



***Aggregate Facility Study  
SPP-2006-AG2-AFS-4  
For Transmission Service  
Requested by  
Aggregate Transmission Customers***

***SPP Engineering, SPP Tariff Studies***

SPP AGGREGATE FACILITY STUDY (SPP-2006-AG2-AFS-4)

January 29, 2007 (Revised February 26, 2007)

Page 1 of 73

## *Table of Contents*

1. Executive Summary.....	3
2. Introduction .....	<u>5</u>
A. FINANCIAL ANALYSIS.....	8
B. THIRD PARTY UPGRADES.....	10
3. Study Methodology .....	11
A. DESCRIPTION .....	11
B. MODEL DEVELOPMENT.....	12
C. TRANSMISSION REQUEST MODELING.....	143
D. TRANSFER ANALYSIS.....	14
E. CURTAILMENT AND REDISPATCH EVALUATION.....	14
4. Study Results.....	15
A. STUDY ANALYSIS RESULTS.....	15
B. STUDY DEFINITIONS .....	159
5. Conclusion.....	19
Appendix A .....	21

## **1. Executive Summary**

Pursuant to Attachment Z of the Southwest Power Pool Open Access Transmission Tariff (OATT), 1922 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 \$68,269,198. Additionally \$200,000 of assigned E & C cost for 3<sup>rd</sup> party facility upgrades are assignable to the customer. The total upgrade levelized revenue requirement for all transmission requests is \$160,269,654. 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 with redispatch if applicable. Total upgrade levelized revenue requirements for all transmission requests after consideration of potential base plan funding is \$7,851,152.

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, no third-party facilities were identified. Total engineering and construction cost estimates for required third-party facility upgrades are \$0.

The Transmission Provider will tender a Letter of Intent on Monday, January 29th, 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 February 13th, 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 re-performed 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/section.asp?group=215&pageID=27>). 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 fourth open season commenced on February 1, 2006. All requests for long-term transmission service received prior to June 1, 2006 with a signed study agreement were then included in this fourth Aggregate Transmission Service Study (ATSS).

Approximately 1922 MW of long-term transmission service has been restudied in this Aggregate Facility Study (AFS) with over \$68 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](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 redispach 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. 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 \$200,000. 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.

Third-party facilities are evaluated for only those requests whose load sinks within the SPP footprint. The Customer must arrange for study of 3<sup>rd</sup> 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 pre-determined 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 AECl, 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 1922 MW over a variety of requested service periods. The SPP MDWG 2006 Series Cases Update 4 2006 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. Four groups of requests were developed from the aggregate of 1922 MW in order to minimize counterflows among requested service. Each request was included in two to four groups depending on the requested path. From the thirteen seasonal models, three 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. 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 pre-transfer 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 1<sup>st</sup>-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 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 without 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 Friday, January 29th, 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 February 13th, 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 -  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. Excl'd 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 -  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	Note	Minimum Allocated ATC (MW) within reservation period	Season of Minimum Allocated ATC within reservation period
AEPM	AG2-2006-033	1087745	EES	CSWS	225	1/1/2007	1/1/2010	6/1/2008	6/1/2011	4/1/2007	4/1/2010	1,2	0	08SP
AEPM	AG2-2006-034	1087757	CSWS	CSWS	172	6/1/2008	6/1/2028						0	08SP
EDE	AG2-2005-064	973355	KCPL	EDE	100	1/1/2010	1/1/2030					3	0	11SP
GSEC	AG2-2006-054	1090270	CSWS	CSWS	10	10/1/2006	10/1/2036	7/1/2009	7/1/2039				0	16SP
GSEC	AG2-2006-133	1090487	SPS	SPS	150	4/1/2007	4/1/2017	6/1/2009	6/1/2019	4/1/2007	4/1/2017	1,2	0	08SP
INDP	AG1-2006-051	1033791	KCPL	INDN	50	6/1/2010	6/1/2040					3	0	11SP
KCPS	GEN-2004-008	1115127	KCPL	KCPL	332	6/1/2009	6/1/2029					3	0	11SP
KCPS	AG1-2006-009	1179751	KCPL	KCPL	168	6/1/2009	6/1/2029					3	0	11SP
KEPC	AG2-2006-067	1090416	KCPL	WR	30	6/1/2010	6/1/2030						0	11SP
MIDW	AG2-2006-107	1090817	WR	WR	25	6/1/2007	6/1/2017	7/1/2009	7/1/2019	10/1/2007	10/1/2017	1,2	0	11SP
MIDW	AG2-2006-108	1090829	WR	WR	15	6/1/2008	6/1/2028	7/1/2009	7/1/2029	6/1/2008	6/1/2028	1,2	0	16SP
MIDW	AG2-2006-097	1090917	WR	WR	20	6/1/2008	6/1/2038	7/1/2009	7/1/2039	6/1/2008	6/1/2038	1,2	0	11WP
MIDW	AG2-2006-097	1090919	WR	WR	5	6/1/2008	6/1/2038	7/1/2009	7/1/2039	6/1/2008	6/1/2038	1,2	0	11WP
MIDW	AG2-2006-097	1090920	WR	WR	40	6/1/2008	6/1/2038	7/1/2009	7/1/2039	6/1/2008	6/1/2038	1,2	0	11WP
MIDW	AG2-2006-097	1090921	WR	WR	10	6/1/2008	6/1/2038	7/1/2009	7/1/2039	6/1/2008	6/1/2038	1,2	0	11WP
MIDW	AG2-2006-106	1090964	WR	WR	35	1/1/2007	1/1/2012	6/1/2010	6/1/2015	10/1/2007	10/1/2012	1,2	0	08SP
MIDW	AG2-2006-106	1090965	WR	WR	10	1/1/2007	1/1/2012	6/1/2010	6/1/2015	10/1/2007	10/1/2012	1,2	0	08SP
MIDW	AG2-2006-108	1091057	WR	WR	10	6/1/2008	6/1/2018	7/1/2009	7/1/2019	6/1/2008	6/1/2018	1,2	0	16SP
OGE	AG2-2006-035	1087908	OKGE	EES	10	12/1/2006	12/1/2011	4/1/2007	4/1/2012	4/1/2007	4/1/2012	1,2	0	0
SPSM	AG2-2006-074	1090699	WPEK	KCPL	50	10/1/2006	10/1/2007	10/1/2007	10/1/2008				0	07SP
SPSM	AG2-2006-124	1090705	WPEK	KCPL	50	10/1/2006	10/1/2007	10/1/2007	10/1/2008				0	07SP
UCU	AG2-2006-006	1052923	KCPL	MPS	160	6/1/2010	6/1/2030						0	11SP
WRGS	AG2-2006-016	1076158	KCPL	AMRN	20	6/1/2010	6/1/2015						0	11SP
WRGS	AG2-2006-030	1086655	OKGE	WR	225	10/1/2006	10/1/2026	7/1/2009	7/1/2029	4/1/2007	4/1/2027	1,2	0	16SP

