER 230KV 19.903 0.00171 0.1166 WERE PANNEE 115KV 990 0.11443 WERE WEFFEEV ENERGY CENTER 230KV 19.903 0.00171 0.1										37
WERE PAWNE 115KV 99. 0.1145 WERE 20KV 490 0.01358 0.1288 WERE RICC 115KV 999 0.11445 WERE 20KV 490 0.01358 0.1288 WERE RICC LAY CENTER JUNCTION 115KV 999 0.11445 WERE 20KV 490 0.01358 0.1288 WERE RICC LAY CENTER JUNCTION 115KV 999 0.11445 WERE 20KV 490 0.01358 0.12838 WERE PAWNE 115KV 999 0.11445 WERE 20KV										
WERE PAWNEE 115KV' 999 -0.11443/WERE UEFFEY ENERGY CENTER 230KV' 490 -0.01395 -0.12838 WERE CLAY CENTER JUNCTION 115KV 999 -0.11443/WERE UEFFEY ENERGY CENTER 330KV' 990 -0.01395 -0.12838 WERE CLAY CENTER JUNCTION 115KV 931 -0.10224/WERE UEFFEY ENERGY CENTER 345KV' 990 -0.01395 -0.1219 WERE PAWNEE 115KV' 999 -0.11443/WERE LAWRENCE ENERGY CENTER 345KV' 130 -0.0073 -0.12173 WERE RICE 115KV' 999 -0.11443/WERE LAWRENCE ENERGY CENTER 345KV' 154,9718 -0.0071 -0.12173 WERE CLAY CENTER JUNCTION 115KV 990 -0.11443/WERE LAWRENCE ENERGY CENTER 230KV 150,9718 -0.0071 -0.12173 WERE CLAY CENTER JUNCTION 115KV 931 -0.10224/WERE LAWRENCE ENERGY CENTER 230KV 1400 -0.0135 -0.11619 WERE PAWNEE 115KV' 999 -0.11443/WERE CLAY CENTER 230KV 150,000 -0.0073 -0.11592 WERE PAWNEE 115KV 999 -0.11443/WERE CLAY CENTER 230KV 150,000 -0.0033 -0.11592 WERE RICE 115KV 999 -0.11443/WERE CLAY CENTER 230KV 150,000 -0.0033 -0.11592 WERE RICE 115KV 999 -0.11443/WERE CLAY CLA SIGNV 150,000 -0.0033 -0.11592 WERE RICE 115KV 999 -0.11443/WERE CLAY CLA SIGNV 150,000 -0.0033 -0.11592 WERE RICE 115KV 999 -0.11443/WERE CLAY CLA SIGNV 150,000 -0.0033 -0.11592 WERE RICE 115KV 999 -0.11443/WERE CLAY CLA SIGNV 150,000 -0.0033 -0.11592 WERE PAWNEE 115KV 999 -0.11443/WERE CLAY CLA SIGNV 150,000 -0.0031 -0.11562 WERE PAWNEE 115KV 999 -0.11443/WERE CLAY CLA SIGNV 150,000 -0.0031 -0.11562 WERE PAWNEE 115KV 999 -0.11443/WERE CLAY CLA SIGNV 150,000 -0.0031 -0.11562 WERE PAWNEE 115KV 999 -0.11443/WERE CLAY CENTER 250KV 150,000 -0.0031 -0.11562 WERE RICE 115KV 999 -0.11443/WERE CLAY CHANTER SIGNV 150,000 -0.0031 -0.11562 WERE RICE 115KV 999 -0.11443/WERE CLAY CHANTER SIGNV 150,000 -0.0031 -0.11562 WERE PAWNEE 115KV 999 -0.11443/WERE CLAY CHANTER SIGNV 150,000 -0.0031 -0.11562 WERE PAWNEE 115KV 999 -0.11443/WERE CLAY CHANTER SIGNV 150,000 -0.0031 -0.011562 WERE PAWNEE 115KV 999 -0.11443/WERE CLAY CHANTER SIGNV 150,000 -0.0031 -0.011562 WERE PAWNEE 115KV 999 -0.0031 -0.0031 -0.0031 -0.0031 -0.0031 -0.0031 -0.0031 -0.0031 -0.0031 -0.0031 -0.0031 -0.0031 -0.0031 -0.0031 -0.0										37
WRER RICE 115KV 999 -0.11443 WRER LEFFREY DERROY CENTER 23KVV 4.90 -0.01385 -0.12838 WERE PAWNEE 115KV 394 -0.1224 WRER JEFFREY DERROY CENTER 23KVV 380 -0.02173 WERE PAWNEE 115KV 999 -0.11443 WREE LANG 7.345 345KV 380 -0.0073 -0.12173 WERE NICE 115KV 999 -0.11443 WREE LANG 7.345 345KV 154.9716 -0.0071 -0.12173 WERE NICE 115KV 999 -0.11443 WREE LANG 7.345 345KV 300 -0.0074 -0.12173 WERE CLAY CENTER JUNCTION 115KV 999 -0.11443 WREE LEFFREY ENERGY CENTER 23KW 490 0.01369 -0.11431 WERE PAWNEE 115KV 999 -0.11443 WREE CITY OF IOLA 69KV 19.902 0.00139 -0.11552 WERE RICE 115KV 999 -0.11443 WREE COFFE COUNTY NO. 25 HARPE 69KV 19.902 0.00139 -0.11453 WERE RICE 115KV 999 -0.11443 WREE COFFE COUNTY NO. 25 HARPE 69KV 1										38
WERE CLAY CENTER JUNCTION 115KV 31.4 0.10224 WERE LAND 7.345 94KV 37.42261 0.01966 0.1219 WERE PAWNEE 115KV 999 0.11443 WERE LAND 7.345 94KV 380 0.0073 0.12173 WERE PAWNEE 115KV 999 0.11443 WERE LAND 7.345 94KV 380 0.0073 0.12173 WERE THE STANDARD STA	WERE	'PAWNEE 115KV'	999					0.01395	-0.12838	38
WERE CLAY CENTER JUNCTION 115KV 31.4 0.10224 WERE LAND 7.345 94KV 37.42261 0.01966 0.1219 WERE PAWNEE 115KV 999 0.11443 WERE LAND 7.345 94KV 380 0.0073 0.12173 WERE PAWNEE 115KV 999 0.11443 WERE LAND 7.345 94KV 380 0.0073 0.12173 WERE THE STANDARD STA	WERE	'RICE 115KV'	999	-0.11443	WERE	'JEFFREY ENERGY CENTER 230KV'	490	0.01395	-0.12838	38
WERE PAWNEE 115KV 999 -0.11443] WERE LANG 7 345 345KV 330 0.0073 -0.12175 WERE RICE 115KV 999 -0.11443] WERE LANG 7 345 345KV 330 0.0073 -0.12155 WERE RICE 115KV 999 -0.11443] WERE LANG 7 345 345KV 330 0.0073 -0.12175 WERE CLAY CENTER JUNCTION 115KV 31.4 -0.10224 WERE CLEAR CLAY CENTER 20KV 480 0.0739 -0.12175 WERE CLAY CENTER JUNCTION 115KV 31.4 -0.10224 WERE CLEAR CLAY CENTER 20KV 480 0.0739 -0.11615 WERE PAWNEE 115KV 999 -0.11443] WERE LANG 7 345 345KV 19.00 0.0739 -0.1165 WERE PAWNEE 115KV 999 -0.11443] WERE CLOYER 20KV 480 0.0739 -0.1165 WERE PAWNEE 115KV 999 -0.11443] WERE CLOYER CONTROL 25 HARPE 69KV 19.00 0.000 90 -0.11463 WERE PAWNEE 115KV 999 -0.11443 WERE CLOYER COUNTY NO. 2 SHARPE 69KV 19.00 0.000 90 -0.11463 WERE PAWNEE 115KV 999 -0.11443 WERE CLOYER COUNTY NO. 2 SHARPE 69KV 19.001 0.000 90 -0.11463 WERE PAWNEE 115KV 999 -0.11443 WERE CLOYER COUNTY NO. 2 SHARPE 69KV 19.01 0.000 90 -0.11462 WERE PAWNEE 115KV 999 -0.11443 WERE CLOYER COUNTY NO. 2 SHARPE 69KV 19.01 0.000 90 -0.11462 WERE PAWNEE 115KV 999 -0.11443 WERE CLAYER CLAYER COUNTY NO. 2 SHARPE 69KV 19.01 0.000 90 -0.11462 WERE PAWNEE 115KV 999 -0.11443 WERE CLAYER		'CLAY CENTER JUNCTION 115KV'	31.4			'JEFFREY ENERGY CENTER 345KV'	974,2261		-0.1219	40
WREE PAWNEE 115KV 999 -0.11443 WREE LAWRENCE ENRROY CENTER 230KV 154.9715 0.071 -0.12153 WERE RICE 115KV 999 -0.11443 WREE LAWRENCE ENRROY CENTER 230KV 130 0.073 -0.12173 WERE CLAY CENTER JUNCTION 115KV 999 -0.11443 WREE LAWRENCE ENRROY CENTER 230KV 490 0.07395 -0.11619 WERE PAWNEE 115KV 999 -0.11443 WERE COTY OF IOLA 69KV 19.902 0.0039 -0.11656 WERE RICE 115KV 999 -0.11443 WERE CITY OF IOLA 69KV 19.902 0.00321 -0.11656 WERE RICE 115KV 999 -0.11443 WERE CITY OF IOLA 69KV 19.902 0.0039 -0.11656 WERE RICE 115KV 999 -0.11443 WERE CITY OF IOLA 69KV 19.902 0.0039 -0.11666 WERE PAWNEE 115KV 999 -0.11443 WERE CITY OF IOLA 69KV 3.4030 0.0017 -0.11666 WERE PAWNEE 115KV 999 -0.11443 WERE CITY OF IOLG 69KV	WERE		999	-0 11443	WERE		380		-0.12173	40
WERE RICE 115KV 999 -0.11443 WERE LANG 7345 345KV 380 0.0073 -0.1273 WERE RICE 115KV 999 -0.11443 WERE LANG 7345 345KV 380 0.0073 -0.1273 WERE CLAY CENTER JUNCTION 115KV 31.4 -0.10224 WERE CLAY CENTER JUNCTION 115KV 31.4 -0.10224 WERE JEFFREY BNERGY CENTER 230KV 490 0.01398 -0.11619 WERE CLAY CENTER JUNCTION 115KV 999 -0.11443 WERE CLYO PI OLA 65KV 1990 0.0139 -0.1162 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 65KV 1990 0.0039 -0.1162 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 65KV 1990 0.0039 -0.1162 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 65KV 1990 0.0039 -0.1162 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 65KV 1990 0.0039 -0.1162 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 65KV 1990 0.0039 -0.1162 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 65KV 1990 0.0039 -0.1162 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 65KV 1990 0.0039 -0.1162 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 65KV 1990 0.0039 -0.1162 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 65KV 1990 0.0039 -0.1162 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 65KV 1990 0.0039 -0.1162 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 0.0038 -0.1152 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 0.0038 -0.1152 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 0.0038 -0.1152 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 0.0038 -0.1152 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 0.0038 -0.1152 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 0.0038 -0.1152 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 0.0038 -0.1152 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 0.0038 -0.1033 -0.1035 -0.1129 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 0.0038 -0.1035 -0.1129 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 0.0038 -0.1035 -0.1129 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 0.0038 -0.1035 -0.1129 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 0.0038 -0.1035 -0.1129 WERE RICE 115KV 999 -0.11443 WERE CLYO PI OLA 0.0038 -0.0037 -0.1035 -0.1035 -0.1035 -0.1035 -0.1035 -0.1035 -0.1035 -0.1035 -0.1035 -0.1035 -0.1035 -0.1035 -0.1035 -0.1035 -0.1035 -0.1										40
WERE RICE 116KV 999 -0.11443 WERE LAWRENCE ENERGY CENTER 230KV 15.9715 0.0071 -0.12153 WERE PAWNEE 115KV 999 -0.11443 WERE CITY OF IOLA 68KV 119.902 0.00139 -0.11582 WERE PAWNEE 115KV 999 -0.11443 WERE CITY OF IOLA 68KV 19.902 0.00139 -0.11565 WERE RICE 115KV 999 -0.11443 WERE CITY OF IOLA 68KV 19.902 0.00139 -0.11565 WERE RICE 115KV 999 -0.11443 WERE CITY OF IOLA 68KV 19.902 0.00139 -0.11565 WERE PAWNEE 115KV 999 -0.11443 WERE CITY OF AUGUSTA 68KV 19.902 0.00139 -0.11565 WERE PAWNEE 115KV 999 -0.11443 WERE CITY OF AUGUSTA 68KV 10.00000 -0.11566 WERE PAWNEE 115KV 999 -0.11443 WERE CILY OF AUGUSTA 68KV 10.000000 -0.11562 WERE PAWNEE 115KV 999 -0.11443 WERE CILY OF AUGUSTA 68KV 10.000000 -0						I ANG 7 245 245KV/				40
WERE PAWNEE 115KV 999 -0.11443 WERE UFFREY ENERGY CENTER 230KV 990 -0.0169 0.016						LANDENCE ENERGY OFFITER COOK!				
WERE PAWNEE 115KV 999 -0.11443 WERE CITY OF IOLA 69KV 19.902 0.00139 -0.11582										40
WERE PAWNEE 115KV' 999 - 0.11443 WERE COFFEY COUNTY NO. 2 SHARPE 68KV' 19.01 0.00213 -0.11656 WERE RICE 115KV' 999 - 0.11443 WERE COFFEY COUNTY NO. 2 SHARPE 68KV' 19.02 0.0013 -0.11656 WERE RICE 115KV' 999 - 0.11443 WERE COFFEY COUNTY NO. 2 SHARPE 68KV' 19.61 0.00213 -0.11656 WERE PAWNEE 115KV' 999 - 0.11443 WERE COFFEY COUNTY NO. 2 SHARPE 68KV' 19.61 0.00213 -0.11656 WERE PAWNEE 115KV' 999 - 0.11443 WERE CHANUTE 68KV' 15.285 0.00019 -0.11462 WERE PAWNEE 115KV' 999 - 0.11443 WERE CLR 3.573 34KY 100 0.00089 -0.11532 WERE RICE 115KV' 999 - 0.11443 WERE CLR 3.573 34KY 100 0.00089 -0.11532 WERE RICE 115KV' 999 - 0.11443 WERE CLR 3.573 34KY 100 0.00089 -0.11532 WERE RICE 115KV' 999 - 0.11443 WERE CLAY GUISTA 68KY 15.285 0.00019 -0.11462 WERE RICE 115KV' 999 - 0.11443 WERE CLAY GUISTA 68KY 100 0.00089 -0.11532 WERE PAWNEE 115KV' 999 - 0.11443 WERE CLAY GUISTA 68KY										42
WERE RICE 115KV 999 -0.11443 WERE COPFEY CONTY NO. 2 SHARPE 69KV 19.902 0.00139 -0.11666							19.902		-0.11582	42
WERE RICE 115KV 999 -0.11443 WERE COPFEY COUNTY NO. 2 SHARPE 69KV 1.6.10 .0.00213 -0.11666	WERE	'PAWNEE 115KV'	999	-0.11443	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.61	0.00213	-0.11656	42
WERE	WERE	'RICE 115KV'	999	-0.11443	WERE	'CITY OF IOLA 69KV'	19.902	0.00139	-0.11582	42
WERE	WERE	'RICE 115KV'	999			'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.61	0.00213	-0.11656	42
WERE PAWNEE 115KV 999 0.11443 WERE CLR 3.575 34KV 100 0.00089 0.11532										43
WERE PAWNEE 115KV 999 0.11443 WERE CLR 3.575 34KV 100 0.00089 0.11532										43 43
WERE RICE 115KV 999 -0.11443 WERE CHANUTE 69KV 15.285 0.00019 -0.11462										43
WERE RICE 115KV 999 -0.11443 WERE CITY OF AUGUSTA 69KV 15.285 0.00019 0.11462										43
WERE RICE 115KV 999 -0.11443 WERE CLR 3 .575 34KV 100 0.00099 0.11532										
WERE PAWNEE 115KV 999										43
WERE PAWNEE 115KV 999										43
WERE PAWNEE 115KV 999						'CITY OF WELLINGTON 69KV'				44
WERE	WERE	'PAWNEE 115KV'				'WACO 138KV'	17.414	-0.00259	-0.11184	44
WERE	WERE	'RICE 115KV'	999	-0.11443	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00153	-0.1129	44
WERE CLAY CENTER JUNCTION 115KV 31.4 -0.10224 WERE LAWRENCE ENERGY CENTER 230KV 154.9715 0.0071 0.10934 WERE CLAY CENTER JUNCTION 115KV 31.4 -0.10224 WERE CTY OF IOLA 68KV 19.902 0.00139 0.10363 WERE CLAY CENTER JUNCTION 115KV 31.4 -0.10224 WERE CTY OF IOLA 68KV 19.902 0.00139 0.10363 WERE CLAY CENTER JUNCTION 115KV 31.4 -0.10224 WERE CTY OF IOLA 68KV 19.902 0.00139 0.10363 WERE CLAY CENTER JUNCTION 115KV 31.4 -0.10224 WERE CHANUTE 68KV 19.902 0.00139 0.10363 0.00717 0.10341 WERE CLAY CENTER JUNCTION 115KV 31.4 -0.10224 WERE CHANUTE 68KV 10.0 0.00839 0.00117 0.10341 WERE CLAY CENTER JUNCTION 115KV 31.4 -0.10224 WERE CLAY CENTER JUNCTION 115KV 10.0 0.00839 0.10313 0.10071 WERE CLAY CENTER JUNCTION 115KV 10.0 0.1024 WERE WACO 138KV 17.4 0.00259 0.00965 WERE KNOLL 3.1 15.1 115KV 17.4 0.00259 0.00965 WERE KNOLL 3.1 15.1 15KV 17.4 0.00259 0.00965 WERE KNOLL 3.1 15.1 15KV 18.9 0.0 0.1 14.4 0.00259 0.00965 WERE PAWNEE 115KV 19.9 0.0 0.11443 WERE KNOLL 3.1 15.1 115KV 18.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0										44
WERE CLAY CENTER JUNCTION 115KV 31.4 -0.10224 WERE COFFEY COUNTY NO. 2 SHARPE 69KV 19.902 0.00139 0.10363										45
WERE CLAY CENTER JUNCTION 115KV 31.4 -0.10224 WERE COFFEY COUNTY NO. 2 SHARPE 69KV 19.902 0.00139 0.10363		CLAY CENTER ILINCTION 115KV								45
WERE CLAY CENTER JUNCTION 115KV 31.4 -0.10224 WERE COFFEY COUNTY NO. 2 SHARPE 69KV 19.61 0.00213 0.10437										45
WERE 'CLAY CENTER JUNCTION 115KV' 31.4 -0.10224 WERE CHANUTE 69KV' 34.903 0.00117 -0.10341 WERE CLAY CENTER JUNCTION 115KV' 31.4 -0.10224 WERE CLR 3 .575 34KV' 100 0.00099 -0.10313 WERE CLAY CENTER JUNCTION 115KV' 31.4 -0.10224 WERE CITY OF WELLINGTON 69KV' 20 -0.00153 -0.10071 WERE CLAY CENTER JUNCTION 115KV' 31.4 -0.10224 WERE WACO 138KV' 17.414 -0.00239 -0.09865 WERE KNOLL 3 115 115KV' 44.46 -0.0127 WERE SMOKEY HILLS 34KV' 51 -0.0621 -0.0038 WERE PAWNEE 115KV' 999 -0.11443 WERE KNOLL 3 115 115KV' 39.9 -0.0317 -0.08273 WERE CLAY CENTER JUNCTION 115KV 31.4 -0.10224 WERE KNOLL 3 115 115KV' 39.9 -0.0317 -0.08273 WERE GILL ENERGY CENTER JSBKV' 31.4 -0.10224 WERE KNOLL 3 115 115KV' 39.9 -0.0317 -0.0724 WERE GILL ENERGY CENTER 138KV' 31.4										
WERE 'CLAY CENTER JUNCTION 115KV' 31.4 -0.10224 WERE CLR 3. 575 34KV 100 0.00099 0.10313 WERE 'CLAY CENTER JUNCTION 115KV' 31.4 -0.10224 WERE CITY OF WELLINGTON 69KV' 20 -0.00153 -0.10071 WERE CLAY CENTER JUNCTION 115KV' 31.4 -0.10224 WERE 'WACO 138KV' 17.414 -0.00259 -0.099865 WERE (KNOLL 3 115 115KV' 44.46 -0.0317 WERE SMOKEY HILLS 34KV' 51 -0.0621 -0.0938 WERE 'PAWINEE 115KV' 999 -0.11443 WERE KNOLL 3 115 115KV' 39.9 -0.0317 -0.08273 WERE 'RICE 115KV' 999 -0.11443 WERE KNOLL 3 115 115KV' 39.9 -0.0317 -0.08273 WERE 'RICE 115KV' 999 -0.11443 WERE KNOLL 3 115 115KV' 39.9 -0.0317 -0.08273 WERE 'GILL ENERGY CENTER 138KV 31.4 -0.10224 WERE KNOLL 3 115 115KV' 39.9 -0.0317 -0.0647 WERE 'GILL ENERGY CENTER 138KV 218										47
WERE CLAY CENTER JUNCTION 115KV 31.4 -0.10224 WERE CITY OF WELLINGTON 69KV 20 -0.00153 0.10071										48
WERE CLAY CENTER JUNCTION 115KV 31.4 -0.10224 WERE WACO 138KV 17.414 -0.00259 0.09965 WERE WROLL 3 115 115KV 44.46 -0.0317 WERE SMOKEY HILLS 34KV 51 0.0621 -0.0938 WERE PAWNEE 115KV 999 -0.11443 WERE KNOLL 3 115 115KV 39.9 -0.0317 -0.08273 WERE RICE 115KV 999 -0.11443 WERE KNOLL 3 115 115KV 39.9 -0.0317 -0.08273 WERE RICE 115KV 39.9 -0.0317 -0.08273 WERE RICE 115KV 39.9 -0.0317 -0.08273 WERE GILL ENERGY CENTER 138KV 218 -0.00287 WERE WROLL 3 115 115KV 39.9 -0.0317 -0.08273 WERE GILL ENERGY CENTER 138KV 218 -0.00287 WERE SMOKEY HILLS 34KV 51 0.0621 -0.06497 WERE GILL ENERGY CENTER 69KV 118 -0.00216 WERE SMOKEY HILLS 34KV 51 0.0621 -0.06426 WERE CITY OF WINFIELD 69KV 40 -0.00093 WERE SMOKEY HILLS 34KV 51 0.0621 -0.06303 WERE EVANS ENERGY CENTER 138KV 1002 -0.00011 WERE SMOKEY HILLS 34KV 51 0.0621 -0.06221 WERE EVANS ENERGY CENTER 138KV 360 -0.0001 WERE SMOKEY HILLS 34KV 51 0.0621 -0.06221 WERE EVANS MA138 16KV 360 -0.0001 WERE SMOKEY HILLS 34KV 51 0.0621 -0.0622 WERE CLAYS MA138 16KV 360 -0.0001 WERE SMOKEY HILLS 34KV 51 0.0621 -0.0622 WERE CLAYS MA138 16KV 360 -0.0001 WERE SMOKEY HILLS 34KV 51 0.0621 -0.0622 WERE CLAYS MA138 16KV 360 -0.0001 WERE SMOKEY HILLS 34KV 51 0.0621 -0.0622 WERE CLAYS MA138 16KV 51 0.0621 -0.0622 -0.06121 WERE CLAYS MA138 16KV 51 0.0621 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622										48
WERE CLAY CENTER JUNCTION 115KV 31.4 -0.10224 WERE WACO 138KV 17.414 -0.00259 0.09965 WERE WROLL 3 115 115KV 44.46 -0.0317 WERE SMOKEY HILLS 34KV 51 0.0621 -0.0938 WERE PAWNEE 115KV 999 -0.11443 WERE KNOLL 3 115 115KV 39.9 -0.0317 -0.08273 WERE RICE 115KV 999 -0.11443 WERE KNOLL 3 115 115KV 39.9 -0.0317 -0.08273 WERE RICE 115KV 39.9 -0.0317 -0.08273 WERE RICE 115KV 39.9 -0.0317 -0.08273 WERE GILL ENERGY CENTER 138KV 218 -0.00287 WERE WROLL 3 115 115KV 39.9 -0.0317 -0.08273 WERE GILL ENERGY CENTER 138KV 218 -0.00287 WERE SMOKEY HILLS 34KV 51 0.0621 -0.06497 WERE GILL ENERGY CENTER 69KV 118 -0.00216 WERE SMOKEY HILLS 34KV 51 0.0621 -0.06426 WERE CITY OF WINFIELD 69KV 40 -0.00093 WERE SMOKEY HILLS 34KV 51 0.0621 -0.06303 WERE EVANS ENERGY CENTER 138KV 1002 -0.00011 WERE SMOKEY HILLS 34KV 51 0.0621 -0.06221 WERE EVANS ENERGY CENTER 138KV 360 -0.0001 WERE SMOKEY HILLS 34KV 51 0.0621 -0.06221 WERE EVANS MA138 16KV 360 -0.0001 WERE SMOKEY HILLS 34KV 51 0.0621 -0.0622 WERE CLAYS MA138 16KV 360 -0.0001 WERE SMOKEY HILLS 34KV 51 0.0621 -0.0622 WERE CLAYS MA138 16KV 360 -0.0001 WERE SMOKEY HILLS 34KV 51 0.0621 -0.0622 WERE CLAYS MA138 16KV 360 -0.0001 WERE SMOKEY HILLS 34KV 51 0.0621 -0.0622 WERE CLAYS MA138 16KV 51 0.0621 -0.0622 -0.06121 WERE CLAYS MA138 16KV 51 0.0621 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622 -0.0622	WERE	'CLAY CENTER JUNCTION 115KV'	31.4	-0.10224	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00153	-0.10071	49
WERE KNOLL 3 115 115KV										49
WERE PAWNEE 115KV 999 -0.11443 WERE KNOLL 3 115 115KV 39.9 -0.0317 -0.08273 WERE RICE 115KV 999 -0.11443 WERE KNOLL 3 115 115KV 39.9 -0.0317 -0.08273 WERE CLAY CENTER JUNCTION 115KV 34.4 -0.10224 WERE KNOLL 3 115 115KV 39.9 -0.0317 -0.07054 WERE CLAY CENTER SHOWN 15KV 218 -0.00224 WERE KNOLL 3 115 115KV 39.9 -0.0317 -0.07054 WERE GILL ENERGY CENTER 69KV 1218 -0.00221 WERE SMOKEY HILLS 34KV 51 -0.0621 -0.0621 -0.0627 WERE CITY OF WINFIELD 69KV 40 -0.00039 WERE SMOKEY HILLS 34KV 51 -0.0621 -0.06226 WERE CITY OF WINFIELD 69KV 40 -0.00039 WERE SMOKEY HILLS 34KV 51 -0.0621 -0.0623 WERE EVANS ENERGY CENTER 136KV 1002 -0.0011 WERE SMOKEY HILLS 34KV 51 -0.0621 -0.0622 WERE EVANS ENERGY CENTER 136KV 360 -0.00011 WERE SMOKEY HILLS 34KV 51 -0.0621 -0.0622 WERE EVANS ENERGY CENTER 136KV 360 -0.00011 WERE SMOKEY HILLS 34KV 51 -0.0621 -0.0622 WERE CLAYS ENERGY CENTER 136KV 360 -0.00011 WERE SMOKEY HILLS 34KV 51 -0.0621 -0.0622 WERE GLAYS ENERGY CENTER 136KV 360 -0.00011 WERE SMOKEY HILLS 34KV 51 -0.0621 -0.0622 WERE CLAYS ENERGY CENTER 136KV 360 -0.00014 WERE SMOKEY HILLS 34KV 51 -0.0621 -0.0622 WERE CLAYS ENERGY CENTER 136KV 360 -0.00014 WERE SMOKEY HILLS 34KV 51 -0.0621 -0.0622 WERE CLAYS ENERGY CENTER 136KV 1002 -0.00089 WERE SMOKEY HILLS 34KV 51 -0.0621 -0.0621 -0.0622 WERE CLAYS ENERGY CENTER 136KV 51 -0.0621 -0.0612 -0.0										52
WERE 'RICE 115KV' 999 -0.11443 WERE KNOLL 3 115 115KV' 39.9 -0.0317 0.08273 WERE 'CLAY CENTER JUNCTION 115KV' 31.4 -0.10224 WERE KNOLL 3 115 115KV' 39.9 -0.0317 0.07054 WERE GILL ENERGY CENTER 138KV 218 -0.00287 WERE SMOKEY HILLS 34KV' 51 0.0621 0.06497 WERE GILL ENERGY CENTER 69KV' 118 -0.00216 WERE SMOKEY HILLS 34KV' 51 0.0621 0.06426 WERE CITY OF WINFIELD 69KV' 40 -0.00093 WERE SMOKEY HILLS 34KV' 51 0.0621 0.06210 0.06303 WERE 'EVANS ENERGY CENTER 138KV' 1002 -0.00011 WERE SMOKEY HILLS 34KV' 51 0.0621 0.06221 0.06										59
WERE CLAY CENTER JUNCTION 115KV 31.4 -0.10224 WERE KNOLL 3 115 115KV 39.9 -0.0317 -0.07054						WNOLL 2 115 115KV				59
WERE GILL ENERGY CENTER 138KV 218 -0.00287 WERE SMOKEY HILLS 34KV 51 0.0621 0.06497										59
WERE GILL ENERGY CENTER 69KV 118 -0.00216 WERE SMOKEY HILLS 34KV 51 0.0621 0.06426 WERE CITY OF WINFIELD 69KV 40 -0.00039 WERE SMOKEY HILLS 34KV 51 0.0621 -0.06203 WERE EVANS ENERGY CENTER 138KV 1002 -0.00011 WERE SMOKEY HILLS 34KV 51 0.0621 -0.06221 WERE EVANS N4 138 66KV 360 -0.0001 WERE SMOKEY HILLS 34KV 51 0.0621 -0.0622 WERE CLR 3 .575 34KV 200 0.00089 WERE SMOKEY HILLS 34KV 51 0.0621 -0.0622 WERE GETTY 69KV 35 0.00047 WERE SMOKEY HILLS 34KV 51 0.0621 -0.06121 WERE GETTY 69KV 35 0.00047 WERE SMOKEY HILLS 34KV 51 0.0621 -0.06163 WERE LATHAM1234.0 345KV 15 0.0621 -0.0613 WERE SMOKEY HILLS 34KV 51 0.0621 -0.06163 WERE SMOKEY HILLS 34KV 51 0.0621 -0.06121 -0.06163 WERE SMOKEY HILLS 34KV 51 0.0621 -0.06121 -0.										70
WERE CITY OF WINFIELD 69KV/ 40 -0.00093 WERE SMOKEY HILLS 34KV/ 51 0.0621 0.06303 WERE EVANS ENERGY CENTER 138KV/ 1002 -0.00011 WERE SMOKEY HILLS 34KV/ 51 0.0621 -0.06221 WERE EVANS N4 138 16KV/ 360 -0.0001 WERE 'SMOKEY HILLS 34KV/ 51 0.0621 -0.0622 WERE 'CLR 3 575 34KV 200 0.00089 WERE SMOKEY HILLS 34KV/ 51 0.0621 -0.06121 WERE 'GETTY 69KV' 35 0.00047 WERE SMOKEY HILLS 34KV/ 51 0.0621 -0.06163 WERE 'LATHAM1234.0 345KV' 150 0.00089 WERE 'SMOKEY HILLS 34KV/ 51 0.0621 -0.0612										76
WERE "EVANS ENERGY CENTER 138KV" 1002 -0.00011 WERE SMOKEY HILLS 34KV" 51 0.0621 -0.06221 WERE "EVANS NA 138 16KV" 360 -0.0001 WERE SMOKEY HILLS 34KV" 51 0.0621 -0.0622 WERE 'CLR 3 .575 34KV 200 0.00089 WERE SMOKEY HILLS 34KV" 51 0.0621 -0.06121 WERE 'GETTY 69KV 35 0.00047 WERE SMOKEY HILLS 34KV" 51 0.0621 -0.0613 WERE "LATHAM1234.0 345KV" 150 0.00089 WERE "SMOKEY HILLS 34KV" 51 0.0621 -0.06121										76
WERE "EVANS ENERGY CENTER 138KV" 1002 -0.00011 WERE SMOKEY HILLS 34KV" 51 0.0621 -0.06221 WERE "EVANS NA 138 16KV" 360 -0.0001 WERE SMOKEY HILLS 34KV" 51 0.0621 -0.0622 WERE 'CLR 3 .575 34KV 200 0.00089 WERE SMOKEY HILLS 34KV" 51 0.0621 -0.06121 WERE 'GETTY 69KV 35 0.00047 WERE SMOKEY HILLS 34KV" 51 0.0621 -0.0613 WERE "LATHAM1234.0 345KV" 150 0.00089 WERE "SMOKEY HILLS 34KV" 51 0.0621 -0.06121				-0.00093	WERE	'SMOKEY HILLS 34KV'				78
WERE 'EVANS N4 138 16KV' 360 -0.0001 WERE SMOKEY HILLS 34KV' 51 0.0621 -0.0622 WERE 'CLR_3 .575 34KV' 200 0.00089 WERE 'SMOKEY HILLS 34KV' 51 0.0621 -0.06121 WERE 'GETTY 69KV' 35 0.00047 WERE 'SMOKEY HILLS 34KV' 51 0.0621 -0.06121 WERE 'LATHAM1234.0 345KV' 150 0.00089 WERE 'SMOKEY HILLS 34KV' 51 0.0621 -0.06121			1002	-0.00011	WERE	'SMOKEY HILLS 34KV'	51			79
WERE 'CLR_3_575_34KV' 200 0.00089 WERE 'SMOKEY HILLS_34KV' 51 0.0621 0.06121 WERE 'GETTY 69KV' 35 0.00047 WERE 'SMOKEY HILLS_34KV' 51 0.0621 -0.0613 WERE 'LATHAM1234.0 345KV' 150 0.00089 WERE 'SMOKEY HILLS_34KV' 51 0.0621 -0.06121						'SMOKEY HILLS 34KV'				79
WERE 'GETTY 69KV' 35 0.00047 WERE SMOKEY HILLS 34KV' 51 0.0621 -0.06163 WERE 'LATHAM1234.0 345KV' 150 0.00089 WERE 'SMOKEY HILLS 34KV' 51 0.0621 -0.06121										80
WERE LATHAM1234.0 345KV' 150 0.00089 WERE 'SMOKEY HILLS 34KV' 51 0.0621 -0.06121										80
WERE LYONS 115KV 999 0.0009 WERE 'SMOKEY HILLS 34KV' 51 0.0621 -0.0612										80
Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified.	WERE						51	0.0621	-0.0612	80