**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 2006 Fall Peak, 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.

**Note 3:** All previous transmission requests with a source of Iatan II were re-evaluated in this AFS due to attempting to determine an overall solution for the requested service.

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

Customer	Study Number	Reservation	<sup>9</sup> Engineering and Construction Cost of Upgrades Allocated to Customer for Revenue Requirements	<sup>1</sup> Letter of Credit Amount Required	<sup>2</sup> Potential Base Plan Engineering and Construction Funding Allowable	NOTE	Additional Engineering and Construction Cost for 3rd Party Upgrades	<sup>3</sup> Total Revenue Requirements for Assigned Upgrades over term of reservation without potential base plan funding allocation	<sup>3</sup> Total Revenue Requirements for Assigned Upgrades over term of reservation WITH potential base plan funding allocation	Point-to-Point Base Rate over reservation period	<sup>4</sup> Total Cost of Reservation Assignable to Customer contingent upon base plan funding
AEPM	AG2-2006-033	1087745	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	Sch 9 Charges
AEPM	AG2-2006-034	1087757	\$ 3,000,000	\$ -	\$ 3,000,000		\$ -	\$ 8,631,816	\$ -	\$ -	Sch 9 Charges
EDE	AG2-2005-064	973355	\$ 4,733,572	\$ -	\$ 3,502,843	10, 8	\$ -	\$ 15,077,273	\$ 3,920,092	\$ -	\$ 3,920,092
GSEC	AG2-2006-054	1090270	\$ 70,000	\$ 70,000	\$ -	12	\$ 200,000	\$ 264,077	\$ 264,077	\$ -	\$ 464,077
GSEC	AG2-2006-133	1090487	\$ 288,620	\$ 288,620	\$ 288,620		\$ -	\$ 569,903	\$ -	\$ -	Sch 9 Charges
INDP	AG1-2006-051	1033791	\$ 938,195	\$ 938,195	\$ -	8	\$ -	\$ 3,340,156	\$ 3,340,156	\$ 15,840,000	\$ 15,840,000
KCPS	GEN-2004-008	1115127	\$ -	\$ -	\$ -	8	\$ -	\$ -	\$ -	\$ -	Sch 9 Charges
KCPS	AG1-2006-009	1179751	\$ 4,161,805	\$ 3,461,805	\$ 4,161,805	8	\$ -	\$ 10,566,295	\$ -	\$ -	Sch 9 Charges
KEPC	AG2-2006-067	1090416	\$ 17,090	\$ 17,090	\$ 17,090		\$ -	\$ 59,915	\$ -	\$ -	Sch 9 Charges
MIDW	AG2-2006-107	1090817	\$ 24,672	\$ -	\$ 24,672	6	\$ -	\$ 48,848	\$ -	\$ -	Sch 9 Charges
MIDW	AG2-2006-108	1090829	\$ 15,861	\$ -	\$ -	5	\$ -	\$ 44,881	\$ 44,881	\$ -	\$ 44,881
MIDW	AG2-2006-097	1090917	\$ 17,623	\$ -	\$ -	5	\$ -	\$ 64,983	\$ 64,983	\$ -	\$ 64,983
MIDW	AG2-2006-097	1090919	\$ 3,525	\$ -	\$ -	5	\$ -	\$ 12,998	\$ 12,998	\$ -	\$ 12,998
MIDW	AG2-2006-097	1090920	\$ 38,771	\$ -	\$ -	5	\$ -	\$ 142,963	\$ 142,963	\$ -	\$ 142,963
MIDW	AG2-2006-097	1090921	\$ 10,574	\$ -	\$ -	5	\$ 10,574	\$ 38,990	\$ 38,990	\$ -	\$ 38,990
MIDW	AG2-2006-106	1090964	\$ 31,721	\$ -	\$ 31,721		\$ -	\$ 52,964	\$ -	\$ -	Sch 9 Charges
MIDW	AG2-2006-106	1090965	\$ 10,574	\$ -	\$ 10,574		\$ -	\$ 17,655	\$ -	\$ -	Sch 9 Charges
MIDW	AG2-2006-108	1091057	\$ 10,574	\$ -	\$ -	5	\$ -	\$ 22,012	\$ 22,012	\$ -	\$ 22,012
OGE	AG2-2006-035	1087908	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ 540,000	\$ 540,000
SPSM	AG2-2006-074	1090699	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ 528,000	\$ 528,000
SPSM	AG2-2006-124	1090705	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ 528,000	\$ 528,000
UCU	AG3-2006-018D	1104638	\$ -	\$ -	\$ -	7,13	\$ -	\$ -	\$ -	\$ -	Sch 9 Charges
WRGS	AG2-2006-016	1076158	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ 1,080,000	\$ 1,080,000
WRGS	AG2-2006-030	1086655	\$ 54,896,021	\$ 27,421,315	\$ 54,896,021		\$ -	\$ 121,313,926	\$ -	\$ -	Sch 9 Charges
Totals			\$ 68,269,198		\$ 65,933,346			\$ 160,269,654	\$ 7,851,152		

**Note 1:** Letter of Credit required for financial security for transmission owner for network upgrades is determined by allocated engineering and construction costs less engineering and construction costs for upgrades when network customer is the transmission owner 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:** Revenue Requirements (RR) are based upon deferred end dates if applicable. Deferred 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. 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.

**Note 5:** Total Base plan funding available for 2008 to serve combined M and W system Midwest load based on 333MW of load is up to 416 MW of resources or 102 Additional MW more than forecast. This equates to \$18,360,000 potential base plan funding for the full 102MW. 125MW remaining in this study exceeds cap for base funding.

**Note 6:** Midwest has a maximum of 425MW of resources allowable for base funding for year 2007 based on 332MW load.

**Note 7:** UCU has a maximum of 161MW of resources in 2010 allowable for base funding for year 2010.

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

**Note 8:** All previous transmission requests with a source of Iatan II were re-evaluated in this AFS due to attempting to determine an overall solution for the requested service.

**Note 9:** 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 3 **does** 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.

**Note 10:** A ratio of total assignable \$4,733,572 for 100MW to the assignable portion above 125% resource to load cap or 26MW results in \$1,230,749 assignable to the customer.

**Note 11:** 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 12:** \$200,000 to install Capacitor at GSEC bus and \$70,000 SPS cost for line tap.

**Note 13:** Customer UCU Study Number AG2-2006-006 Reservation 1052923 for PTP Transmission Service request replaced with equivalent Study Number AG3-2006-018D Reservation 1104638 for NITS request.



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

Customer Study Number  
 AEPM AG2-2006-033

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
AEPM	1087745	EES	CSWS	225	1/1/2007	1/1/2010	6/1/2008	6/1/2011	\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1087745	None					\$ -	\$ -	\$ -
Total						\$ -	\$ -	\$ -

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	EOC	Earliest Service Start Date	Redispatch Available
1087745	ALLUMAX TAP - NORTHWEST TEXARKANA 138KV CKT 1	6/1/2008	6/1/2008		
	CHAMBER SPRINGS - TONTITOWN 161KV CKT 1	12/1/2008	6/1/2007		
	Chamber Springs - Tontitown 345 kV	6/1/2008	6/1/2008		
	Flint Creek - East Centerton 345 kV	6/1/2011	6/1/2011		
	LINWOOD - MCWILLIE STREET 138KV CKT 1	6/1/2007	6/1/2008		Yes

Customer Study Number  
 AEPM AG2-2006-034

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
AEPM	1087757	CSWS	CSWS	172	6/1/2008	6/1/2028			\$ 3,000,000	\$ -	\$ 3,000,000	\$ 8,631,816
									\$ 3,000,000	\$ -	\$ 3,000,000	\$ 8,631,816

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1087757	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2010	6/1/2010			\$ 1,500,000	\$ 1,500,000	\$ 4,315,908
	SOUTHWEST SHREVEPORT (SW SHV 2) 345/138/13.8KV TRANSFORMER CKT 2	6/1/2010	6/1/2010			\$ 1,500,000	\$ 1,500,000	\$ 4,315,908
Total						\$ 3,000,000	\$ 3,000,000	\$ 8,631,816

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	EOC	Earliest Service Start Date	Redispatch Available
1087757	5 TRIBES - HANCOCK 161KV CKT 1	6/1/2014	6/1/2014		
	5 TRIBES - PECAN CREEK 161KV CKT 1	6/1/2014	6/1/2014		
	AGENCY - PECAN CREEK 161KV CKT 1	6/1/2014	6/1/2014		
	ALLUMAX TAP - NORTHWEST TEXARKANA 138KV CKT 1	6/1/2008	6/1/2008		
	CHAMBER SPRINGS - TONTITOWN 161KV CKT 1	12/1/2008	6/1/2007		
	Chamber Springs - Tontitown 345 kV	6/1/2008	6/1/2008		
	Flint Creek - East Centerton 345 kV	6/1/2011	6/1/2011		
	LINWOOD - MCWILLIE STREET 138KV CKT 1	6/1/2007	6/1/2008		
	PECAN CREEK (PECANCK1) 345/161/13.8KV TRANSFORMER CKT 2	6/1/2014	6/1/2014		
	Siloam Springs - South Fayetteville 161 kV	6/1/2015	6/1/2015		

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

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available
1087757	ARCADIA - REDBUD 345 KV CKT 1	6/1/2006	6/1/2006		
	ARCADIA - REDBUD 345 KV CKT 2	6/1/2006	6/1/2006		
	BEE LINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009		
	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		

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

Customer Study Number  
GSEC AG2-2006-054

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
GSEC	1090270	CSWS	CSWS	10	10/1/2006	10/1/2036	7/1/2009	7/1/2039	\$ -	\$ -	\$ 270,000	\$ 264,077
									\$ -	\$ -	\$ 270,000	\$ 264,077