WERE LYONS 115KV 999 0.0003|WERE | SMOKET HILLS 34KV
Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified.
Factor = Source GSF - Sink GSF
Redispatch Amount = Relief Amount / Factor

		Aggregate Relief							
Reservation	Relief Amount	Amount							
1161997	7 6.8	6.8							
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink			Factor	Amount (MW)
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.35349	WERE	'CHANUTE 69KV'	46.617	0.00007	-0.35356	19
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.35349	WERE	'CITY OF AUGUSTA 69KV'	20.02	-0.00061	-0.35288	
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.35349	WERE	'CITY OF ERIE 69KV'	23.258	0.00007	-0.35356	
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.35349	WERE	'CITY OF IOLA 69KV'	19.865	0.00016	-0.35365	19
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.35349	WERE	'CITY OF WELLINGTON 69KV'	31.07001	-0.00103	-0.35246	
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.35349	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.00029	-0.35378	19
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.35349	WERE	'EVANS ENERGY CENTER 138KV'	269.2019	-0.00062	-0.35287	19
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.35349	WERE	'GILL ENERGY CENTER 138KV'	77	-0.0016	-0.35189	
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.35349	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.00382	-0.35731	
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.35349	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01248	-0.36597	
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.35349	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	-0.00061	-0.35288	19
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.35349	WERE	'LAWRENCE ENERGY CENTER 230KV'	235.3866	-0.00073	-0.35276	19
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.35349	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	-0.00319	-0.3503	19
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.35349	WERE	'WACO 138KV'	17.947	-0.0015	-0.35199	19
WERE	'ABILENE ENERGY CENTER 115KV'	66	-0.35349	WERE	'HUTCHINSON ENERGY CENTER 115KV'	80.00001	-0.09794	-0.25555	27
WERE	'CLAY CENTER JUNCTION 115KV'	26.275	-0.23215	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01248	-0.24463	28
WERE	'CLAY CENTER JUNCTION 115KV'	26.275	-0.23215	WERE	'CHANUTE 69KV'	46.617	0.00007	-0.23222	29
WFRF	'CLAY CENTER JUNCTION 115KV'	26.275	-0.23215	WFRF	'CITY OF AUGUSTA 69KV'	20.02	-0.00061	-0.23154	29

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

WERE	'CLAY CENTER JUNCTION 115KV'	26.275 -0.23215 WERE	'CITY OF ERIE 69KV'	23.258 0.00007 -0.23222 29
WERE	'CLAY CENTER JUNCTION 115KV'	26.275 -0.23215 WERE	'CITY OF IOLA 69KV'	19.865 0.00016 -0.23231 29
WERE	'CLAY CENTER JUNCTION 115KV'	26.275 -0.23215 WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96 0.00029 -0.23244 29
WERE	'CLAY CENTER JUNCTION 115KV'	26.275 -0.23215 WERE	'EVANS ENERGY CENTER 138KV'	269.2019 -0.00062 -0.23153 29
WERE	'CLAY CENTER JUNCTION 115KV'	26.275 -0.23215 WERE	'JEFFREY ENERGY CENTER 230KV'	470 0.00382 -0.23597 29
WERE	'CLAY CENTER JUNCTION 115KV'	26.275 -0.23215 WERE	'LAWRENCE ENERGY CENTER 115KV'	60 -0.00061 -0.23154 29
WERE	'CLAY CENTER JUNCTION 115KV'	26.275 -0.23215 WERE	'CITY OF WELLINGTON 69KV'	31.07001 -0.00103 -0.23112 30
WERE	'CLAY CENTER JUNCTION 115KV'	26.275 -0.23215 WERE	'GILL ENERGY CENTER 138KV'	77 -0.0016 -0.23055 30
WERE	'CLAY CENTER JUNCTION 115KV'	26.275 -0.23215 WERE	'LAWRENCE ENERGY CENTER 230KV'	235.3866 -0.00073 -0.23142 30
WERE	'CLAY CENTER JUNCTION 115KV'	26.275 -0.23215 WERE	'TECUMSEH ENERGY CENTER 115KV'	108 -0.00319 -0.22896 30
WERE	'CLAY CENTER JUNCTION 115KV'	26.275 -0.23215 WERE	'WACO 138KV'	17.947 -0.0015 -0.23065 30
WERE	'BPU - CITY OF MCPHERSON 115KV'	259 -0.16334 WERE	'JEFFREY ENERGY CENTER 345KV'	940 0.01248 -0.17582 39
WERE	'BPU - CITY OF MCPHERSON 115KV'	259 -0.16334 WERE	'JEFFREY ENERGY CENTER 230KV'	470 0.00382 -0.16716 41
WERE	'BPU - CITY OF MCPHERSON 115KV'	259 -0.16334 WERE	'CHANUTE 69KV'	46.617 0.00007 -0.16341 42
WERE	'BPU - CITY OF MCPHERSON 115KV'	259 -0.16334 WERE	'CITY OF AUGUSTA 69KV'	20.02 -0.00061 -0.16273 42
WERE	'BPU - CITY OF MCPHERSON 115KV'	259 -0.16334 WERE	'CITY OF ERIE 69KV'	23.258 0.00007 -0.16341 42
WERE	'BPU - CITY OF MCPHERSON 115KV'	259 -0.16334 WERE	'CITY OF IOLA 69KV'	19.865 0.00016 -0.1635 42
WERE	'BPU - CITY OF MCPHERSON 115KV'	259 -0.16334 WERE	'CITY OF WELLINGTON 69KV'	31.07001 -0.00103 -0.16231 42
WERE	'BPU - CITY OF MCPHERSON 115KV'	259 -0.16334 WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96 0.00029 -0.16363 42
WERE	'BPU - CITY OF MCPHERSON 115KV'	259 -0.16334 WERE	'EVANS ENERGY CENTER 138KV'	269.2019 -0.00062 -0.16272 42
WERE	'BPU - CITY OF MCPHERSON 115KV'	259 -0.16334 WERE	'GILL ENERGY CENTER 138KV'	77 -0.0016 -0.16174 42
WERE	'BPU - CITY OF MCPHERSON 115KV'	259 -0.16334 WERE	'LAWRENCE ENERGY CENTER 115KV'	60 -0.00061 -0.16273 42
WERE	'BPU - CITY OF MCPHERSON 115KV'	259 -0.16334 WERE	'LAWRENCE ENERGY CENTER 230KV'	235.3866 -0.00073 -0.16261 42
WERE	'BPU - CITY OF MCPHERSON 115KV'	259 -0.16334 WERE	'WACO 138KV'	17.947 -0.0015 -0.16184 42
WERE	'BPU - CITY OF MCPHERSON 115KV'	259 -0.16334 WERE	'TECUMSEH ENERGY CENTER 115KV'	108 -0.00319 -0.16015 43
WERE	'CLAY CENTER JUNCTION 115KV'	26.275 -0.23215 WERE	'HUTCHINSON ENERGY CENTER 115KV'	80.00001 -0.09794 -0.13421 51
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303 -0.09794 WERE	'JEFFREY ENERGY CENTER 345KV'	940 0.01248 -0.11042 62
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67 -0.09788 WERE	'JEFFREY ENERGY CENTER 345KV'	940 0.01248 -0.11036 62
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303 -0.09794 WERE	'JEFFREY ENERGY CENTER 230KV'	470 0.00382 -0.10176 67
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67 -0.09788 WERE	'JEFFREY ENERGY CENTER 230KV'	470 0.00382 -0.10170 67
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303 -0.09794 WERE	'CHANUTE 69KV'	46.617 0.00007 -0.09801 70
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303 -0.09794 WERE	'CITY OF WELLINGTON 69KV'	31.07001 -0.00103 -0.09691 70
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303 -0.09794 WERE	'EVANS ENERGY CENTER 138KV'	269.2019 -0.00062 -0.09732 70
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303 -0.09794 WERE	'LAWRENCE ENERGY CENTER 115KV'	60 -0.00061 -0.09733 70
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303 -0.09794 WERE	'LAWRENCE ENERGY CENTER 230KV'	235,3866 -0.00073 -0.09721 70
WERE	'HUTCHINSON ENERGY CENTER 115KV'	67 -0.09794 WERE	'CHANUTE 69KV'	46.617 0.00007 -0.09721 70
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67 -0.09788 WERE	'EVANS ENERGY CENTER 138KV'	269.2019 -0.00062 -0.09726 70
WERE		67 -0.09788 WERE 67 -0.09788 WERE	'LAWRENCE ENERGY CENTER 115KV'	60 -0.00061 -0.09727 70
	'HUTCHINSON ENERGY CENTER 69KV'			
WERE WERE	'HUTCHINSON ENERGY CENTER 69KV' 'HUTCHINSON ENERGY CENTER 115KV'	67 -0.09788 WERE 303 -0.09794 WERE	'LAWRENCE ENERGY CENTER 230KV' 'GILL ENERGY CENTER 138KV'	235.3866 -0.00073 -0.09715 70 77 -0.0016 -0.09634 71
WERE	'HUTCHINSON ENERGY CENTER 115KV'	67 -0.09788 WERE	'CITY OF WELLINGTON 69KV'	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67 -0.09788 WERE	'GILL ENERGY CENTER 138KV'	31.07001 -0.00103 -0.09685 71 77 -0.0016 -0.09628 71
WERE	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 69KV'		'TECUMSEH ENERGY CENTER 115KV' 'TECUMSEH ENERGY CENTER 115KV'	108 -0.00319 -0.09475 72 108 -0.00319 -0.09469 72
WERE				108 -0.00319 -0.09469 72 80.00001 -0.09794 -0.0654 104
WERE	'BPU - CITY OF MCPHERSON 115KV'		'HUTCHINSON ENERGY CENTER 115KV'	
WERE	'PAWNEE 115KV'	999 -0.04301 WERE 999 -0.04301 WERE	'JEFFREY ENERGY CENTER 345KV'	940 0.01248 -0.05549 123 940 0.01248 -0.05549 123
WERE			'JEFFREY ENERGY CENTER 345KV'	
WERE	'PAWNEE 115KV'	999 -0.04301 WERE	'JEFFREY ENERGY CENTER 230KV'	470 0.00382 -0.04683 146
WERE	'RICE 115KV'	999 -0.04301 WERE 999 -0.04301 WERE	'JEFFREY ENERGY CENTER 230KV'	470 0.00382 -0.04683 146 269.2019 -0.00062 -0.04239 161
WERE WERE	'PAWNEE 115KV' 'PAWNEE 115KV'	999 -0.04301 WERE 999 -0.04301 WERE	'EVANS ENERGY CENTER 138KV' 'LAWRENCE ENERGY CENTER 115KV'	269.2019 -0.00062 -0.04239 161 60 -0.00061 -0.0424 161
WERE	'RICE 115KV'	999 -0.04301 WERE 999 -0.04301 WERE	'EVANS ENERGY CENTER 115KV'	60 -0.00061 -0.0424 161 269.2019 -0.00062 -0.04239 161
WERE	'RICE 115KV'	999 -0.04301 WERE 999 -0.04301 WERE	'LAWRENCE ENERGY CENTER 115KV'	60 -0.00061 -0.0424 161 235,3866 -0.00073 -0.04228 162
WERE	'PAWNEE 115KV'		'LAWRENCE ENERGY CENTER 230KV'	
WERE	'RICE 115KV'	999 -0.04301 WERE	'LAWRENCE ENERGY CENTER 230KV'	235.3866 -0.00073 -0.04228 162
WERE	'PAWNEE 115KV'	999 -0.04301 WERE	'GILL ENERGY CENTER 138KV'	77 -0.0016 -0.04141 165
WERE	'RICE 115KV'	999 -0.04301 WERE	'GILL ENERGY CENTER 138KV'	77 -0.0016 -0.04141 165
WERE	'PAWNEE 115KV'	999 -0.04301 WERE	TECUMSEH ENERGY CENTER 115KV	108 -0.00319 -0.03982 172
WERE	'RICE 115KV'	999 -0.04301 WERE	'TECUMSEH ENERGY CENTER 115KV'	108 -0.00319 -0.03982 172

Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF Redispatch Amount = Relief Amount / Factor

Source Control Area	Source	Increment(MW)	(
		Maximum	
1161997	8.	18.0	
1161506	9.	18.0	
Reservation	Relief Amount	Aggregate Relief Amount	
Season riowyate identilied.	2000 Sulliller Feak		

1161			1						
1161	997 8.	18.0							
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	'BPU - CITY OF MCPHERSON 115KV'	239			'SMOKEY HILLS 34KV'	152		-0.24545	73
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.16261	WERE	'KNOLL 3 115 115KV'	75	0.01715	-0.17976	100
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.09467	WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.17751	101
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.09461	WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.17745	101
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.16261	WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.01102	-0.17363	104
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.16261	WERE	'JEFFREY ENERGY CENTER 230KV'	494	0.00237	-0.16498	109
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.16261	WERE	'LANG 7 345 345KV'	310	0.00063	-0.16324	110
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.16261	WERE	'CHANUTE 69KV'	55.637	-0.00008	-0.16253	111
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.16261	WERE	'CITY OF WELLINGTON 69KV'	41.45	-0.001	-0.16161	111
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.16261	WERE	'EVANS ENERGY CENTER 138KV'	320.8022	-0.00076	-0.16185	111
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.16261	WERE	'GILL ENERGY CENTER 138KV'	155	-0.00151	-0.1611	112
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.16261	WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00152	-0.16109	112
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.16261	WERE	'LAWRENCE ENERGY CENTER 230KV'	274.2987	-0.00168	-0.16093	112
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.16261	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	-0.00421	-0.1584	113
WERE	'PAWNEE 115KV'	999	-0.03606	WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.1189	151
WERE	'RICE 115KV'	999	-0.03606	WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.1189	151
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.09467	WERE	'KNOLL 3 115 115KV'	75	0.01715	-0.11182	161
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.09461	WERE	'KNOLL 3 115 115KV'	75	0.01715	-0.11176	161
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.09467	WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.01102	-0.10569	170
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.09461	WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.01102	-0.10563	170
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.09467	WERE	'JEFFREY ENERGY CENTER 230KV'	494	0.00237	-0.09704	185
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.09461	WERE	'JEFFREY ENERGY CENTER 230KV'	494	0.00237	-0.09698	185
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.09467	WERE	'LANG 7 345 345KV'	310	0.00063	-0.0953	189
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.09461	WERE	'LANG 7 345 345KV'	310	0.00063	-0.09524	189
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.09467	WERE	'EVANS ENERGY CENTER 138KV'	320.8022	-0.00076	-0.09391	191
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.09461	WERE	'EVANS ENERGY CENTER 138KV'	320.8022	-0.00076	-0.09385	191
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.09467	WERE	'GILL ENERGY CENTER 138KV'	155	-0.00151	-0.09316	193
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.09467	WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00152	-0.09315	193
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.09467	WERE	'LAWRENCE ENERGY CENTER 230KV'	274.2987	-0.00168	-0.09299	193
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.09461	WERE	'GILL ENERGY CENTER 138KV'	155	-0.00151	-0.0931	193
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.09461	WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00152	-0.09309	193
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.09461	WERE	'LAWRENCE ENERGY CENTER 230KV'	274.2987	-0.00168	-0.09293	193
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.09467	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	-0.00421	-0.09046	199
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.09461	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	-0.00421	-0.0904	199
WERE	'GILL ENERGY CENTER 69KV'	118	-0.0013	WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.08414	214
WERE	'EVANS ENERGY CENTER 138KV'	486.1978	-0.00076	WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.0836	215

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

WERE	'EVANS N4 138 16KV'	360	-0.00075	WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.08359	215
WERE	'CLR_3 .575 34KV'	300	-0.00035	WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.08319	216
WERE	'LATHAM1234.0 345KV'	150	-0.00035	WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.08319	216
WERE	'LYONS 115KV'	999	0.00005	WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.08279	217
WERE	'LANG 7 345 345KV'	518	0.00063	WERE	'SMOKEY HILLS 34KV'	152	0.08284	-0.08221	219
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.16261	WERE	'HUTCHINSON ENERGY CENTER 115KV'	120	-0.09467	-0.06794	265
WERE	'PAWNEE 115KV'	999	-0.03606	WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.01102	-0.04708	382
WERE	'RICE 115KV'	999	-0.03606	WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.01102	-0.04708	382
WERE	'PAWNEE 115KV'	999	-0.03606	WERE	'JEFFREY ENERGY CENTER 230KV'	494	0.00237	-0.03843	468
WERE	'RICE 115KV'	999	-0.03606	WERE	'JEFFREY ENERGY CENTER 230KV'	494	0.00237	-0.03843	468
WERE	'PAWNEE 115KV'	999	-0.03606	WERE	'LANG 7 345 345KV'	310	0.00063	-0.03669	490
WERE	'RICE 115KV'	999	-0.03606	WERE	'LANG 7 345 345KV'	310	0.00063	-0.03669	490
WERE	'PAWNEE 115KV'	999	-0.03606	WERE	'EVANS ENERGY CENTER 138KV'	320.8022	-0.00076	-0.0353	509
WERE	'RICE 115KV'	999	-0.03606	WERE	'EVANS ENERGY CENTER 138KV'	320.8022	-0.00076	-0.0353	509
WERE	'PAWNEE 115KV'	999	-0.03606	WERE	'LAWRENCE ENERGY CENTER 230KV'	274.2987	-0.00168	-0.03438	523
WERE	'RICE 115KV'	999	-0.03606	WERE	'LAWRENCE ENERGY CENTER 230KV'	274.2987	-0.00168	-0.03438	523

| 939| -0.036006|WERE | LAWKENCE ENERGY CENTER | 939| -0.036006|WERE | LAWKENCE ENERGY CENTER | Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF | Redispatch Amount = Relief Amount / Factor

Aggregate Relief

38.0

Amount

Reservation

 Upgrade:
 WICHITA - RENO 345KV

 Limiting Facility:
 EXIDE JUNCTION - SUMMIT 115KV CKT 1

 Direction:
 To>-From

 NORTH/IEW - SUMMIT 115KV CKT 1
 57368573811573715738112211SP

 Date Redispatch Needed:
 67(909 - 7/1109)

 Season Flowgate Identified:
 2011 Summer Peak

Relief Amount

1140120

1161		12.9	38.0							
1161	997	12.5	38.0							
			imum		Sink Control		Maximum			Aggregate Redispatch
Source Control Area	Source	Incre		GSF	Area	Sink	Decrement(MW)		Factor	Amount (MW)
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.16271		'SMOKEY HILLS 34KV'	152			15
WERE	'HUTCHINSON ENERGY CENTER 115KV'		263	-0.09476		'SMOKEY HILLS 34KV'	152			
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.16271		'JEFFREY ENERGY CENTER 345KV'	940			21
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.16271		'JEFFREY ENERGY CENTER 230KV'	470			
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.16271	WERE	'LANG 7 345 345KV'	610		-0.16328	
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.16271		'EVANS ENERGY CENTER 138KV'	331.6143	-0.00079	-0.16192	
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.16271	WERE	'GILL ENERGY CENTER 138KV'	155			
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.16271	WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00148	-0.16123	
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.16271	WERE	'LAWRENCE ENERGY CENTER 230KV'	201.5866	-0.00167	-0.16104	
WERE	'BPU - CITY OF MCPHERSON 115KV'		259	-0.16271	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	-0.00428	-0.15843	
WERE	'PAWNEE 115KV'		999	-0.03611		'SMOKEY HILLS 34KV'	152	0.08273		
WERE	'RICE 115KV'		999	-0.03611	WERE	'SMOKEY HILLS 34KV'	152	0.08273	-0.11884	32
WERE	'HUTCHINSON ENERGY CENTER 115KV'		263	-0.09476	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01086	-0.10562	
WERE	'HUTCHINSON ENERGY CENTER 115KV'		263	-0.09476	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.00225	-0.09701	39
WERE	'HUTCHINSON ENERGY CENTER 115KV'		263	-0.09476	WERE	'LANG 7 345 345KV'	610	0.00057	-0.09533	39
WERE	'HUTCHINSON ENERGY CENTER 115KV'		263	-0.09476	WERE	'EVANS ENERGY CENTER 138KV'	331.6143	-0.00079	-0.09397	40
WERE	'HUTCHINSON ENERGY CENTER 115KV'		263	-0.09476	WERE	'GILL ENERGY CENTER 138KV'	155	-0.00153	-0.09323	40
WERE	'HUTCHINSON ENERGY CENTER 115KV'		263	-0.09476	WERE	'LAWRENCE ENERGY CENTER 230KV'	201.5866	-0.00167	-0.09309	40
WERE	'EVANS ENERGY CENTER 138KV'		475.3857	-0.00079	WERE	'SMOKEY HILLS 34KV'	152	0.08273	-0.08352	45
WERE	'EVANS N4 138 16KV'		360	-0.00079	WERE	'SMOKEY HILLS 34KV'	152	0.08273	-0.08352	
WERE	'PAWNEE 115KV'		999	-0.03611	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01086	-0.04697	80
WERE	'RICE 115KV'		999	-0.03611	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01086	-0.04697	80
WERE	'PAWNEE 115KV'		999	-0.03611	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.00225	-0.03836	99
WERE	'RICE 115KV'		999	-0.03611	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.00225	-0.03836	99
WERE	'PAWNEE 115KV'		999	-0.03611	WERE	'LANG 7 345 345KV'	610	0.00057	-0.03668	103
WERE	'RICE 115KV'		999	-0.03611	WERE	'LANG 7 345 345KV'	610	0.00057	-0.03668	103