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1090270	GSEC Midway Interconnection #1	6/1/2011	6/1/2011			\$ 70,000	\$ 70,000	\$ 264,077
	GSEC Midway Interconnection #2	6/1/2011	6/1/2011			\$ 200,000	\$ 200,000	\$ -
<b>Total</b>						<b>\$ 270,000</b>	<b>\$ 270,000</b>	<b>\$ 264,077</b>

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	EOC	Earliest Service Start Date	Redispatch Available
1090270	ALTUS JCT TAP - RUSSELL 138KV CKT 1	6/1/2014	6/1/2014		
	CANADIAN - CEDAR LANE 138KV CKT 1	6/1/2015	6/1/2015		
	Hart Interchange 230/115 kV	6/1/2011	6/1/2011		
	Hitchland 345 and 115 kV Interchange	6/1/2010	6/1/2010		
	Mooreland - Potter 345 kV SPS	6/1/2015	6/1/2015		
	Mooreland - Potter 345 kV WFEC	6/1/2015	6/1/2015		
	Mooreland 345/138 kV Transformer	6/1/2015	6/1/2015		
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2015	6/1/2015		
	SNYDER AEPW- SNYDER WFEC INTERCONNECTION	6/1/2016	6/1/2016		
	Spearville - Mooreland 345 kV SUNC	6/1/2015	6/1/2015		
	Spearville - Mooreland 345 kV WFEC	6/1/2015	6/1/2015		
	Stateline Project	6/1/2014	6/1/2014		
	Tex-Hitchland-Sherman Tap 115 kV ckt	6/1/2010	6/1/2010		
	THOMAS TAP - WEATHERFORD 69KV CKT 1	6/1/2014	6/1/2014		
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2015	6/1/2015		
	WEATHERFORD SOUTHEAST (WTH. SE) 138/69/13.8KV TRANSFORMER CKT 1	6/1/2013	6/1/2013		

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

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available
1090270	ARCADIA - REDBUD 345 KV CKT 1	6/1/2006	6/1/2006		
	ARCADIA - REDBUD 345 KV CKT 2	6/1/2006	6/1/2006		
	BEE LINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009		
	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		

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	EOC	Earliest Service Start Date	Redispatch Available
1090270	HAMON BUTLER - MOREWOOD 69KV CKT 1	12/1/2006	4/1/2008		No
	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	12/1/2006	7/1/2009		No

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

Customer Study Number  
GSEC AG2-2006-133

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
GSEC	1090487	SPS	SPS	150	4/1/2007	4/1/2017	6/1/2009	6/1/2019	\$ 288,620		\$ 288,620	\$ 569,903
									\$ 288,620	\$ -	\$ 288,620	\$ 569,903

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1090487	Mustang-San Andr-Amerada Hess 115KV Displacement	4/1/2007	6/1/2008		Yes	\$ 288,620	\$ 1,742,892	\$ 569,903
	YOAKUM COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	6/1/2007	6/1/2008		Yes	\$ -	\$ 2,500,000	\$ -
Total						\$ 288,620	\$ 4,242,892	\$ 569,903

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	EOC	Earliest Service Start Date	Redispatch Available
1090487	BC-EARTH INTERCHANGE 115KV	6/1/2016	6/1/2016		
	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2	6/1/2013	6/1/2013		
	Hart Interchange 230/115 kV	6/1/2011	6/1/2011		
	Hitchland 345 and 115 kV Interchange	6/1/2010	6/1/2010		
	KRESS INTERCHANGE 115/69KV TRANSFORMERS	4/1/2007	4/1/2007		
	LC-SOL3 115KV	6/1/2016	6/1/2016		
	MUSTANG STATION 230/115KV TRANSFORMER CKT 1	4/1/2007	6/1/2008		Yes
	Potter - Roosevelt 345KV	6/1/2013	6/1/2013		
	Pringle - Etter 115 kV	6/1/2010	6/1/2010		
	ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1	6/1/2013	6/1/2013		
	Seven Rivers to Pecos to Potash Junction 230kV	6/1/2007	6/1/2009		Yes
	Tex-Hitchland-Sherman Tap 115 kV ckt	6/1/2010	6/1/2010		
	TUCO INTERCHANGE 115/69KV TRANSFORMER	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.

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available
1090487	TERRY COUNTY INTERCHANGE 115/69KV TRANSFORMERS	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  
KEPC AG2-2006-067

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
KEPC	1090416	KCPL	WR	30	6/1/2010	6/1/2030			\$ 17,090	\$ -	\$ 17,090	\$ 59,915
									\$ 17,090	\$ -	\$ 17,090	\$ 59,915

  

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1090416	COFFEYVILLE TAP - DEARING 138KV CKT 1 AEPW Displacement	6/1/2011	6/1/2011			\$ 5,167	\$ 500,000	\$ 17,801
	COFFEYVILLE TAP - DEARING 138KV CKT 1 WERE Displacement	6/1/2011	6/1/2011			\$ 11,923	\$ 3,000,000	\$ 42,114
	ROSE HILL (ROSEHLX) 345/138/13.8KV TRANSFORMER CKT 3 Displacement	6/1/2011	6/1/2011			\$ -	\$ 5,000,000	\$ -
<b>Total</b>						\$ 17,090	\$ 8,500,000	\$ 59,915

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	EOC	Earliest Service Start Date	Redispatch Available
1090416	CIRCLEVILLE - HOYT HTI SWITCHING JUNCTION 115KV CKT 1	12/1/2006	6/1/2010		
	COFFEYVILLE SUB - CRA 69KV CKT 1	6/1/2011	6/1/2011		
	COFFEYVILLE SUB - DEARING 69KV CKT 1	6/1/2011	6/1/2011		
	COUNTY LINE - HOOK JCT 115KV CKT 1	6/1/2011	6/1/2011		
	COUNTY LINE - TECUMSEH HILL 115KV CKT 1	6/1/2011	6/1/2011		
	CRESWELL (CRESWLX) 138/69/13.2KV TRANSFORMER	6/1/2012	6/1/2012		
	Evans - Grant - Chisolm Rebuild and Conversion Project	6/1/2008	6/1/2009		
	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1	6/1/2011	6/1/2011		
	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2	6/1/2011	6/1/2011		
	NEOSHO - NORTHEAST PARSONS 138KV CKT 1	6/1/2013	6/1/2013		
	Stranger - Thorton 115 kV	6/1/2010	6/1/2010		
	STRANGER CREEK TRANSFORMER CKT 2	6/1/2011	6/1/2011		
	TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV 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.

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available
1090416	JATAN - ST JOE 345KV CKT 1	6/1/2011	6/1/2011		
	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	12/1/2006	7/1/2009		

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

Customer Study Number  
MIDW AG2-2006-097

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
MIDW	1090917	WR	WR	20	6/1/2008	6/1/2038	7/1/2009	7/1/2039	\$ -	\$ -	\$ 17,623	\$ 64,983
MIDW	1090919	WR	WR	5	6/1/2008	6/1/2038	7/1/2009	7/1/2039	\$ -	\$ -	\$ 3,525	\$ 12,998
MIDW	1090920	WR	WR	40	6/1/2008	6/1/2038	7/1/2009	7/1/2039	\$ -	\$ -	\$ 38,771	\$ 142,963
MIDW	1090921	WR	WR	10	6/1/2008	6/1/2038	7/1/2009	7/1/2039	\$ -	\$ -	\$ 10,574	\$ 38,990
									\$ -	\$ -	\$ 70,493	\$ -

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1090917	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$ 17,623	\$ 864,000	\$ 64,983
					Total	\$ 17,623	\$ 864,000	\$ 64,983
1090919	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$ 3,525	\$ 864,000	\$ 12,998
					Total	\$ 3,525	\$ 864,000	\$ 12,998
1090920	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$ 38,771	\$ 864,000	\$ 142,963
					Total	\$ 38,771	\$ 864,000	\$ 142,963
1090921	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$ 10,574	\$ 864,000	\$ 38,990
					Total	\$ 10,574	\$ 864,000	\$ 38,990

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	EOC	Earliest Service Start Date	Redispatch Available
1090917	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1	6/1/2014	6/1/2014		
	HUNTSVILLE - ST JOHN 115KV CKT 1	6/1/2014	6/1/2014		
	Mooreland - Potter 345 kV SPS	6/1/2015	6/1/2015		
	Mooreland - Potter 345 kV WFEC	6/1/2015	6/1/2015		
	Mooreland 345/138 kV Transformer	6/1/2015	6/1/2015		
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2015	6/1/2015		
	Spearville - Mooreland 345 kV SUNC	6/1/2015	6/1/2015		
	Spearville - Mooreland 345 kV WFEC	6/1/2015	6/1/2015		
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2015	6/1/2015		
1090919	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1	6/1/2014	6/1/2014		
	HUNTSVILLE - ST JOHN 115KV CKT 1	6/1/2014	6/1/2014		
	Mooreland - Potter 345 kV SPS	6/1/2015	6/1/2015		
	Mooreland - Potter 345 kV WFEC	6/1/2015	6/1/2015		
	Mooreland 345/138 kV Transformer	6/1/2015	6/1/2015		
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2015	6/1/2015		
	Spearville - Mooreland 345 kV SUNC	6/1/2015	6/1/2015		
	Spearville - Mooreland 345 kV WFEC	6/1/2015	6/1/2015		
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2015	6/1/2015		
1090920	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1	6/1/2014	6/1/2014		
	HUNTSVILLE - ST JOHN 115KV CKT 1	6/1/2014	6/1/2014		
	Mooreland - Potter 345 kV SPS	6/1/2015	6/1/2015		
	Mooreland - Potter 345 kV WFEC	6/1/2015	6/1/2015		
	Mooreland 345/138 kV Transformer	6/1/2015	6/1/2015		
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2015	6/1/2015		
	Spearville - Mooreland 345 kV SUNC	6/1/2015	6/1/2015		
	Spearville - Mooreland 345 kV WFEC	6/1/2015	6/1/2015		
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2015	6/1/2015		
1090921	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1	6/1/2014	6/1/2014		
	HUNTSVILLE - ST JOHN 115KV CKT 1	6/1/2014	6/1/2014		
	Mooreland - Potter 345 kV SPS	6/1/2015	6/1/2015		
	Mooreland - Potter 345 kV WFEC	6/1/2015	6/1/2015		
	Mooreland 345/138 kV Transformer	6/1/2015	6/1/2015		
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2015	6/1/2015		
	Spearville - Mooreland 345 kV SUNC	6/1/2015	6/1/2015		
	Spearville - Mooreland 345 kV WFEC	6/1/2015	6/1/2015		
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2015	6/1/2015		

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	EOC	Earliest Service Start Date	Redispatch Available
1090917	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	12/1/2006	7/1/2009		Yes
1090919	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	12/1/2006	7/1/2009		Yes
1090920	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	12/1/2006	7/1/2009		Yes
1090921	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	12/1/2006	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  
MIDW AG2-2006-106

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
MIDW	1090964	WR	WR	35	1/1/2007	1/1/2012	6/1/2010	6/1/2015	\$ 31,721	\$ -	\$ 31,721	\$ 52,964
MIDW	1090965	WR	WR	10	1/1/2007	1/1/2012	6/1/2010	6/1/2015	\$ 10,574	\$ -	\$ 10,574	\$ 17,655
									\$ -	\$ -	\$ 42,295	\$ -