WERE RICE TISKY
Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified.
Factor = Source GSF - Sink GSF
Redispatch Amount = Relief Amount / Factor

Aggregate Relief Amount 0.1 0.4

Reservation

 Upgrade:
 WICHITA - RENO 345KV

 Limiting Facility:
 EXIDE JUNCTION - SUMMIT 115KV CKT 1

 Direction:
 To>From

 Line Outage:
 WR-DOUBLE21

 Flowgate:
 57368573811WR-DOUBLE212211SP

 Date Redispatch Needed:
 67(99.7/1109)

 Season Flowgate Identified:
 2011 Summer Peak

Relief Amount

506	0.4							
0	Maximum	005	Sink Control	Circle	Maximum	005		Aggregate Redispatch
								Amount (MW)
				'GILL ENERGY CENTER 138KV'				
'BPU - CITY OF MCPHERSON 115KV'	259	-0.18503	WERE	'JEFFREY ENERGY CENTER 230KV'				
'BPU - CITY OF MCPHERSON 115KV'	259	-0.18503	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.00913	-0.19416	
'BPU - CITY OF MCPHERSON 115KV'	259	-0.18503	WERE	'KNOLL 3 115 115KV'	21.7	-0.01237	-0.17266	
'BPU - CITY OF MCPHERSON 115KV'	259	-0.18503	WERE	'LANG 7 345 345KV'	610	0.00295	-0.18798	
'BPU - CITY OF MCPHERSON 115KV'	259	-0.18503	WERE	'LAWRENCE ENERGY CENTER 115KV'	85	0.00279	-0.18782	
'BPU - CITY OF MCPHERSON 115KV'	259	-0.18503	WERE	'LAWRENCE ENERGY CENTER 230KV'	201.5866	0.00291	-0.18794	
'BPU - CITY OF MCPHERSON 115KV'	259	-0.18503	WERE	'SMOKEY HILLS 34KV'	152	0.03213	-0.21716	
'BPU - CITY OF MCPHERSON 115KV'	259	-0.18503	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00238	-0.18741	
'BPU - CITY OF MCPHERSON 115KV'	259	-0.18503	WERE	'WACO 138KV'	17.972	-0.00146	-0.18357	
'HUTCHINSON ENERGY CENTER 115KV'				'SMOKEY HILLS 34KV'		0.03213		
'HUTCHINSON ENERGY CENTER 69KV'	67	-0.1196	WERE	'SMOKEY HILLS 34KV'	152	0.03213	-0.15173	
'ABILENE ENERGY CENTER 115KV'				'SMOKEY HILLS 34KV'	152	0.03213		
'BPU - CITY OF MCPHERSON 115KV'				'CLAY CENTER JUNCTION 115KV'				
'HUTCHINSON ENERGY CENTER 115KV'								
'HUTCHINSON ENERGY CENTER 115KV'				'CITY OF AUGUSTA 69KV'	20.02	-0.00011	-0.11962	
	Source BPU - CITY OF MCPHERSON 115KV	Source	Source	Source	Source	Source	Source	Source