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1090964	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$ 31,721	\$ 864,000	\$ 52,964
					Total	\$ 31,721	\$ 864,000	\$ 52,964
1090965	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$ 10,574	\$ 864,000	\$ 17,655
					Total	\$ 10,574	\$ 864,000	\$ 17,655

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	EOC	Earliest Service Start Date	Redispatch Available
1090964	CHAPMAN - CLAY CENTER JUNCTION 115KV CKT 1	6/1/2007	6/1/2009		Yes
	CIRCLEVILLE - HOYT HTI SWITCHING JUNCTION 115KV CKT 1	12/1/2006	6/1/2010		Yes
	CLAY CENTER - GREENLEAF 115KV CKT 1	6/1/2007	6/1/2009		Yes
	COUNTY LINE - HOOK JCT 115KV CKT 1	6/1/2011	6/1/2011		
	COUNTY LINE - TECUMSEH HILL 115KV CKT 1	6/1/2011	6/1/2011		
	GILL ENERGY CENTER EAST - GILLJCT269.0 69KV CKT 1	6/1/2007	6/1/2008	10/1/2007	Yes
	GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1 #1	6/1/2007	7/1/2007		Yes
	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009	10/1/2008	Yes
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009	10/1/2008	Yes
	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1	6/1/2011	6/1/2011		
	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2	6/1/2011	6/1/2011		
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1	6/1/2014	6/1/2014		
	HUNTSVILLE - ST JOHN 115KV CKT 1	6/1/2014	6/1/2014		
	TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1	6/1/2010	6/1/2010		
1090965	CHAPMAN - CLAY CENTER JUNCTION 115KV CKT 1	6/1/2007	6/1/2009		Yes
	CIRCLEVILLE - HOYT HTI SWITCHING JUNCTION 115KV CKT 1	12/1/2006	6/1/2010		Yes
	CLAY CENTER - GREENLEAF 115KV CKT 1	6/1/2007	6/1/2009		Yes
	COUNTY LINE - HOOK JCT 115KV CKT 1	6/1/2011	6/1/2011		
	COUNTY LINE - TECUMSEH HILL 115KV CKT 1	6/1/2011	6/1/2011		
	GILL ENERGY CENTER EAST - GILLJCT269.0 69KV CKT 1	6/1/2007	6/1/2008	10/1/2007	Yes
	GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1 #1	6/1/2007	7/1/2007		Yes
	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009	10/1/2008	Yes
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009	10/1/2008	Yes
	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1	6/1/2011	6/1/2011		
	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2	6/1/2011	6/1/2011		
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1	6/1/2014	6/1/2014		
	HUNTSVILLE - ST JOHN 115KV CKT 1	6/1/2014	6/1/2014		
	TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1	6/1/2010	6/1/2010		

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

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available
1090964	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
1090965	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	EOC	Earliest Service Start Date	Redispatch Available
1090964	HEIZER TO KNOLL 230KV	6/1/2007	10/1/2007		No
	IATAN - ST JOE 345KV CKT 1	6/1/2011	6/1/2011		
	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	12/1/2006	7/1/2009		Yes
1090965	HEIZER TO KNOLL 230KV	6/1/2007	10/1/2007		No
	IATAN - ST JOE 345KV CKT 1	6/1/2011	6/1/2011		
	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	12/1/2006	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  
MIDW AG2-2006-107

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
MIDW	1090817	WR	WR	25	6/1/2007	6/1/2017	7/1/2009	7/2/2019	\$ 24,672	\$ -	\$ 24,672	\$ 48,848
									\$ 24,672	\$ -	\$ 24,672	\$ 48,848

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1090817	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$ 24,672	\$ 864,000	\$ 48,848
Total						\$ 24,672	\$ 864,000	\$ 48,848

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	EOC	Earliest Service Start Date	Redispatch Available
1090817	CHAPMAN - CLAY CENTER JUNCTION 115KV CKT 1	6/1/2007	6/1/2009		Yes
	CLAY CENTER - GREENLEAF 115KV CKT 1	6/1/2007	6/1/2009		Yes
	COUNTY LINE - HOOK JCT 115KV CKT 1	6/1/2011	6/1/2011		
	COUNTY LINE - TECUMSEH HILL 115KV CKT 1	6/1/2011	6/1/2011		
	GILL ENERGY CENTER EAST - GILLJCT269.0 69KV CKT 1	6/1/2007	6/1/2008	10/1/2007	Yes
	GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1 #1	6/1/2007	7/1/2007		Yes
	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009	10/1/2008	Yes
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009	10/1/2008	Yes
	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1	6/1/2011	6/1/2011		
	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2	6/1/2011	6/1/2011		
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1	6/1/2014	6/1/2014		
	HUNTSVILLE - ST JOHN 115KV CKT 1	6/1/2014	6/1/2014		
	Mooreland - Potter 345 kV SPS	6/1/2015	6/1/2015		
	Mooreland - Potter 345 kV WFEC	6/1/2015	6/1/2015		
	Mooreland 345/138 kV Transformer	6/1/2015	6/1/2015		
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2015	6/1/2015		
	Spearville - Mooreland 345 kV SUNC	6/1/2015	6/1/2015		
	Spearville - Mooreland 345 kV WFEC	6/1/2015	6/1/2015		
	TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1	6/1/2010	6/1/2010		
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2015	6/1/2015		

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

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available
1090817	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	EOC	Earliest Service Start Date	Redispatch Available
1090817	HEIZER TO KNOLL 230KV	6/1/2007	10/1/2007		No
	IATAN - ST JOE 345KV CKT 1	6/1/2011	6/1/2011		
	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	12/1/2006	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  
MIDW AG2-2006-108