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

WERE	ERGY CENTER 115KV ERGY CENTER 69KV 263 -0.111 267 -0.1.1	973 WERE 975 WERE 976 WERE 996 WERE 996 WERE 996 WERE 996 WERE 996 WERE 996 WERE	ICITY OF IOLA 69KV CITY OF WILLVANE 69KV CITY OF WELLINGTON 69KV COFFEY COLNTY NO. 2 SHAPPE 69KV EVANS ENERGY CENTER 138KV GILL ENERGY CENTER 138KV JEFFREY BNERGY CENTER 230KV JEFFREY BNERGY CENTER 345KV KNOLL 3115 115KV LANG 7 345 345KV LANG 7 345 345KV LAWRENGE ENERGY CENTER 115KV LAWRENGE ENERGY CENTER 115KV WAGO 138KV CHANUTE 69KV CITY OF AUGUSTA 69KV CITY OF BURLINGTON 69KV CITY OF FREDONIA 69KV CITY OF IGRARD 69KV CITY OF IOLA 69KV	27.273 9.291 41.45 19.98 331.6143 155 470 940 21.7 610 85 201.5866 108 17.972 58.843 20.02 7.8 23.579 3.887	-0.00065 -0.00092 -0.00079 -0.00079 -0.0062 -0.00622 -0.00913 -0.01237 -0.00295 -0.00295 -0.00291 -0.00146 -0.000142 -0.000140 -0.000142 -0.000142 -0.000142	-0.12026 -0.11908 -0.11908 -0.11881 -0.12052 -0.11943 -0.12955 -0.12268 -0.12268 -0.12268 -0.12264 -0.12264 -0.12264 -0.12264 -0.12264 -0.12264 -0.12002 -0.11949 -0.12002 -0.11949 -0.12002 -0.12002 -0.12002	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
WERE	ERGY CENTER 115KV ERGY CENTER 69KV	263 -0.111 267 -0.1.1 267 -0.1.1	1773 WERE 1774 WERE 1775 WERE 1775 WERE 1775 WERE 1776 WERE 1777 W	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV' EVANS ENERGY CENTER 138KV' GILL ENERGY CENTER 138KV' JEFFREY BENERGY CENTER 230KV' JEFFREY BENERGY CENTER 245KV' INDIA. 3 115 115KV' LANG 7. 345 345KV' LANG 7. 345 345KV' LAWRENCE ENERGY CENTER 115KV' LAWRENCE ENERGY CENTER 115KV' WAGO 138KV' CHANUTE 99KV' CHANUTE 69KV' CITY OF BURLINGTON 69KV' CITY OF GERE 69KV' CITY OF FREDONIA 69KV' CITY OF GERE 69KV' CITY OF GEREND 69KV' CITY OF GEREND 69KV' CITY OF GEREND 69KV' CITY OF GEREND 69KV'	41.45 19.98 331.6143 155 470 940 21.7 610 85 201.5866 103 32 20.2 7.8 2.3 2.3 3.897	-0.00092 0.00079 -0.0003 -0.0016 0.00622 0.00913 -0.01237 0.00295 0.00279 0.00238 -0.00146 0.00042 -0.00011 0.00079 0.00042 0.00029	-0.11881 -0.12052 -0.11943 -0.11943 -0.11813 -0.12595 -0.12286 -0.10736 -0.12268 -0.12264 -0.12264 -0.12211 -0.11827 -0.12020 -0.12020 -0.1203	3 3 3 3 3 3 3
WERE HUTCHINSON EN WERE HUTCHINS	ERGY CENTER 115KV ERGY CENTER 69KV	263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.11 267 -0.1.	1773 WERE 1774 WERE 1775 WERE 1776 WERE 1776 WERE 1777 WERE 1777 WERE 1777 WERE 1778 WERE 1779 WERE	COFFEY COUNTY NO. 2 SHARPE 69KV' "EVANS ENERGY CENTER 138KV' "GILL ENERGY CENTER 138KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 345KV' KNOLL 3 115 115KV' LAWRENCE ENERGY CENTER 345KV' LAWRENCE ENERGY CENTER 115KV' LAWRENCE ENERGY CENTER 115KV' "TECUMSEH ENERGY CENTER 115KV' "WAGO 138KV' "CHANUTE 69KV' CITY OF BURLINGTON 69KV' CITY OF FEREONIA 69KV' CITY OF GIRARD 69KV' CITY OF GIRARD 69KV' CITY OF GIRARD 69KV'	19.98 331.6143 1155 470 940 21.7 6101 85 201.5866 1088 17.972 58.843 20.02 7.8 23.579 3.8877	0.00079 -0.0003 -0.0016 0.00622 0.00913 -0.01237 0.00295 0.00279 0.00291 0.00238 -0.00146 0.00042 -0.00011 0.00079 0.00042	-0.12052 -0.11943 -0.11813 -0.12595 -0.12886 -0.12268 -0.12264 -0.12264 -0.12264 -0.12211 -0.11827 -0.12002 -0.12002 -0.12002	3 3 3 3 3 3 3
WERE HUTCHINSON EN WERE HUTCHINS	ERGY CENTER 115KV ERGY CENTER 69KV	263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.11 267 -0.1.	1773 WERE 1774 WERE 1775 WERE 1776 WERE 1776 WERE 1777 WERE 1777 WERE 1777 WERE 1778 WERE 1779 WERE	COFFEY COUNTY NO. 2 SHARPE 69KV' "EVANS ENERGY CENTER 138KV' "GILL ENERGY CENTER 138KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 345KV' KNOLL 3 115 115KV' LAWRENCE ENERGY CENTER 345KV' LAWRENCE ENERGY CENTER 115KV' LAWRENCE ENERGY CENTER 115KV' "TECUMSEH ENERGY CENTER 115KV' "WAGO 138KV' "CHANUTE 69KV' CITY OF BURLINGTON 69KV' CITY OF FEREONIA 69KV' CITY OF GIRARD 69KV' CITY OF GIRARD 69KV' CITY OF GIRARD 69KV'	19.98 331.6143 1155 470 940 21.7 6101 85 201.5866 1088 17.972 58.843 20.02 7.8 23.579 3.8877	0.00079 -0.0003 -0.0016 0.00622 0.00913 -0.01237 0.00295 0.00279 0.00291 0.00238 -0.00146 0.00042 -0.00011 0.00079 0.00042	-0.12052 -0.11943 -0.11813 -0.12595 -0.12886 -0.12268 -0.12264 -0.12264 -0.12264 -0.12211 -0.11827 -0.12002 -0.12002 -0.12002	3 3
WERE HUTCHINSON EN WENT HUTCHINSON EN WENT HUTCHINS	ERGY CENTER 115KV ERGY CENTER 69KV	263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 267 -0.1	173 WERE 173 WERE 173 WERE 175 WERE 176 WERE 176 WERE 177 WERE 178 WERE 179 WERE 179 WERE 179 WERE 179 WERE	EVANS ENERGY CENTER 138KV' 'GILL ENERGY CENTER 138KV' 'JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 345KV' 'KNOLL 3115 115KV' 'LANG 7 345 345KV' LANG 7 345 345KV' 'LAWRENCE ENERGY CENTER 115KV' 'VAWRENCE ENERGY CENTER 115KV' 'WAGO 138KV' 'CHANJE 69KV' 'CITY OF BURLINGTON 69KV' CITY OF FREDONIA 69KV' CITY OF GIRRON 69KV' CITY OF GIRRON 69KV' CITY OF GIRRON 69KV' CITY OF GIRRON 69KV'	331.6143 1555 470 940 21.7, 610 85 621.5866 108 17.972 58.843 20.02 7.8 23.579 3.887 5.092	-0.0003 -0.0016 0.00622 0.00913 -0.01237 0.00295 0.00291 0.00238 -0.00146 0.00042 -0.00011 0.00079 0.00042 0.00042	-0.11943 -0.11813 -0.12595 -0.12595 -0.12268 -0.12268 -0.12264 -0.12264 -0.12211 -0.11827 -0.12002 -0.11949 -0.12039 -0.12002	3 3
WERE HUTCHINSON EN WERE HUTCHINS	ERGY CENTER 115KV ERGY CENTER 69KV	263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 267 -0.1	173 WERE 174 WERE 175 WERE 176 WERE 177 WERE 177 WERE 178 WERE 179 WERE 179 WERE 179 WERE 179 WERE 179 WERE	GILL ENERGY CENTER 138KV' 'JEFFREY ENERGY CENTER 230KV' 'JEFFREY ENERGY CENTER 345KV' KNOLL 3 115 115KV' 'LAWRENCE ENERGY CENTER 115KV' 'LAWRENCE ENERGY CENTER 115KV' 'LAWRENCE ENERGY CENTER 115KV' 'WACO 138KV' 'CHANUTE 69KV' 'CITY OF AUGUSTA 69KV' 'CITY OF BURLINGTON 69KV' CITY OF GERE 60KV' CITY OF GIRARD 69KV' CITY OF GIRARD 69KV'	155 470 940 21.7 610 85 201.586 108 17.972 58.843 20.02 7.8 23.579 3.897 5.092	-0.0016 0.00622 0.00913 -0.01237 0.00295 0.00279 0.00291 0.00238 -0.00146 0.00042 -0.00011 0.00079 0.00042 0.00029 0.00046	-0.11813 -0.12595 -0.12586 -0.12886 -0.10736 -0.12252 -0.12252 -0.12264 -0.12211 -0.11827 -0.12002 -0.11949 -0.12039 -0.12002	3 3
WERE HUTCHINSON EN WENT HUTCHINSON EN WENT HUTCHINSON EN WENT HUTCHINSON EN WENT HUTCHINS	ERGY CENTER 115KV ERGY CENTER 69KV	263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1	973 WERE 976 WERE 996 WERE 996 WERE 996 WERE 996 WERE 996 WERE 996 WERE	JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 345KV' KNOLL 3 115 115KV' LANG 7 345 345KV' LANG 7 345 345KV' LAWRENCE ENERGY CENTER 115KV' LAWRENCE ENERGY CENTER 115KV' LAWRENCE ENERGY CENTER 115KV' WAGO 138KV' CHANUTE 69KV' CITY OF AUGUSTA 69KV' CITY OF BURLINGTON 69KV' CITY OF FEBONIA 69KV' CITY OF GIRRE 69KV'	470 940 21.7 610 85 201.5866 108 17.972 58.843 20.02 7.8 23.579 3.897 5.092	0.00622 0.00913 -0.01237 0.00295 0.00279 0.00291 0.00238 -0.00146 0.00042 -0.00011 0.00079 0.00042 0.00042 0.00042	-0.12595 -0.12886 -0.12268 -0.12268 -0.12252 -0.12264 -0.12211 -0.11827 -0.12002 -0.11949 -0.12039 -0.12002	3 3
WERE HUTCHINSON EN WERE HUTCHINS	ERGY CENTER 115KV ERGY CENTER 61KV ERGY CENTER 69KV	263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1	1773 WERE 1774 WERE 1775 W	JEFFREY ENERGY CENTER 345KV' (KNOLL 3115 115KV' LAWRENGE ENERGY CENTER 115KV' LAWRENGE ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 115KV' WAGO 138KV' CHANUTE 69KV' CITY OF AUGUSTA 69KV' CITY OF GENELOSTO 69KV'	940 21.7 610 85 201.5866 108 17.972 58.843 20.02 7.8 23.579 3.897 5.092	0.00913 -0.01237 0.00295 0.00279 0.00291 0.00238 -0.00146 0.00042 -0.00011 0.00079 0.00042 0.00029	-0.12886 -0.10736 -0.12268 -0.12252 -0.12264 -0.12211 -0.11827 -0.12002 -0.11949 -0.12039 -0.12002	3 3 3 3 3 3 3 3
WERE HUTCHINSON EN WERE HUTCHINS	ERGY CENTER 115KV ERGY CENTER 69KV	263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 267 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1	173 WERE 196 WERE	IKNOLL 3 115 115KV LANG 7 345 345KV LAWRENCE ENERGY CENTER 115KV LAWRENCE ENERGY CENTER 230KV TECUMSEH ENERGY CENTER 115KV WACO 138KV CHANUTE 99KV CITY OF AUGUSTA 69KV CITY OF BURLINGTON 69KV CITY OF FREDONIA 69KV CITY OF GRADE 69KV	21.7 610 85, 201.5866 108 17.972 58.843 20.02 7.8 23.579 3.897 5.092	-0.01237 0.00295 0.00279 0.00291 0.00238 -0.00146 0.00042 -0.00011 0.00079 0.00042 0.00042 0.00042	-0.10736 -0.12268 -0.12252 -0.12264 -0.12211 -0.11827 -0.12002 -0.11949 -0.12039 -0.12002	3 3 3 3 3 3 3 3
WERE HUTCHINSON EN WERE HUTCHINS	ERGY CENTER 115KV' ERGY CENTER 69KV'	263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.111 263 -0.11 263 -0.11 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1	973 WERE 973 WERE 973 WERE 973 WERE 973 WERE 973 WERE 976 WERE 996 WERE	LANG 7.345.345KV 'LAWRENCE ENERGY CENTER 115KV' LAWRENCE ENERGY CENTER 230KV' 'TECUMSEH ENERGY CENTER 115KV' WAGO 138KV' 'CHANUTE 98KV' 'CHANUTE 98KV' 'CITY OF BURLINGTON 69KV' CITY OF FUR 96KV' CITY OF FEREONIA 69KV' CITY OF GRIRE 69KV' CITY OF GRIRARD 69KV'	610 85 201.5866 108 17.972 58.843 20.02 7.8 23.579 3.897 5.092	0.00295 0.00279 0.00291 0.00238 -0.00146 0.00042 -0.00011 0.00079 0.00042 0.00029	-0.12268 -0.12252 -0.12264 -0.12211 -0.11827 -0.12002 -0.11949 -0.12039 -0.12002	3 3 3 3 3 3 3
WERE HUTCHINSON EN WERE ABILENE ENERGY WE	ERGY CENTER 115KV ERGY CENTER 69KV	263 -0.111 263 -0.111 263 -0.111 263 -0.111 267 -0.1	973 WERE 973 WERE 973 WERE 973 WERE 973 WERE 996 WERE	LAWRENCE ENERGY CENTER 115KV' LAWRENCE ENERGY CENTER 230KV' 'TECUMSEH ENERGY CENTER 115KV' WAGO 138KV' 'CHANUTE 89KV' CITY OF AUGUSTA 69KV' CITY OF BURLINGTON 69KV' CITY OF GEREONIA 69KV' CITY OF GEREONIA 69KV' CITY OF GRARD 69KV' CITY OF GRARD 69KV' CITY OF GRARD 69KV'	85 201.5866 108 17.972 58.843 20.02 7.8 23.579 3.897 5.092	0.00279 0.00291 0.00238 -0.00146 0.00042 -0.00011 0.00079 0.00042 0.00029 0.00046	-0.12252 -0.12264 -0.12211 -0.11827 -0.12002 -0.11949 -0.12039 -0.12002	3 3 3 3 3 3
WERE HUTCHINSON EN WERE HUTCHINS	ERGY CENTER 115KV ERGY CENTER 69KV	263 -0.111 263 -0.111 263 -0.111 263 -0.111 267 -0.1	973 WERE 973 WERE 973 WERE 973 WERE 973 WERE 996 WERE	LAWRENCE ENERGY CENTER 115KV' LAWRENCE ENERGY CENTER 230KV' 'TECUMSEH ENERGY CENTER 115KV' WAGO 138KV' 'CHANUTE 89KV' CITY OF AUGUSTA 69KV' CITY OF BURLINGTON 69KV' CITY OF GEREONIA 69KV' CITY OF GEREONIA 69KV' CITY OF GRARD 69KV' CITY OF GRARD 69KV' CITY OF GRARD 69KV'	85 201.5866 108 17.972 58.843 20.02 7.8 23.579 3.897 5.092	0.00279 0.00291 0.00238 -0.00146 0.00042 -0.00011 0.00079 0.00042 0.00029 0.00046	-0.12252 -0.12264 -0.12211 -0.11827 -0.12002 -0.11949 -0.12039 -0.12002	3 3 3 3
WERE HUTCHINSON EN WENT HUTCHINSON EN WERE HUTCHINS	ERGY CENTER 115KV' ERGY CENTER 115KV' ERGY CENTER 115KV' ERGY CENTER 115KV' ERGY CENTER 69KV'	263 -0.111 263 -0.112 263 -0.115 263 -0.115 267 -0.1. 267 -0.1. 267 -0.1. 267 -0.1. 267 -0.1. 267 -0.1. 267 -0.1. 267 -0.1. 267 -0.1. 267 -0.1. 267 -0.1. 267 -0.1. 267 -0.1. 267 -0.1. 267 -0.1. 267 -0.1. 267 -0.1.	973 WERE 973 WERE 973 WERE 976 WERE 96 WERE	LAWRENCE ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 115KV' WACO 138KV' CHANUTE 69KV' CITY OF AUGUSTA 69KV' CITY OF BURLINGTON 69KV' CITY OF FEEDONIA 69KV' CITY OF GIRREN 69KV' CITY OF GIRREN 69KV' CITY OF GIRREN 69KV' CITY OF GIRREN 69KV'	201.5866 108 17.972 58.843 20.02 7.8 23.579 3.897 5.092	0.00291 0.00238 -0.00146 0.00042 -0.00011 0.00079 0.00042 0.00029 0.00046	-0.12264 -0.12211 -0.11827 -0.12002 -0.11949 -0.12039 -0.12002	3 3 3
WERE HUTCHINSON EN WENT HUTCHINSON EN WERE HUTCHINS	ERGY CENTER 115KV ERGY CENTER 115KV ERGY CENTER 69KV	263 -0.111 263 -0.11 67 -0.1: 67 -0.1: 67 -0.1: 67 -0.1: 67 -0.1: 67 -0.1: 67 -0.1: 67 -0.1: 67 -0.1: 67 -0.1: 67 -0.1:	973 WERE 973 WERE 996 WERE 996 WERE 996 WERE 996 WERE 996 WERE 996 WERE 996 WERE 996 WERE	TECUMSEH ENERGY CENTER 115KV WAGO 138KV 'CHANUTE 89KV 'CITY OF AUGUSTA 69KV 'CITY OF BURLINGTON 69KV 'CITY OF BURLINGTON 69KV 'CITY OF FERDONIA 69KV 'CITY OF GRARD 69KV 'CITY OF GRARD 69KV 'CITY OF GRARD 69KV	108 17.972 58.843 20.02 7.8 23.579 3.897 5.092	0.00238 -0.00146 0.00042 -0.00011 0.00079 0.00042 0.00029 0.00046	-0.12211 -0.11827 -0.12002 -0.11949 -0.12039 -0.12002	3
WERE HUTCHINSON EN WERE ABILENE ENERGY WE	ERGY CENTER 115KV' ERGY CENTER 69KV'	263 -0.11! 67 -0.1: 67 -0.1: 67 -0.1: 67 -0.1: 67 -0.1: 67 -0.1: 67 -0.1: 67 -0.1: 67 -0.1: 67 -0.1: 67 -0.1: 67 -0.1: 67 -0.1: 67 -0.1:	973 WERE 996 WERE	WACO 138KV' 'CHANUTE 69KV' CITY OF AUGUSTA 69KV' CITY OF BURLINGTON 69KV' CITY OF BER 69KV' CITY OF FREODNIA 69KV' CITY OF GRADD 69KV' CITY OF GRADD 69KV' CITY OF GIRADD 69KV'	17.972 58.843 20.02 7.8 23.579 3.897 5.092	-0.00146 0.00042 -0.00011 0.00079 0.00042 0.00029 0.00046	-0.11827 -0.12002 -0.11949 -0.12039 -0.12002	3
WERE HUTCHINSON EN WERE ABILENE ENERGY WER	ERGY CENTER 69KV'	67 -0.1' 67 -0.1' 67 -0.1' 67 -0.1' 67 -0.1' 67 -0.1' 67 -0.1' 67 -0.1' 67 -0.1' 67 -0.1' 67 -0.1' 67 -0.1'	96 WERE	CHANUTE 69KV CITY OF BURLINGTON 69KV CITY OF FERE 69KV CITY OF FREDONIA 69KV CITY OF GRARD 69KV CITY OF GRARD 69KV CITY OF GRARD 69KV	58.843 20.02 7.8 23.579 3.897 5.092	0.00042 -0.00011 0.00079 0.00042 0.00029 0.00046	-0.12002 -0.11949 -0.12039 -0.12002	3
WERE HUTCHINSON EN WERE ABILENE ENERGY WERE ABILENE ENERG	ERGY CENTER 69KV'	67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1	96 WERE 96 WERE 96 WERE 96 WERE 96 WERE 96 WERE 96 WERE	CITY OF AUGUSTA 69KV' CITY OF BURLINGTON 69KV' CITY OF ERIE 69KV' CITY OF FREDONIA 69KV' CITY OF GRAD 69KV' CITY OF GIRARD 69KV' CITY OF IOLA 69KV'	20.02 7.8 23.579 3.897 5.092	-0.00011 0.00079 0.00042 0.00029 0.00046	-0.11949 -0.12039 -0.12002	3
WERE HUTCHINSON EN WERE ABILENE ENERGY WER	ERGY CENTER 69KV'	67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1	96 WERE 96 WERE 96 WERE 96 WERE 96 WERE 96 WERE	'CITY OF BURLINGTON 69KV' 'CITY OF ERIE 69KV' 'CITY OF FREDONIA 69KV' 'CITY OF GIRARD 69KV' 'CITY OF IOLA 69KV'	7.8 23.579 3.897 5.092	0.00079 0.00042 0.00029 0.00046	-0.12039 -0.12002	2
WERE HUTCHINSON EN WERE ABILENE ENERGY WERE ABILENE	ERGY CENTER 69KV'	67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1	96 WERE 96 WERE 96 WERE 96 WERE 96 WERE	CITY OF ERIE 69KV' 'CITY OF FREDONIA 69KV' 'CITY OF GIRARD 69KV' 'CITY OF IOLA 69KV'	23.579 3.897 5.092	0.00042 0.00029 0.00046	-0.12002	3
WERE HUTCHINSON EN WERE ABILENE ENERGY WERE ABILENE	ERGY CENTER 69KV'	67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1	96 WERE 96 WERE 96 WERE 96 WERE 96 WERE	CITY OF ERIE 69KV' 'CITY OF FREDONIA 69KV' 'CITY OF GIRARD 69KV' 'CITY OF IOLA 69KV'	23.579 3.897 5.092	0.00042 0.00029 0.00046	-0.12002	3
WERE HUTCHINSON EN WERE ABILENE ENERGY WERE ABILEN	ERGY CENTER 69KV'	67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1	96 WERE 96 WERE 96 WERE 96 WERE	'CITY OF FREDONIA 69KV' 'CITY OF GIRARD 69KV' 'CITY OF IOLA 69KV'	3.897 5.092	0.00029 0.00046		3
WERE HUTCHINSON EN WERE ABILENE ENERGY WERE ABILE	ERGY CENTER 69KV'	67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1	96 WERE 96 WERE 96 WERE	'CITY OF GIRARD 69KV' 'CITY OF IOLA 69KV'	5.092	0.00046		
WERE HUTCHINSON EN WERE ABLENE ENERGY WERE ABLENE E	IERGY CENTER 69KV'	67 -0.1 67 -0.1 67 -0.1 67 -0.1 67 -0.1	96 WERE 96 WERE	'CITY OF IOLA 69KV'				
WERE HUTCHINSON EN WERE ABILENE ENERGY WER	ERGY CENTER 69KV'	67 -0.1 67 -0.1 67 -0.1 67 -0.1	96 WERE		27.273	0.0005	-0.12006	3
WERE HUTCHINSON EN WERE ABLENE ENERGY WERE ABLENE E	ERGY CENTER 69KV' ERGY CENTER 69KV' ERGY CENTER 69KV' ERGY CENTER 69KV'	67 -0.1 67 -0.1 67 -0.1		I'CITY OF MULVANE 69KV'		0.00053	-0.12013	3
WERE HUTCHINSON EN WERE ABILENE ENERGY ABILENE ENER	ERGY CENTER 69KV' ERGY CENTER 69KV' ERGY CENTER 69KV'	67 -0.1°	96 WERE		9.291	-0.00065	-0.11895	3
WERE HUTCHINSON EN WERE ABILENE ENERGY ABILENE ENE	ERGY CENTER 69KV' ERGY CENTER 69KV' ERGY CENTER 69KV'	67 -0.1°		'CITY OF WELLINGTON 69KV'	41.45	-0.00092	-0.11868	3
WERE HUTCHINSON EN WERE ABILENE ENERGY ABILENE E	ERGY CENTER 69KV' ERGY CENTER 69KV'	67 -0.1	96 WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	0.00079	-0.12039	3
WERE HUTCHINSON EN WERE ABILENE ENERGY WERE	ERGY CENTER 69KV'		96 WERE	'EVANS ENERGY CENTER 138KV'	331.6143	-0.0003	-0.1193	- 3
WERE HUTCHINSON EN WERE ABILENE ENERGY WERE			96 WERE	'GILL ENERGY CENTER 138KV'	155	-0.0003	-0.118	- 3
WERE HUTCHINSON EN WERE ABLENE ENERGY WERE								
WERE HUTCHINSON EN WERE ABILENE ENERGY WERE			96 WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.00622	-0.12582	3
WERE HUTCHINSON EN WERE ABILENE ENERGY WERE ABILENE			96 WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.00913	-0.12873	3
WERE HUTCHINSON EN WERE ABILENE ENERGY WERE	ERGY CENTER 69KV'		96 WERE	'KNOLL 3 115 115KV'	21.7	-0.01237	-0.10723	3
WERE HUTCHINSON EN WERE HUTCHINSON EN WERE HUTCHINSON EN WERE HUTCHINSON EN WERE ABILENE ENERGY WERE ABILE	ERGY CENTER 69KV'	67 -0.1°	96 WERE	'LANG 7 345 345KV'	610	0.00295	-0.12255	3
WERE HUTCHINSON EN WERE HUTCHINSON EN WERE HUTCHINSON EN WERE HUTCHINSON EN WERE ABILENE ENERGY WERE ABILE			96 WERE	'LAWRENCE ENERGY CENTER 115KV'	85	0.00279	-0.12239	3
WERE HUTCHINSON EN WERE HUTCHINSON EN WERE ABILENE ENERGY WERE ABI			96 WERE	'LAWRENCE ENERGY CENTER 230KV'	201.5866	0.00291	-0.12251	- 3
WERE HUTCHINSON EN WERE ABILENE ENERGY WERE			96 WERE	TECUMSEH ENERGY CENTER 115KV	108	0.00231	-0.12198	
WERE 'ABILENE ENERGY								3
WERE 'ABILENE ENERGY WERE ABILENE ENERGY			96 WERE	'WACO 138KV'	17.972	-0.00146	-0.11814	3
WERE ABILENE ENERGY			25 WERE	'CHANUTE 69KV'	58.843	0.00042	-0.08767	4
WERE 'ABILENE ENERGY WERE ABILENE ENERGY	/ CENTER 115KV'	5.999996 -0.08	25 WERE	'CITY OF AUGUSTA 69KV'	20.02	-0.00011	-0.08714	4
WERE 'ABILENE ENERGY WERE ABILENE ENERGY	CENTER 115KV	5.999996 -0.08	25 WERE	'CITY OF BURLINGTON 69KV'	7.8	0.00079	-0.08804	4
WERE 'ABILENE ENERG' WERE 'ABILENE ENERG' WERE ABILENE ENERG' WERE ABILENE ENERG' WERE 'ABILENE ENERG' WERE 'ABILENE ENERG' WERE 'ABILENE ENERG' WERE ABILENE ENERG'			25 WERE	'CITY OF ERIE 69KV'	23.579	0.00042	-0.08767	4
WERE ABILENE ENERGY			25 WERE	'CITY OF FREDONIA 69KV'	3.897	0.00029	-0.08754	4
WERE 'ABILENE ENERGY WERE 'ABILENE ENERGY WERE ABILENE ENERGY								4
WERE ABILENE ENERGY			25 WERE	'CITY OF GIRARD 69KV'	5.092	0.00046	-0.08771	
WERE 'ABILENE ENERGY			'25 WERE	'CITY OF IOLA 69KV'	27.273	0.00053	-0.08778	4
WERE ABILENE ENERGY			25 WERE	'CITY OF MULVANE 69KV'	9.291	-0.00065	-0.0866	4
WERE 'ABILENE ENERGY WERE ABILENE ENERGY WERE 'ABILENE ENERGY WERE 'ABILENE ENERGY			25 WERE	'CITY OF WELLINGTON 69KV'	41.45	-0.00092	-0.08633	4
WERE 'ABILENE ENERGY WERE ABILENE ENERGY WERE 'ABILENE ENERGY WERE 'ABILENE ENERGY	CENTER 115KV'	5.999996 -0.08	25 WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	0.00079	-0.08804	4
WERE 'ABILENE ENERGY			25 WERE	'EVANS ENERGY CENTER 138KV'	331.6143	-0.0003	-0.08695	4
WERE 'ABILENE ENERGY			25 WERE	'GILL ENERGY CENTER 138KV'	155	-0.0016	-0.08565	- 1
WERE 'ABILENE ENERGY			25 WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.00622	-0.09347	
WERE ABILENE ENERGY WERE ABILENE ENERGY WERE ABILENE ENERGY WERE ABILENE ENERGY								- 4
WERE 'ABILENE ENERGY WERE 'ABILENE ENERGY WERE 'ABILENE ENERGY			25 WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.00913	-0.09638	4
WERE 'ABILENE ENERGY WERE 'ABILENE ENERGY			'25 WERE	'LANG 7 345 345KV'	610	0.00295	-0.0902	4
WERE 'ABILENE ENERGY			25 WERE	'LAWRENCE ENERGY CENTER 115KV'	85	0.00279	-0.09004	4
WERE 'ABILENE ENERGY	/ CENTER 115KV'	5.999996 -0.08	25 WERE	'LAWRENCE ENERGY CENTER 230KV'	201.5866	0.00291	-0.09016	4
			25 WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00238	-0.08963	4
	Y CENTER 115KV'		25 WERE	'WACO 138KV'	17,972	-0.00146	-0.08579	4
	CPHERSON 115KV		03 WERE	'ABILENE ENERGY CENTER 115KV'	17.972	-0.00146	-0.09778	- 4
								- 4
WERE CLAY CENTER JU	NCTION 115KV		66 WERE	'SMOKEY HILLS 34KV'	152	0.03213	-0.08779	4
	ERGY CENTER 115KV'		73 WERE	'COLBY 115KV'	5.48809	-0.015	-0.10473	4
	ERGY CENTER 69KV'		96 WERE	'COLBY 115KV'	5.48809	-0.015	-0.1046	4
WERE 'PAWNEE 115KV'		999 -0.056	69 WERE	'SMOKEY HILLS 34KV'	152	0.03213	-0.08882	4
WERE 'RICE 115KV'			69 WERE	'SMOKEY HILLS 34KV'	152	0.03213	-0.08882	4
WERE 'ST JOHN 115KV'			69 WERE	'SMOKEY HILLS 34KV'	152	0.03213	-0.08882	- 1
			25 WERE	'COLBY 115KV'	5.48809	-0.015	-0.07225	
	CENTED 115KV/							5
	Y CENTER 115KV		25 WERE	'KNOLL 3 115 115KV'	21.7	-0.01237	-0.07488	5
WERE 'GREAT BEND PLA	Y CENTER 115KV'		26 WERE	'SMOKEY HILLS 34KV'	152	0.03213	-0.07339	5
WERE 'BPU - CITY OF MC	Y CENTER 115KV' ANT 69KV'		03 WERE	'HUTCHINSON ENERGY CENTER 115KV'	120	-0.11973	-0.0653	6
WERE CLAY CENTER JU	Y CENTER 115KV'	18.23401 -0.05	66 WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.00622	-0.06188	6
	Y CENTER 115KV' ANT 69KV' CPHERSON 115KV'		66 WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.00013	-0.06479	6
	Y CENTER 115KV' ANT 69KV' CPHERSON 115KV' JINCTION 115KV'	18.23401 -0.059	66 WERE	'LANG 7 345 345KV'	610	0.00315	-0.05861	
	Y CENTER 115KV' ANT 69KV' CPHERSON 115KV' INICTION 115KV' INICTION 115KV'				010	0.00233		6
WERE CLAY CENTER JU Maximum Decrement and Maximum Increment we	Y CENTER 115KV' ANT 69KV' PPHERSON 115KV' INCTION 115KV' INCTION 115KV' INCTION 115KV'			'LAWRENCE ENERGY CENTER 115KV'	85	0.00279	-0.05845	6

Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF
Redispatch Amount = Relief Amount / Factor

Upgrade: WICHITA - RENO 345KV
Limiting Facility: NORTHVIEW - SUMMIT 115KV CKT 1
Direction: To->From
Line Outage: EXIDE JUNCTION - SUMMIT 115KV CKT 1
57371573811573685738112208SP
Date Redispatch Needed: Starting 2008 6/1 - 10/1 Until EOC of Upgrade
Season Flowgate Identified: 2008 Summer Peak

Season Flowgate Identified:									
		Aggregate Relief							
Reservation	Relief Amount	Amount							
1161506		12.1							
1161997	6.0	12.1							
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.24138		'SMOKEY HILLS 34KV'	152	0.08159	-0.32297	
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.24138	WERE	'KNOLL 3 115 115KV'	75	0.02275	-0.26413	
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.24138	WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.00929	-0.25067	48
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.24138	WERE	'CHANUTE 69KV'	55.637	-0.00023	-0.24115	50 50
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.24138	WERE	'CITY OF AUGUSTA 69KV'	20.02	-0.00082	-0.24056	50
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.24138		'CITY OF ERIE 69KV'	23.374	-0.00023	-0.24115	
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.24138	WERE	'CITY OF IOLA 69KV'	24.471	-0.00018	-0.2412	50
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.24138		'CITY OF WELLINGTON 69KV'	41.45		-0.24054	
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.24138		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	-0.00031	-0.24107	50
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.24138		'EVANS ENERGY CENTER 138KV'	320.8022	-0.00076	-0.24062	
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.24138		'GILL ENERGY CENTER 138KV'	155		-0.2402	
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.24138	WERE	'JEFFREY ENERGY CENTER 230KV'	494		-0.24202	50
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.24138	WERE	'LANG 7 345 345KV'	310		-0.24113	
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.24138	WERE	'WACO 138KV'	17.967	-0.00114	-0.24024	50
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.24138	WERE	'LAWRENCE ENERGY CENTER 115KV'	85		-0.23879	
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.24138	WERE	'LAWRENCE ENERGY CENTER 230KV'	274.2987	-0.00281	-0.23857	51
WERE	'CLAY CENTER JUNCTION 115KV'	17.044	-0.24138		'TECUMSEH ENERGY CENTER 115KV'	108		-0.23594	
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.12261		'SMOKEY HILLS 34KV'	152		-0.2042	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.06768	WERE	'SMOKEY HILLS 34KV'	152		-0.14927	81
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.06764		'SMOKEY HILLS 34KV'	152		-0.14923	
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.12261	WERE	'KNOLL 3 115 115KV'	75	0.02275	-0.14536	
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.12261	WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.00929	-0.1319	
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.12261	WERE	'JEFFREY ENERGY CENTER 230KV'	494	0.00064	-0.12325	
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.12261	WERE	'CHANUTE 69KV'	55.637	-0.00023	-0.12238	99
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.12261	WERE	'CITY OF WELLINGTON 69KV'	41.45	-0.00084	-0.12177	
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.12261	WERE	'EVANS ENERGY CENTER 138KV'	320.8022	-0.00076	-0.12185	99
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.12261	WERE	'GILL ENERGY CENTER 138KV'	155	-0.00118	-0.12143	99

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.12261	WERE	'LANG 7 345 345KV'	310	-0.00025	-0.12236	99
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.12261	WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00259	-0.12002	101
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.12261	WERE	'LAWRENCE ENERGY CENTER 230KV'	274.2987	-0.00281	-0.1198	101
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.12261	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	-0.00544	-0.11717	103
WERE	'PAWNEE 115KV'	999	-0.02237	WERE	'SMOKEY HILLS 34KV'	152	0.08159	-0.10396	116
WERE	'RICE 115KV'	999	-0.02237	WERE	'SMOKEY HILLS 34KV'	152	0.08159	-0.10396	116
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.06768	WERE	'KNOLL 3 115 115KV'	75	0.02275	-0.09043	134
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.06764	WERE	'KNOLL 3 115 115KV'	75	0.02275	-0.09039	134
WERE	'TECUMSEH ENERGY CENTER 115KV'	52.99999	-0.00544	WERE	'SMOKEY HILLS 34KV'	152	0.08159	-0.08703	139
WERE	'GILL ENERGY CENTER 69KV'	118	-0.00107	WERE	'SMOKEY HILLS 34KV'	152	0.08159	-0.08266	146
WERE	'CLR_3 .575 34KV'	300	-0.00047	WERE	'SMOKEY HILLS 34KV'	152	0.08159	-0.08206	147
WERE	'EVANS ENERGY CENTER 138KV'	486,1978	-0.00076	WERE	'SMOKEY HILLS 34KV'	152	0.08159	-0.08235	147
WERE	'EVANS N4 138 16KV'	360	-0.00076	WERE	'SMOKEY HILLS 34KV'	152	0.08159	-0.08235	147
WERE	'LATHAM1234.0 345KV'	150	-0.00047	WERE	'SMOKEY HILLS 34KV'	152	0.08159	-0.08206	147
WERE	'LANG 7 345 345KV'	518	-0.00025	WERE	'SMOKEY HILLS 34KV'	152	0.08159	-0.08184	148
WERE	'LYONS 115KV'	999	-0.00007	WERE	'SMOKEY HILLS 34KV'	152	0.08159	-0.08166	148
WERE	'NEOSHO ENERGY CENTER 138KV'	67	-0.00021	WERE	'SMOKEY HILLS 34KV'	152	0.08159	-0.0818	148
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.06768	WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.00929	-0.07697	157
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.06764	WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.00929	-0.07693	157
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.06768	WERE	'JEFFREY ENERGY CENTER 230KV'	494	0.00064	-0.06832	177
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.06764	WERE	'JEFFREY ENERGY CENTER 230KV'	494	0.00064	-0.06828	177
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.06768	WERE	'LANG 7 345 345KV'	310	-0.00025	-0.06743	179
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.06764	WERE	'LANG 7 345 345KV'	310	-0.00025	-0.06739	179
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.06768	WERE	'EVANS ENERGY CENTER 138KV'	320.8022	-0.00076	-0.06692	180
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.06764	WERE	'EVANS ENERGY CENTER 138KV'	320.8022	-0.00076	-0.06688	181
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.06768	WERE	'GILL ENERGY CENTER 138KV'	155	-0.00118	-0.0665	182
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.06764	WERE	'GILL ENERGY CENTER 138KV'	155	-0.00118	-0.06646	182
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.06768	WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00259	-0.06509	186
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.06768	WERE	'LAWRENCE ENERGY CENTER 230KV'	274.2987	-0.00281	-0.06487	186
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.06764	WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.00259	-0.06505	186
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.06764	WERE	'LAWRENCE ENERGY CENTER 230KV'	274.2987	-0.00281	-0.06483	186
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.06768	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	-0.00544	-0.06224	194
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.06764	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	-0.00544	-0.0622	194
WERE	'BPU - CITY OF MCPHERSON 115KV'	239	-0.12261	WERE	'HUTCHINSON ENERGY CENTER 115KV'	120	-0.06768	-0.05493	220
WERE	'PAWNEE 115KV'	999	-0.02237	WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.00929	-0.03166	381
WERE	'RICE 115KV'	999	-0.02237	WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.00929	-0.03166	381
Maximum Decrement Factor = Source GSF	and Maximum Increment were determine from the Souce an - Sink GSF	d Sink Operating Po	ints in the	study mode	ls where limiting facility was identified.	·			
Redispatch Amount =	Relief Amount / Factor								

Season Flowgate Identified:	2011 Summer Peak		_						
	B # 44	Aggregate Relief	1						
Reservation 114012	Relief Amount 0 0.3	Amount 0.9	ł						
114012			ł						
116199			l						
110133	0.0	0.3							Aggregate
		Maximum	l	Sink Control		Maximum		ı	Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594		'CHANUTE 69KV'	58.843		-0.36569	
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594		'CITY OF AUGUSTA 69KV'	20.02			
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594	WERE	'CITY OF BURLINGTON 69KV'	7.8	-0.00034	-0.3656	
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594	WERE	'CITY OF ERIE 69KV'	23.579	-0.00025	-0.36569	
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594	WERE	'CITY OF FREDONIA 69KV'	3.897	-0.00031	-0.36563	
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594	WERE	'CITY OF GIRARD 69KV'	5.092	-0.00017	-0.36577	
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594	WERE	'CITY OF IOLA 69KV'	27.273	-0.0002	-0.36574	
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594	WERE	'CITY OF MULVANE 69KV'	9.291	-0.00088	-0.36506	
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594	WERE	'CITY OF WELLINGTON 69KV'	41.45		-0.36508	:
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	-0.00034	-0.3656	2
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594		'COLBY 115KV'	5.626662		-0.36848	
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594		'EVANS ENERGY CENTER 138KV'	340.124		-0.36516	2
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594		'GILL ENERGY CENTER 138KV'	155	-0.0012	-0.36474	
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594		'JEFFREY ENERGY CENTER 230KV'	470		-0.3665	
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594		'JEFFREY ENERGY CENTER 345KV'	940	0.00918	-0.37512	
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594		'KNOLL 3 115 115KV'	44.7		-0.38856	
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594		'LANG 7 345 345KV'	610		-0.36566	1
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594		'LAWRENCE ENERGY CENTER 115KV'	85		-0.36344	
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594		'LAWRENCE ENERGY CENTER 230KV'	215.1338		-0.36319	
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594		'SMOKEY HILLS 34KV'	152		-0.44745	
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996 5.999996	-0.36594 -0.36594		'TECUMSEH ENERGY CENTER 115KV' WACO 138KV'	128 17.972		-0.36048 -0.36479	
WERE WERE	'ABILENE ENERGY CENTER 115KV' 'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594		'HUTCHINSON ENERGY CENTER 115KV'	17.972		-0.36479	1
WERE	'CLAY CENTER JUNCTION 115KV'	18.23401	-0.36594		'KNOLL 3 115 115KV'	120	0.02262	-0.29819	
WERE	'CLAY CENTER JUNCTION 115KV'	18.23401	-0.24142		'SMOKEY HILLS 34KV'	152		-0.20404	3
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594		'BPU - CITY OF MCPHERSON 115KV'	135		-0.32293	
WERE	'BPU - CITY OF MCPHERSON 115KV'	3.555550	-0.12268		'SMOKEY HILLS 34KV'	152		-0.20419	-
WERE	'CLAY CENTER JUNCTION 115KV'	18.23401	-0.24142		'CHANUTE 69KV'	58.843		-0.24117	4
WERE	'CLAY CENTER JUNCTION 115KV'	18,23401	-0.24142		'CITY OF AUGUSTA 69KV'	20.02		-0.2406	4
WERE	'CLAY CENTER JUNCTION 115KV'	18.23401	-0.24142		'CITY OF BURLINGTON 69KV'	7.8		-0.24108	4
WERE	'CLAY CENTER JUNCTION 115KV'	18,23401	-0.24142		'CITY OF ERIE 69KV'	23,579		-0.24117	
WERE	'CLAY CENTER JUNCTION 115KV'	18.23401	-0.24142		'CITY OF FREDONIA 69KV'	3.897	-0.00031	-0.24111	
WERE	'CLAY CENTER JUNCTION 115KV'	18.23401	-0.24142		'CITY OF GIRARD 69KV'	5.092			4
WERE	'CLAY CENTER JUNCTION 115KV'	18.23401	-0.24142	WERE	'CITY OF IOLA 69KV'	27.273	-0.0002	-0.24122	4
WERE	'CLAY CENTER JUNCTION 115KV'	18.23401	-0.24142		'CITY OF MULVANE 69KV'	9.291	-0.00088	-0.24054	
WERE	'CLAY CENTER JUNCTION 115KV'	18.23401	-0.24142		'CITY OF WELLINGTON 69KV'	41.45		-0.24056	4
WERE	'CLAY CENTER JUNCTION 115KV'	18.23401	-0.24142	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	-0.00034	-0.24108	4
WERE	'CLAY CENTER JUNCTION 115KV'	18.23401	-0.24142		'COLBY 115KV'	5.626662		-0.24396	4
WERE	'CLAY CENTER JUNCTION 115KV'	18.23401	-0.24142		'EVANS ENERGY CENTER 138KV'	340.124		-0.24064	
WERE	'CLAY CENTER JUNCTION 115KV'	18.23401	-0.24142		'GILL ENERGY CENTER 138KV'	155	-0.0012	-0.24022	4
WERE	'CLAY CENTER JUNCTION 115KV'	18.23401	-0.24142		'JEFFREY ENERGY CENTER 230KV'	470		-0.24198	
WERE	'CLAY CENTER JUNCTION 115KV'	18.23401	-0.24142		'JEFFREY ENERGY CENTER 345KV'	940		-0.2506	
WERE	'CLAY CENTER JUNCTION 115KV'	18.23401	-0.24142		'LANG 7 345 345KV'	610		-0.24114	
WERE	'CLAY CENTER JUNCTION 115KV'	18.23401	-0.24142		'LAWRENCE ENERGY CENTER 115KV'	85	-0.0025	-0.23892	
WERE WERE	'CLAY CENTER JUNCTION 115KV'	18.23401 18.23401	-0.24142		'LAWRENCE ENERGY CENTER 230KV' 'TECUMSEH ENERGY CENTER 115KV'	215.1338		-0.23867 -0.23596	
WERE	'CLAY CENTER JUNCTION 115KV' CLAY CENTER JUNCTION 115KV'	18.23401 18.23401	-0.24142 -0.24142		WACO 138KV	128 17.972		-0.23596 -0.24027	
WERE	CLAY CENTER JUNCTION 115KV	18.23401	-0.24142		'HUTCHINSON ENERGY CENTER 115KV'	17.972		-0.24027	
WERE	'BPU - CITY OF MCPHERSON 115KV'	16.23401	-0.24142		'KNOLL 3 115 115KV'	44.7	0.02262	-0.17367	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.12266		'SMOKEY HILLS 34KV'	152		-0.14926	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.06766		'SMOKEY HILLS 34KV'	152		-0.14917	
WERE	'ABILENE ENERGY CENTER 115KV'	5.999996	-0.36594		'CLAY CENTER JUNCTION 115KV'	19.86599		-0.12452	
WERE	'BPU - CITY OF MCPHERSON 115KV'	39	-0.12268		'CHANUTE 69KV'	58.843		-0.12243	
WERE	'BPU - CITY OF MCPHERSON 115KV'	39	-0.12268		'CITY OF AUGUSTA 69KV'	20.02		-0.12186	
WERE	'BPU - CITY OF MCPHERSON 115KV'	39			'CITY OF BURLINGTON 69KV'	7.8		-0.12234	
WERE	'BPU - CITY OF MCPHERSON 115KV'	39			'CITY OF ERIE 69KV'	23.579		-0.12243	
WERE	'BPU - CITY OF MCPHERSON 115KV'	39	-0.12268	WERE	'CITY OF FREDONIA 69KV'	3.897	-0.00031	-0.12237	

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

WERE	'BPU - CITY OF MCPHERSON 115KV'	39	-0.12268 WERE	'CITY OF IOLA 69KV'	27.273	-0.0002	-0.12248	7
WERE	'BPU - CITY OF MCPHERSON 115KV'	39	-0.12268 WERE	'CITY OF MULVANE 69KV'	9,291	-0.00088	-0.1218	7
WERE	'BPU - CITY OF MCPHERSON 115KV'	39		'CITY OF WELLINGTON 69KV'	41.45	-0.00086	-0.12182	7
WERE	'BPU - CITY OF MCPHERSON 115KV'	39	-0.12268 WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	-0.00034	-0.12234	7
WERE	'BPU - CITY OF MCPHERSON 115KV'	39	-0.12268 WERE	'COLBY 115KV'	5.626662	0.00254	-0.12522	7
WERE	'BPU - CITY OF MCPHERSON 115KV'	39	-0.12268 WERE	'EVANS ENERGY CENTER 138KV'	340.124	-0.00078	-0.1219	7
WERE	'BPU - CITY OF MCPHERSON 115KV'	39	-0.12268 WERE	'GILL ENERGY CENTER 138KV'	155	-0.0012	-0.12148	7
WERE	'BPU - CITY OF MCPHERSON 115KV'	39	-0.12268 WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.00056	-0.12324	7
WERE	'BPU - CITY OF MCPHERSON 115KV'	39	-0.12268 WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.00918	-0.13186	7
WERE	'BPU - CITY OF MCPHERSON 115KV'	39	-0.12268 WERE	'LANG 7 345 345KV'	610	-0.00028	-0.1224	7
WERE	'BPU - CITY OF MCPHERSON 115KV'	39	-0.12268 WERE	'LAWRENCE ENERGY CENTER 115KV'	85	-0.0025	-0.12018	7
WERE	'BPU - CITY OF MCPHERSON 115KV'	39	-0.12268 WERE	'LAWRENCE ENERGY CENTER 230KV'	215.1338	-0.00275	-0.11993	7
WERE	'BPU - CITY OF MCPHERSON 115KV'	39	-0.12268 WERE	'WACO 138KV'	17.972	-0.00115	-0.12153	7
WERE	'CLAY CENTER JUNCTION 115KV'	18.23401	-0.24142 WERE	'BPU - CITY OF MCPHERSON 115KV'	135	-0.12268	-0.11874	7
WERE	'BPU - CITY OF MCPHERSON 115KV'	39	-0.12268 WERE	'TECUMSEH ENERGY CENTER 115KV'	128	-0.00546	-0.11722	8
WERE	'PAWNEE 115KV'	999	-0.0224 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.10391	8
WERE	'RICE 115KV'	999	-0.0224 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.10391	8
WERE	'ST JOHN 115KV'	7.5	-0.0224 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.10391	8
WERE	'BROWN COUNTY 115KV'	5.5	-0.00259 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.0841	10
WERE	'CITY OF OSAGE CITY 115KV'	8.85	-0.00406 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.08557	10
WERE	'GREAT BEND PLANT 69KV'	10	-0.00785 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.08936	10
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.06775 WERE	'KNOLL 3 115 115KV'	44.7	0.02262	-0.09037	10
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.06766 WERE	'KNOLL 3 115 115KV'	44.7	0.02262	-0.09028	10
WERE	'LAWRENCE ENERGY CENTER 115KV'	28	-0.0025 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.08401	10
WERE	'LAWRENCE ENERGY CENTER 230KV'	53.86624	-0.00275 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.08426	10
WERE	'SOUTH SENECA 115KV'	16.7	-0.00377 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.08528	10
WERE	'TECUMSEH ENERGY CENTER 115KV'	33	-0.00546 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.08697	10
WERE	'TECUMSEH ENERGY CENTER 69KV'	41	-0.00599 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.0875	10
WERE	'ATWOOD 115KV'	4	0.00286 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.07865	11
WERE	'CHANUTE 69KV'	28.957	-0.00025 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.08176	11
WERE	'CITY OF AUGUSTA 69KV'	7.320001	-0.00082 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.08233	11
WERE	'CITY OF BURLINGTON 69KV'	4.7	-0.00034 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.08185	11
WERE	'CITY OF FREDONIA 69KV'	6.396999	-0.00031 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.08182	11
WERE	'CITY OF GIRARD 69KV'	5.608		'SMOKEY HILLS 34KV'	152	0.08151	-0.08168	11
WERE	'CITY OF IOLA 69KV'	10.355	-0.0002 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.08171	11
WERE	'CITY OF MULVANE 69KV'	6.498999	-0.00088 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.08239	11
WERE	'CITY OF NEODESHA 69KV'	4.5	-0.0003 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.08181	11
WERE	'CITY OF WINFIELD 69KV'	40	-0.00071 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.08222	11
WERE	'CLR_3 .575 34KV'	300	-0.0005 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.08201	11
WERE	'COLBY 115KV'	7.373338		'SMOKEY HILLS 34KV'	152	0.08151	-0.07897	11
WERE	'EVANS ENERGY CENTER 138KV'	386.876		'SMOKEY HILLS 34KV'	152	0.08151	-0.08229	11
WERE	'EVANS N4 138 16KV'		-0.00078 WERE	'SMOKEY HILLS 34KV'	152	0.08151	-0.08229	11
	nt and Maximum Increment were determine from the Souce an	d Sink Operating Po	ints in the study mode	els where limiting facility was identified.	·			
Factor = Source GS								
Redispatch Amount	= Relief Amount / Factor							

Upgrade: WICHITA - RENO 345KV
Limiting Facility: NORTH AMERICAN PHILIPS - NORTH AMERICAN PHILIPS JUNCTION (SOUTH) 115KV CKT 1
Direction: From->To
EAST MCPHERSON - SUMMIT 230KV CKT 1
Flowgate: 57372573741568725687312208SP
Date Redispatch Needed: Season Flowgate Identified: 2008 Summer Peak

Reservation	Relief Amount		Aggregate Amount	Kellef							
116150		4.1	, anount	4.1							
Source Control Area	Source		Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
VERE	'BPU - CITY OF MCPHERSON 115KV'		moromoni	239	-0.50613		'ABILENE ENERGY CENTER 115KV'	40			runount (ivivi)
/ERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613		'CLAY CENTER JUNCTION 115KV'	21.056			
/ERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613		'CHANUTE 69KV'	55.637			
/ERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613		'CITY OF AUGUSTA 69KV'	20.02			
VERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613		'CITY OF BURLINGTON 69KV'	7.8		-0.51083	
/ERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613		'CITY OF ERIE 69KV'	23.374		-0.50876	
/ERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613		'CITY OF FREDONIA 69KV'	3.596	0.00213		
VERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613		'CITY OF GIRARD 69KV'	4.592	0.00265		
VERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613		'CITY OF IOLA 69KV'	24,471	0.00304		
VERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613		'CITY OF MULVANE 69KV'	8.29	-0.00106		
/ERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613		'CITY OF WELLINGTON 69KV'	41.45	-0.00234		
VERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	0.0047	-0.51083	
VERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613	WERE	'EVANS ENERGY CENTER 138KV'	320.8022	0.00051	-0.50664	
/ERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613		'GILL ENERGY CENTER 138KV'	155		-0.50136	
/ERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613		'JEFFREY ENERGY CENTER 230KV'	494		-0.53451	
/ERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613		'JEFFREY ENERGY CENTER 345KV'	982	0.02959		
VERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613		'LANG 7 345 345KV'	310			
VERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613	WERE	'LAWRENCE ENERGY CENTER 115KV'	85	0.01734		
/ERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613		'LAWRENCE ENERGY CENTER 230KV'	274.2987	0.0182		
/ERE	'BPU - CITY OF MCPHERSON 115KV'			239			'SMOKEY HILLS 34KV'	152	0.02975		
/ERE	'BPU - CITY OF MCPHERSON 115KV'			239			'TECUMSEH ENERGY CENTER 115KV'	108			
'ERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613		'WACO 138KV'	17.967	-0.00424		
/ERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'ABILENE ENERGY CENTER 115KV'	40			
/ERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'CLAY CENTER JUNCTION 115KV'	21.056			
/ERE	'HUTCHINSON ENERGY CENTER 69KV'			67	-0.40059		'ABILENE ENERGY CENTER 115KV'	40			
VERE	'HUTCHINSON ENERGY CENTER 69KV'			67	-0.40059		'CLAY CENTER JUNCTION 115KV'	21.056			
/ERE	'BPU - CITY OF MCPHERSON 115KV'			239	-0.50613		'KNOLL 3 115 115KV'	75			
/ERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'CHANUTE 69KV'	55.637	0.00263		
VERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'CITY OF AUGUSTA 69KV'	20.02	0.00203		
/ERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'CITY OF BURLINGTON 69KV'	7.8		-0.40548	
/ERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'CITY OF ERIE 69KV'	23.374		-0.40341	
VERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'CITY OF FREDONIA 69KV'	3.596	0.00203		
VERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'CITY OF GIRARD 69KV'	4.592			
VERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'CITY OF IOLA 69KV'	24,471	0.00200		
VERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'CITY OF MULVANE 69KV'	8.29			
/ERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'CITY OF WELLINGTON 69KV'	41.45			
/ERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	0.00234	-0.40548	
/ERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'EVANS ENERGY CENTER 138KV'	320.8022		-0.40129	
/ERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'GILL ENERGY CENTER 138KV'	155		-0.39601	
/ERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'JEFFREY ENERGY CENTER 230KV'	494		-0.42916	
/ERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'JEFFREY ENERGY CENTER 345KV'	982			
/ERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'LANG 7 345 345KV'	310			
/ERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'LAWRENCE ENERGY CENTER 115KV'	85			
/ERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'LAWRENCE ENERGY CENTER 230KV'	274.2987			
/ERE	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'SMOKEY HILLS 34KV'	152			
ERE .	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		TECUMSEH ENERGY CENTER 115KV	108			
ERE .	'HUTCHINSON ENERGY CENTER 115KV'			263	-0.40078		'WACO 138KV'	17.967	-0.00424		
/ERE	'HUTCHINSON ENERGY CENTER 69KV'			67	-0.40059		'CHANUTE 69KV'	55.637	0.00263	-0.40322	
/ERE	'HUTCHINSON ENERGY CENTER 69KV'		l	67	-0.40059		'CITY OF AUGUSTA 69KV'	20.02	0.00203		
/ERE	'HUTCHINSON ENERGY CENTER 69KV'		l	67	-0.40059		'CITY OF BURLINGTON 69KV'	7.8	0.00124	-0.40529	
/ERE	'HUTCHINSON ENERGY CENTER 69KV'		l	67	-0.40059		'CITY OF ERIE 69KV'	23.374		-0.40322	
/ERE	'HUTCHINSON ENERGY CENTER 69KV'			67	-0.40059		'CITY OF FREDONIA 69KV'	3.596			
VERE	'HUTCHINSON ENERGY CENTER 69KV'			67			'CITY OF FREDONIA 69KV'	4.592	0.00213	-0.40272	
VERE	'HUTCHINSON ENERGY CENTER 69KV'			67			'CITY OF IOLA 69KV'	24.471			
TEINE	THO TO THE TOO IN LINE TO IT OF INTER DON'T			U/	0.40058	TAREIVE	OILLOL IOPY OBKA	24.471	0.00304	·0.40303	

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40059	WERE	'CITY OF MULVANE 69KV'	8.29	-0.00106	-0.39953	10
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40059	WERE	'CITY OF WELLINGTON 69KV'	41.45	-0.00234	-0.39825	10
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40059	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	0.0047	-0.40529	10
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40059	WERE	'EVANS ENERGY CENTER 138KV'	320.8022	0.00051	-0.4011	10
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40059	WERE	'GILL ENERGY CENTER 138KV'	155	-0.00477	-0.39582	10
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40059	WERE	'JEFFREY ENERGY CENTER 230KV'	494	0.02838	-0.42897	10
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40059	WERE	'JEFFREY ENERGY CENTER 345KV'	982	0.02959	-0.43018	10
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40059	WERE	'LANG 7 345 345KV'	310	0.01524	-0.41583	10
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40059	WERE	'LAWRENCE ENERGY CENTER 115KV'	85	0.01734	-0.41793	10
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40059	WERE	'LAWRENCE ENERGY CENTER 230KV'	274.2987	0.0182	-0.41879	10
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40059	WERE	'SMOKEY HILLS 34KV'	152	0.02975	-0.43034	10
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40059	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.0196	-0.42019	10
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40059	WERE	'WACO 138KV'	17.967	-0.00424	-0.39635	10
WERE	'PAWNEE 115KV'	999	-0.21553	WERE	'ABILENE ENERGY CENTER 115KV'	40	0.11586	-0.33139	12
WERE	'RICE 115KV'	999	-0.21553	WERE	'ABILENE ENERGY CENTER 115KV'	40	0.11586	-0.33139	12
WERE	'ST JOHN 115KV'	7.5	-0.21553	WERE	'ABILENE ENERGY CENTER 115KV'	40	0.11586	-0.33139	12
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.40078	WERE	'KNOLL 3 115 115KV'	75	-0.09259	-0.30819	13
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40059	WERE	'KNOLL 3 115 115KV'	75	-0.09259	-0.308	13
WERE	'GREAT BEND PLANT 69KV'	10	-0.17955		'ABILENE ENERGY CENTER 115KV'	40	0.11586	-0.29541	14
WERE	'PAWNEE 115KV'	999	-0.21553		'CLAY CENTER JUNCTION 115KV'	21.056	0.0854	-0.30093	14
WERE	'RICE 115KV'	999	-0.21553		'CLAY CENTER JUNCTION 115KV'	21.056	0.0854	-0.30093	14
WERE	'ST JOHN 115KV'	7.5	-0.21553		'CLAY CENTER JUNCTION 115KV'	21.056	0.0854	-0.30093	14
WERE	'GREAT BEND PLANT 69KV'	10	-0.17955		'CLAY CENTER JUNCTION 115KV'	21.056	0.0854	-0.26495	16
WERE	'PAWNEE 115KV'	999	-0.21553		'JEFFREY ENERGY CENTER 230KV'	494	0.02838	-0.24391	17
WERE	'PAWNEE 115KV'	999	-0.21553		'JEFFREY ENERGY CENTER 345KV'	982	0.02959	-0.24512	17
WERE	'PAWNEE 115KV'	999	-0.21553		'SMOKEY HILLS 34KV'	152	0.02975	-0.24528	17
WERE	'RICE 115KV'	999	-0.21553		'JEFFREY ENERGY CENTER 230KV'	494	0.02838	-0.24391	17
WERE	'RICE 115KV'	999	-0.21553		'JEFFREY ENERGY CENTER 345KV'	982	0.02959	-0.24512	17
WERE	'RICE 115KV'	999	-0.21553		'SMOKEY HILLS 34KV'	152	0.02975	-0.24528	17
WERE	'ST JOHN 115KV'	7.5	-0.21553		'JEFFREY ENERGY CENTER 230KV'	494	0.02838	-0.24391	17
WERE	'ST JOHN 115KV'	7.5	-0.21553		'JEFFREY ENERGY CENTER 345KV'	982	0.02959	-0.24512	17
WERE	'ST JOHN 115KV'	7.5	-0.21553		'SMOKEY HILLS 34KV'	152	0.02975	-0.24528	17
WERE	'PAWNEE 115KV'	999	-0.21553		'LANG 7 345 345KV'	310	0.01524	-0.23077	18
WERE	'PAWNEE 115KV'	999	-0.21553		'LAWRENCE ENERGY CENTER 115KV'	85	0.01734	-0.23287	18
WERE	'PAWNEE 115KV'	999	-0.21553		'LAWRENCE ENERGY CENTER 230KV'	274,2987	0.0182	-0.23373	18
WERE	'PAWNEE 115KV'	999	-0.21553		TECUMSEH ENERGY CENTER 115KV	108	0.0196	-0.23513	18
WERE	'RICE 115KV'	999	-0.21553		'LANG 7 345 345KV'	310	0.01524	-0.23077	18
WERE	'RICE 115KV'	999	-0.21553		'LAWRENCE ENERGY CENTER 115KV'	85	0.01324	-0.23287	18
WERE	'RICE 115KV'	999	-0.21553		'LAWRENCE ENERGY CENTER 230KV'	274,2987	0.01734	-0.23373	18
WERE	'RICE 115KV'	999	-0.21553		'TECUMSEH ENERGY CENTER 115KV'	108	0.0196	-0.23513	18
WERE	'ST JOHN 115KV'	7.5	-0.21553		'LANG 7 345 345KV'	310	0.01524	-0.23077	18
WERE	'ST JOHN 115KV'	7.5	-0.21553		'LAWRENCE ENERGY CENTER 115KV'	85	0.01734	-0.23287	18
WERE	'ST JOHN 115KV'	7.5	-0.21553		'LAWRENCE ENERGY CENTER 230KV'	274,2987	0.01734	-0.23373	18
WERE	'ST JOHN 115KV'	7.5	-0.21553		TECUMSEH ENERGY CENTER 115KV	108	0.0196	-0.23513	18
WERE	'PAWNEE 115KV'	999	-0.21553		'CHANUTE 69KV'	55,637	0.00263	-0.21816	19
WERE	'PAWNEE 115KV'		-0.21553		'CITY OF AUGUSTA 69KV'	20.02	0.00203	-0.21677	19
	ant and Maximum Increment were determine from the Source and S					20.02	0.00124	U.L 10//	13

NEXT INVESTIGATE INVESTIGATE INVESTIGATE INVESTIGATE INVESTIGATE INVESTIGATION OF AUGUSTA 69KV Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF
Redispatch Amount = Relief Amount / Factor

Season Flowgate Identified:	2011 Summer Peak								
		Aggregate Relief							
Reservation	Relief Amount	Amount							
1140120									
1161506	6.	5 12.8		1		1	1		T.
				0:-1-011		Mandania			Aggregate
Source Control Area	Course	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Contar	Redispatch Amount (MW)
WERE	Source 'BPU - CITY OF MCPHERSON 115KV'	259	-0.5065		'ABILENE ENERGY CENTER 115KV'	Decrement(MVV)		-0.62168	
WERE	BPU - CITY OF MCPHERSON 115KV	259			'CLAY CENTER JUNCTION 115KV'	19.86599			
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.5065		'JEFFREY ENERGY CENTER 230KV'	19.00599			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.5065		'JEFFREY ENERGY CENTER 345KV'	940			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.5065		'LAWRENCE ENERGY CENTER 115KV'	85			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.5065		'LAWRENCE ENERGY CENTER 230KV'	201.5866			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.5065		'SMOKEY HILLS 34KV'	152			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.5065		TECUMSEH ENERGY CENTER 115KV'	108			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.5065		'CHANUTE 69KV'	58.843			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.5065		'CITY OF AUGUSTA 69KV'	20.02			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259		WERE	'CITY OF ERIE 69KV'	23.579			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.5065		'CITY OF IOLA 69KV'	27.273			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.5065		'CITY OF MULVANE 69KV'	9.291			2
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			'CITY OF WELLINGTON 69KV'	41.45			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259		WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	0.00439	-0.51089	2
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.5065		'EVANS ENERGY CENTER 138KV'	331.6143			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.5065		'LANG 7 345 345KV'	610			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.40109	WERE	'ABILENE ENERGY CENTER 115KV'	40	0.11518	-0.51627	2
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40069	WERE	'ABILENE ENERGY CENTER 115KV'	40	0.11518	-0.51587	2
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.5065	WERE	'GILL ENERGY CENTER 138KV'	155	-0.00496	-0.50154	2
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.5065	WERE	'WACO 138KV'	17.972	-0.00443	-0.50207	2
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.40109	WERE	'CLAY CENTER JUNCTION 115KV'	19.86599	0.08468	-0.48577	2
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40069	WERE	'CLAY CENTER JUNCTION 115KV'	19.86599	0.08468	-0.48537	2
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.40109	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.02748	-0.42857	3
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'JEFFREY ENERGY CENTER 345KV'	940		-0.42976	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.40109		'SMOKEY HILLS 34KV'	152			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40069	WERE	'JEFFREY ENERGY CENTER 230KV'	470		-0.42817	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40069		'JEFFREY ENERGY CENTER 345KV'	940		-0.42936	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40069		'SMOKEY HILLS 34KV'	152			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.5065		'KNOLL 3 115 115KV'	21.7		-0.4138	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'LANG 7 345 345KV'	610			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'LAWRENCE ENERGY CENTER 115KV'	85			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.40109		'LAWRENCE ENERGY CENTER 230KV'	201.5866			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.40109		TECUMSEH ENERGY CENTER 115KV'	108			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40069		'LANG 7 345 345KV'	610			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40069		'LAWRENCE ENERGY CENTER 115KV'	85			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40069		'LAWRENCE ENERGY CENTER 230KV'	201.5866			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'TECUMSEH ENERGY CENTER 115KV'	108			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'CHANUTE 69KV'	58.843			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.40109		'CITY OF AUGUSTA 69KV'	20.02			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.40109		'CITY OF ERIE 69KV'	23.579			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'CITY OF IOLA 69KV'	27.273			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'CITY OF WELLINGTON 69KV'	41.45			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.40109		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'EVANS ENERGY CENTER 138KV'	331.6143			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263			'GILL ENERGY CENTER 138KV'	155			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.40109		'WACO 138KV'	17.972			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'CHANUTE 69KV'	58.843			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40069	WERE	'CITY OF AUGUSTA 69KV'	20.02	0.00107	-0.40176	3