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
MIDW	1090829	WR	WR	15	6/1/2008	6/1/2008	7/1/2009	7/1/2009	\$ -	\$ -	\$ 10,574	\$ 44,881
MIDW	1091057	WR	WR	10	6/1/2008	6/1/2018	7/1/2009	7/2/2019	\$ -	\$ -	\$ 15,861	\$ 22,012
									\$ -	\$ -	\$ 26,435	\$ -

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1090829	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$ 10,574	\$ 864,000	\$ 44,881
					Total	\$ 10,574	\$ 864,000	\$ 44,881
1091057	ST JOHN CAPACITOR Displacement	6/1/2008	6/1/2008			\$ 15,861	\$ 864,000	\$ 22,012
					Total	\$ 15,861	\$ 864,000	\$ 22,012

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	EOC	Earliest Service Start Date	Redispatch Available
1090829	COUNTY LINE - HOOK JCT 115KV CKT 1	6/1/2011	6/1/2011		
	COUNTY LINE - TECUMSEH HILL 115KV CKT 1	6/1/2011	6/1/2011		
	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009	10/1/2008	Yes
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009	10/1/2008	Yes
	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1	6/1/2011	6/1/2011		
	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2	6/1/2011	6/1/2011		
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1	6/1/2014	6/1/2014		
	HUNTSVILLE - ST JOHN 115KV CKT 1	6/1/2014	6/1/2014		
	Mooreland - Potter 345 kV SPS	6/1/2015	6/1/2015		
	Mooreland - Potter 345 kV WFEC	6/1/2015	6/1/2015		
	Mooreland 345/138 kV Transformer	6/1/2015	6/1/2015		
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2015	6/1/2015		
	Speanville - Mooreland 345 kV SUNC	6/1/2015	6/1/2015		
	Speanville - Mooreland 345 kV WFEC	6/1/2015	6/1/2015		
	TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1	6/1/2010	6/1/2010		
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2015	6/1/2015		
1091057	COUNTY LINE - HOOK JCT 115KV CKT 1	6/1/2011	6/1/2011		
	COUNTY LINE - TECUMSEH HILL 115KV CKT 1	6/1/2011	6/1/2011		
	HAYS PLANT - SOUTH HAYS 115KV CKT 1	6/1/2008	6/1/2009	10/1/2008	Yes
	HAYS PLANT - VINE STREET 115KV CKT 1	6/1/2008	6/1/2009	10/1/2008	Yes
	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1	6/1/2011	6/1/2011		
	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2	6/1/2011	6/1/2011		
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1	6/1/2014	6/1/2014		
	HUNTSVILLE - ST JOHN 115KV CKT 1	6/1/2014	6/1/2014		
	Mooreland - Potter 345 kV SPS	6/1/2015	6/1/2015		
	Mooreland - Potter 345 kV WFEC	6/1/2015	6/1/2015		
	Mooreland 345/138 kV Transformer	6/1/2015	6/1/2015		
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2015	6/1/2015		
	Speanville - Mooreland 345 kV SUNC	6/1/2015	6/1/2015		
	Speanville - Mooreland 345 kV WFEC	6/1/2015	6/1/2015		
	TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1	6/1/2010	6/1/2010		
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2015	6/1/2015		

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

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available
1091057	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	EOC	Earliest Service Start Date	Redispatch Available
1090829	IATAN - ST JOE 345KV CKT 1	6/1/2011	6/1/2011		
	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	12/1/2006	7/1/2009		No
1091057	IATAN - ST JOE 345KV CKT 1	6/1/2011	6/1/2011		
	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	12/1/2006	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  
OGE AG2-2006-035

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
OGE	1087908	OKGE	EES	10	12/1/2006	12/1/2011			\$ -	\$ 540,000	\$ -	\$ -
									\$ -	\$ 540,000	\$ -	\$ -

  

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1087908	None					\$ -	\$ -	\$ -
<b>Total</b>						\$ -	\$ -	\$ -

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

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available
1087908	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		
	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	EOC	Earliest Service Start Date	Redispatch Available
1087908	IATAN - ST JOE 345KV CKT 1	6/1/2011	6/1/2011		

Customer Study Number  
SPSM AG2-2006-074

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
SPSM	1090699	WPEK	KCPL	50	10/1/2006	10/1/2007	10/1/2007	10/1/2008	\$ -	\$ 528,000	\$ -	\$ -
									\$ -	\$ 528,000	\$ -	\$ -

  

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1090699	None					\$ -	\$ -	\$ -
<b>Total</b>						\$ -	\$ -	\$ -

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	EOC	Earliest Service Start Date	Redispatch Available
1090699	MARTIN CITY - TURNER ROAD SUBSTATION 161KV CKT 1	12/1/2006	10/1/2008	4/1/2007	
	GREENSBURG - JUDSON LARGE 115KV CKT 1	4/1/2007	10/1/2007		

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

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available
1090699	LACYGNE - WEST GARDNER 345KV CKT 1	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  
SPSM AG2-2006-124

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
SPSM	1090705	WPEK	KCPL	50	10/1/2006	10/1/2007	10/1/2007	10/1/2008	\$ -	\$ 528,000	\$ -	\$ -
									\$ -	\$ 528,000	\$ -	\$ -

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1090705	None					\$ -	\$ -	\$ -
<b>Total</b>						\$ -	\$ -	\$ -

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	EOC	Earliest Service Start Date	Redispatch Available
1090699	MARTIN CITY - TURNER ROAD SUBSTATION 161KV CKT 1	12/1/2006	10/1/2008	4/1/2007	
	GREENSBURG - JUDSON LARGE 115KV CKT 1	4/1/2007	10/1/2007		