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40069		'CITY OF ERIE 69KV'	23.579	0.00245	-0.40314	32
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40069		'CITY OF IOLA 69KV'	27.273	0.00286	-0.40355	32
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40069		'CITY OF WELLINGTON 69KV'	41.45	-0.00252	-0.39817	32
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40069		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	0.00439	-0.40508	32
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40069		'EVANS ENERGY CENTER 138KV'	331.6143	0.00025	-0.40094	32
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40069		'GILL ENERGY CENTER 138KV'	155	-0.00496	-0.39573	32
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40069	WERE	'WACO 138KV'	17.972	-0.00443	-0.39626	32
WERE	'PAWNEE 115KV'	999	-0.21568	WERE	'ABILENE ENERGY CENTER 115KV'	40	0.11518	-0.33086	39
WERE	'RICE 115KV'	999	-0.21568	WERE	'ABILENE ENERGY CENTER 115KV'	40	0.11518	-0.33086	39
WERE	'HUTCHINSON ENERGY CENTER 115KV'	263	-0.40109	WERE	'KNOLL 3 115 115KV'	21.7	-0.0927	-0.30839	42
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40069	WERE	'KNOLL 3 115 115KV'	21.7	-0.0927	-0.30799	42
WERE	'PAWNEE 115KV'	999	-0.21568	WERE	'CLAY CENTER JUNCTION 115KV'	19.86599	0.08468	-0.30036	43
WERE	'RICE 115KV'	999	-0.21568		'CLAY CENTER JUNCTION 115KV'	19.86599	0.08468	-0.30036	43
WERE	'PAWNEE 115KV'	999	-0.21568		'JEFFREY ENERGY CENTER 345KV'	940	0.02867	-0.24435	52
WERE	'PAWNEE 115KV'	999	-0.21568		'SMOKEY HILLS 34KV'	152	0.02926	-0.24494	52
WERE	'RICE 115KV'	999	-0.21568		'JEFFREY ENERGY CENTER 345KV'	940	0.02867	-0.24435	52
WERE	'RICE 115KV'	999	-0.21568		'SMOKEY HILLS 34KV'	152	0.02926	-0.24494	52
WERE	'PAWNEE 115KV'	999	-0.21568		'JEFFREY ENERGY CENTER 230KV'	470	0.02748	-0.24316	53
WERE	'RICE 115KV'	999	-0.21568		'JEFFREY ENERGY CENTER 230KV'	470	0.02748	-0.24316	53
WERE	'PAWNEE 115KV'	999	-0.21568		'LAWRENCE ENERGY CENTER 115KV'	85	0.01643	-0.23211	55
WERE	'PAWNEE 115KV'	999	-0.21568		'LAWRENCE ENERGY CENTER 230KV'	201.5866	0.01737	-0.23305	55
WERE	'PAWNEE 115KV'	999	-0.21568		TECUMSEH ENERGY CENTER 115KV	108	0.0188	-0.23448	55
WERE	'RICE 115KV'	999	-0.21568		'LAWRENCE ENERGY CENTER 115KV'	85	0.01643	-0.23211	55
WERE	'RICE 115KV'	999	-0.21568		'LAWRENCE ENERGY CENTER 230KV'	201.5866	0.01737	-0.23305	55
WERE	'RICE 115KV'	999	-0.21568		TECUMSEH ENERGY CENTER 115KV	108	0.01788	-0.23448	55
WERE	'PAWNEE 115KV'	999	-0.21568		'LANG 7 345 345KV'	610	0.01466	-0.23034	56
WERE	'RICE 115KV'	999	-0.21568		'LANG 7 345 345KV'	610	0.01466	-0.23034	56
WERE	'PAWNEE 115KV'	999	-0.21568		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	0.00439	-0.22007	58
WERE	'RICE 115KV'	999	-0.21568		COFFEY COUNTY NO. 2 SHARPE 69KV	19.98	0.00439	-0.22007	58
WERE	'PAWNEE 115KV'	999	-0.21568		'CHANUTE 69KV'	58.843	0.00435	-0.22007	59
WERE	'PAWNEE 115KV'	999	-0.21568		'CITY OF AUGUSTA 69KV'	20.02	0.00243	-0.21675	59
WERE	'PAWNEE 115KV'	999	-0.21568		'CITY OF ERIE 69KV'	23.579	0.00107	-0.21813	59
WERE	'PAWNEE 115KV'	999	-0.21568		'CITY OF IOLA 69KV'	27.273	0.00243	-0.21854	59
WERE	'PAWNEE 115KV'	999	-0.21568		'EVANS ENERGY CENTER 138KV'	331,6143	0.00286	-0.21593	59
WERE	'RICE 115KV'	999	-0.21568		'CHANUTE 69KV'	58.843	0.00025	-0.21333	59
WERE	'RICE 115KV'	999	-0.21568		'CITY OF AUGUSTA 69KV'	20.02	0.00245	-0.21675	59
		999			'CITY OF AUGUSTA 69KV'		0.00107	-0.21813	59
WERE WERE	'RICE 115KV' 'RICE 115KV'	999	-0.21568			23.579 27.273	0.00245	-0.21813	59
		999			'CITY OF IOLA 69KV'				59
WERE	'RICE 115KV'		-0.21568		'EVANS ENERGY CENTER 138KV'	331.6143 41.45	0.00025	-0.21593	59 60
WERE WERE	'PAWNEE 115KV' 'RICE 115KV'	999			'CITY OF WELLINGTON 69KV'	41.45	-0.00252 -0.00252	-0.21316	60
			-0.21568		'CITY OF WELLINGTON 69KV'			-0.21316	
WERE	'PAWNEE 115KV'	999	-0.21568		'GILL ENERGY CENTER 138KV'	155 155	-0.00496	-0.21072	61 61
WERE	'RICE 115KV'	999	-0.21568		'GILL ENERGY CENTER 138KV'		-0.00496	-0.21072	
WERE	'KNOLL 3 115 115KV'	62.66		WERE	'ABILENE ENERGY CENTER 115KV'	40	0.11518	-0.20788	62
WERE	'KNOLL 3 115 115KV'	62.66		WERE	'SMOKEY HILLS 34KV'	152	0.02926	-0.12196	105
WERE	'KNOLL 3 115 115KV'	62.66		WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.02867	-0.12137	106
WERE	'KNOLL 3 115 115KV'	62.66		WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.02748	-0.12018	107
WERE	'GILL ENERGY CENTER 69KV'	118	-0.00359		'ABILENE ENERGY CENTER 115KV'	40	0.11518	-0.11877	108
WERE	'CITY OF WINFIELD 69KV'	40	-0.00135		'ABILENE ENERGY CENTER 115KV'	40	0.11518	-0.11653	110
WERE	'EVANS ENERGY CENTER 138KV'	475.3857		WERE	'ABILENE ENERGY CENTER 115KV'	40	0.11518	-0.11493	111
WERE	EVANS N4 138 16KV'	360			'ABILENE ENERGY CENTER 115KV'	40	0.11518	-0.1149	111

| WERE | EVANS N4 138 16KV | 360 | 0.00028|WERE | ABILENE ENERGY CENTER 118 Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF Redispatch Amount = Relief Amount / Factor

Upgrade: WICHITA - RENO 345KV
Limiting Facility: NORTH AMERICAN PHILIPS - NORTH AMERICAN PHILIPS JUNCTION (SOUTH) 115KV CKT 1
Direction: From->To
Line Outage: EAST MCPHERSON - SUMMIT 230KV CKT 1
Flowgate: 57372573741568725687314208WP
Date Redispatch Needed: Starting 2008 12/1 - 4/1 Until EOC of Upgrade
Season Flowgate Identified: 2008 Winter Peak

Season Flowgate Identified:	2008 Winter Peak								
December	Dell'of America	Aggregate Relief							
Reservation	Relief Amount	Amount							
1161506	6.0	6.0							
		Maximum		Sink Control		Maximum			Aggregate Redispatch
Source Control Area	Source		GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			'CLAY CENTER JUNCTION 115KV'	6.7	0.08529		
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615		'JEFFREY ENERGY CENTER 230KV'	490	0.08329	-0.53441	1
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615		JEFFREY ENERGY CENTER 345KV	974.2261	0.02828	-0.53564	
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615		SMOKEY HILLS 34KV	51	0.02949	-0.53587	1
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615		'CHANUTE 69KV'	34.903	0.02972	-0.50877	1:
WERE	BPU - CITY OF MCPHERSON 115KV	259			'CITY OF AUGUSTA 69KV'	15.285		-0.5077	
WERE	BPU - CITY OF MCPHERSON 115KV		-0.50615		'CITY OF AUGUSTA 69KV'	15.265		-0.51083	
WERE	BPU - CITY OF MCPHERSON 115KV	259 259	-0.50615		'CITY OF BURLINGTON 69KV'	19.902		-0.51083	
WERE WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50615 -0.50615		'CITY OF WELLINGTON 69KV' 'CLR 3 .575 34KV'	20	0.00236	-0.50379	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259				100		-0.50843	
	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50615		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.61	0.00468	-0.51083	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50615		'LANG 7 345 345KV'	380	0.01517	-0.52132	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50615		'LAWRENCE ENERGY CENTER 230KV'	154.9715		-0.52429	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50615		'WACO 138KV'	17.414			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.4008		'CLAY CENTER JUNCTION 115KV'	6.7	0.08529	-0.48609	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40041		'CLAY CENTER JUNCTION 115KV'	6.7	0.08529	-0.4857	1:
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50615		'COLBY 115KV'	6.433462	-0.07459	-0.43156	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.4008		'JEFFREY ENERGY CENTER 230KV'	490	0.02826	-0.42906	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.4008		'JEFFREY ENERGY CENTER 345KV'	974.2261	0.02949	-0.43029	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.4008		'LAWRENCE ENERGY CENTER 230KV'	154.9715		-0.41894	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.4008		'SMOKEY HILLS 34KV'	51		-0.43052	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40041		'JEFFREY ENERGY CENTER 230KV'	490		-0.42867	1-
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40041	WERE	'JEFFREY ENERGY CENTER 345KV'	974.2261	0.02949	-0.4299	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40041		'LAWRENCE ENERGY CENTER 230KV'	154.9715		-0.41855	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40041		'SMOKEY HILLS 34KV'	51	0.02972	-0.43013	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50615	WERE	'KNOLL 3 115 115KV'	39.9	-0.09249	-0.41366	1:
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.4008	WERE	'CHANUTE 69KV'	34.903	0.00262	-0.40342	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.4008	WERE	'CITY OF AUGUSTA 69KV'	15.285	0.00121	-0.40201	1:
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.4008	WERE	'CITY OF IOLA 69KV'	19.902	0.00303	-0.40383	1:
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.4008	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00236	-0.39844	1:
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.4008	WERE	'CLR_3 .575 34KV'	100	0.00228	-0.40308	1:
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.4008	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.61	0.00468	-0.40548	1:
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.4008	WERE	'LANG 7 345 345KV'	380	0.01517	-0.41597	1:
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.4008	WERE	'WACO 138KV'	17.414	-0.00427	-0.39653	1:
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40041	WERE	'CHANUTE 69KV'	34.903	0.00262	-0.40303	1:
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40041		'CITY OF AUGUSTA 69KV'	15.285	0.00121	-0.40162	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40041		'CITY OF IOLA 69KV'	19.902	0.00303	-0.40344	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40041	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00236	-0.39805	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40041		'CLR 3 .575 34KV'	100		-0.40269	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40041		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.61	0.00468	-0.40509	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40041		'LANG 7 345 345KV'	380	0.01517	-0.41558	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40041		'WACO 138KV'	17.414		-0.39614	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.4008		'COLBY 115KV'	6.433462	-0.07459	-0.32621	1:
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40041		COLBY 115KV	6.433462	-0.07459	-0.32582	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423		WERE	'KNOLL 3 115 115KV'	39.9			2

Table 6 - Potential Redispatch Relief Pairs to Prevent Deferral of Service

WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40041	WERE	'KNOLL 3 115 115KV'	39.9	-0.09249	-0.30792	20
WERE	'PAWNEE 115KV'	999	-0.21559		'CLAY CENTER JUNCTION 115KV'	6.7	0.08529	-0.30088	20
WERE	'RICE 115KV'	999	-0.21559	WERE	'CLAY CENTER JUNCTION 115KV'	6.7	0.08529	-0.30088	20
WERE	'ST JOHN 115KV'	7.5	-0.21559	WERE	'CLAY CENTER JUNCTION 115KV'	6.7	0.08529	-0.30088	20
WERE	'PAWNEE 115KV'	999	-0.21559	WERE	'JEFFREY ENERGY CENTER 230KV'	490	0.02826	-0.24385	25
WERE	'PAWNEE 115KV'	999	-0.21559	WERE	'JEFFREY ENERGY CENTER 345KV'	974,2261	0.02949	-0.24508	25
WERE	'PAWNEE 115KV'	999	-0.21559	WERE	'SMOKEY HILLS 34KV'	51	0.02972	-0.24531	25
WERE	'RICE 115KV'	999	-0.21559	WERE	'JEFFREY ENERGY CENTER 230KV'	490	0.02826	-0.24385	25
WERE	'RICE 115KV'	999	-0.21559	WERE	'JEFFREY ENERGY CENTER 345KV'	974.2261	0.02949	-0.24508	25
WERE	'RICE 115KV'	999	-0.21559	WERE	'SMOKEY HILLS 34KV'	51	0.02972	-0.24531	25
WERE	'PAWNEE 115KV'	999	-0.21559	WERE	'LANG 7 345 345KV'	380	0.01517	-0.23076	26
WERE	'PAWNEE 115KV'	999	-0.21559	WERE	'LAWRENCE ENERGY CENTER 230KV'	154.9715	0.01814	-0.23373	26
WERE	'RICE 115KV'	999	-0.21559	WERE	'LANG 7 345 345KV'	380	0.01517	-0.23076	26
WERE	'RICE 115KV'	999	-0.21559	WERE	'LAWRENCE ENERGY CENTER 230KV'	154.9715	0.01814	-0.23373	26
WERE	'PAWNEE 115KV'	999	-0.21559	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.61	0.00468	-0.22027	27
WERE	'RICE 115KV'	999	-0.21559	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.61	0.00468	-0.22027	27
WERE	'PAWNEE 115KV'	999	-0.21559	WERE	'CHANUTE 69KV'	34.903	0.00262	-0.21821	28
WERE	'PAWNEE 115KV'	999	-0.21559	WERE	'CITY OF AUGUSTA 69KV'	15.285	0.00121	-0.2168	28
WERE	'PAWNEE 115KV'	999	-0.21559		'CITY OF IOLA 69KV'	19.902	0.00303	-0.21862	28
WERE	'PAWNEE 115KV'	999	-0.21559		'CITY OF WELLINGTON 69KV'	20	-0.00236	-0.21323	28
WERE	'PAWNEE 115KV'	999	-0.21559		'CLR_3 .575 34KV'	100	0.00228	-0.21787	28
WERE	'RICE 115KV'	999	-0.21559		'CHANUTE 69KV'	34.903	0.00262	-0.21821	28
WERE	'RICE 115KV'	999	-0.21559	WERE	'CITY OF AUGUSTA 69KV'	15.285	0.00121	-0.2168	28
WERE	'RICE 115KV'	999	-0.21559		'CITY OF IOLA 69KV'	19.902	0.00303	-0.21862	28
WERE	'RICE 115KV'	999	-0.21559		'CITY OF WELLINGTON 69KV'	20	-0.00236	-0.21323	28
WERE	'RICE 115KV'	999	-0.21559		'CLR_3 .575 34KV'	100	0.00228	-0.21787	28
WERE	'GREAT BEND PLANT 69KV'	10	-0.17956		'JEFFREY ENERGY CENTER 230KV'	490	0.02826	-0.20782	29
WERE	'GREAT BEND PLANT 69KV'	10	-0.17956		'JEFFREY ENERGY CENTER 345KV'	974.2261	0.02949	-0.20905	29
WERE	'GREAT BEND PLANT 69KV'	10	-0.17956		'SMOKEY HILLS 34KV'	51	0.02972	-0.20928	29
WERE	'PAWNEE 115KV'	999	-0.21559		'WACO 138KV'	17.414	-0.00427	-0.21132	29
WERE	'RICE 115KV'	999	-0.21559		'WACO 138KV'	17.414	-0.00427	-0.21132	29
WERE	'KNOLL 3 115 115KV'	44.46	-0.09249		'JEFFREY ENERGY CENTER 345KV'	974.2261	0.02949	-0.12198	49
WERE	'KNOLL 3 115 115KV'	44.46	-0.09249		'SMOKEY HILLS 34KV'	51	0.02972	-0.12221	49
WERE	'PAWNEE 115KV'	999	-0.21559		'KNOLL 3 115 115KV'	39.9	-0.09249	-0.1231	49
WERE	'RICE 115KV'	999	-0.21559		'KNOLL 3 115 115KV'	39.9	-0.09249	-0.1231	49
WERE	'KNOLL 3 115 115KV'	44.46	-0.09249		'JEFFREY ENERGY CENTER 230KV'	490	0.02826	-0.12075	50
WERE	'KNOLL 3 115 115KV'	44.46	-0.09249		'LAWRENCE ENERGY CENTER 230KV'	154.9715	0.01814	-0.11063	55
WERE	'KNOLL 3 115 115KV'	44.46	-0.09249		'LANG 7 345 345KV'	380	0.01517	-0.10766	56
WERE	'KNOLL 3 115 115KV'	44.46	-0.09249		'CHANUTE 69KV'	34.903	0.00262	-0.09511	63
WERE	'KNOLL 3 115 115KV'	44.46	-0.09249		'CLR_3 .575 34KV'	100	0.00228	-0.09477	64
WEPL	'A. M. MULLERGREN GENERATOR 115KV'	63	-0.17709		'GRAY COUNTY WIND FARM 115KV'	60	-0.11605	-0.06104	99
WERE	'GILL ENERGY CENTER 138KV'	218	-0.00481		'JEFFREY ENERGY CENTER 345KV'	974.2261	0.02949	-0.0343	176
WERE	'GILL ENERGY CENTER 138KV'	218	-0.00481		'JEFFREY ENERGY CENTER 230KV'	490	0.02826	-0.03307	183
WERE	'GILL ENERGY CENTER 69KV'	118	-0.00344		'JEFFREY ENERGY CENTER 345KV'	974.2261	0.02949	-0.03293	183
WERE	'GILL ENERGY CENTER 69KV'	118	-0.00344	1 WERE	'JEFFREY ENERGY CENTER 230KV'	490	0.02826	-0.0317	190

| IVERE | GILL ENERGY CENTER 69KV | 118 | -0.00344 | WERE | GUEFREY ENERGY CENTER 230 | Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF | Redispatch Amount = Relief Amount / Factor