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

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available
1090705	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		

Customer Study Number  
UCU AG2-2006-006

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
UCU	1052923	KCPL	MPS	160	6/1/2010	6/1/2030			\$ -	\$ 61,862,400	\$ -	\$ -
									\$ -	\$ 61,862,400	\$ -	\$ -

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1052923	None					\$ -	\$ -	\$ -
<b>Total</b>						\$ -	\$ -	\$ -

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	EOC	Earliest Service Start Date	Redispatch Available
1052923	MARTIN CITY - TURNER ROAD SUBSTATION 161KV CKT 1	12/1/2006	10/1/2008	4/1/2007	No
	Stranger - Thornton 115 kv	6/1/2010	6/1/2010		
	STRANGER CREEK TRANSFORMER CKT 2	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	EOC	Earliest Service Start Date	Redispatch Available
1052923	IATAN - ST JOE 345KV 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  
WRGS AG2-2006-016

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
WRGS	1076158	KCPL	AMRN	20	6/1/2010	6/1/2015			\$ -	\$ 1,080,000	\$ -	\$ -
									\$ -	\$ 1,080,000	\$ -	\$ -

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1076158	None					\$ -	\$ -	\$ -
						\$ -	\$ -	\$ -
						\$ -	\$ -	\$ -

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	EOC	Earliest Service Start Date	Redispatch Available
1076158	Stranger - Thornton 115 kV	6/1/2010	6/1/2010		
	STRANGER CREEK TRANSFORMER CKT 2	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	EOC	Earliest Service Start Date	Redispatch Available
1076158	IATAN - ST JOE 345KV 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  
WRGS AG2-2006-030

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
WRGS	1086655	OKGE	WR	225	10/1/2006	10/1/2026	7/1/2009	7/1/2029	\$ 40,500,000	\$ -	\$ 54,896,021	\$ 121,313,926
									\$ 40,500,000	\$ -	\$ 54,896,021	\$ 121,313,926

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1086655	COFFEYVILLE TAP - DEARING 138KV CKT 1 AEPW Displacement	6/1/2010*	6/1/2010*			\$ 40,828	\$ 500,000	\$ 136,797
	COFFEYVILLE TAP - DEARING 138KV CKT 1 WERE Displacement	6/1/2010*	6/1/2010*			\$ 94,219	\$ 3,000,000	\$ 324,491
	ROSE HILL (ROSEHLIX) 345/138/13.8KV TRANSFORMER CKT 3 Displacement	6/1/2011	6/1/2011			\$ -	\$ 5,000,000	\$ -
	Sooner to Rose Hill 345 kV OKGE	6/1/2016	6/1/2016			\$ 27,380,487	\$ 27,500,000	\$ 62,306,245
	Sooner to Rose Hill 345 kV WERE	6/1/2016	6/1/2016			\$ 27,380,487	\$ 27,500,000	\$ 58,546,393
<b>Total</b>						<b>\$ 54,896,021</b>	<b>\$ 63,500,000</b>	<b>\$ 121,313,926</b>

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	EOC	Earliest Service Start Date	Redispatch Available
1086655	COFFEYVILLE SUB - CRA 69KV CKT 1	6/1/2010*	6/1/2010*		
	COFFEYVILLE SUB - DEARING 69KV CKT 1	6/1/2010*	6/1/2010*		
	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER	6/1/2012	6/1/2012		
	DEARING (DEARIN1X) 138/69/13.2KV TRANSFORMER CKT 1	12/1/2011	12/1/2011		
	Evans - Grant - Chisolm Rebuild and Conversion Project	6/1/2008	6/1/2009		Yes
	GILL ENERGY CENTER EAST - INTERSTATE 138KV CKT 1	6/1/2012	6/1/2012		
	Mooreland - Potter 345 kV SPS	6/1/2015	6/1/2015		
	Mooreland - Potter 345 kV WFEC	6/1/2015	6/1/2015		
	Mooreland 345/138 kV Transformer	6/1/2015	6/1/2015		
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2015	6/1/2015		
	Spearville - Mooreland 345 kV SUNC	6/1/2015	6/1/2015		
	Spearville - Mooreland 345 kV WFEC	6/1/2015	6/1/2015		
	STRANGER CREEK TRANSFORMER CKT 2	6/1/2011	6/1/2011		
	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	6/1/2015	6/1/2015		

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

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available
1086655	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	EOC	Earliest Service Start Date	Redispatch Available
1086655	RENO - SUMMIT 345KV	1/1/2011	1/1/2011		
	WICHITA - RENO 345KV	12/1/2006	7/1/2009		Yes

\* See Note 12 in Table 2

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

Customer Study Number  
EDE AG2-2005-064

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements	
EDE	973355	KCPL	EDE	100	1/1/2010	1/1/2030			\$ 3,502,843	\$ -	\$ 4,733,572	\$ 15,077,273	
										\$ 3,502,843	\$ -	\$ 4,733,572	\$ 15,077,273

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
973355	SUB 110 - ORONOGO JCT. - SUB 167 - RIVERTON 161KV CKT 1	6/1/2011	6/1/2011			\$ 3,387,204	\$ 5,400,000	\$ 10,788,850
	SUB 110 - ORONOGO JCT. (ORONOGO) 161/69/12.5KV TRANSFORMER CKT 1	6/1/2011	6/1/2011			\$ 1,346,368	\$ 2,000,000	\$ 4,288,423
Total						\$ 4,733,572	\$ 7,400,000	\$ 15,077,273

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	EOC	Earliest Service Start Date	Redispatch Available
973355	BULL SHOALS - BULL SHOALS 161KV CKT 1 SWPA	6/1/2011	6/1/2011		
	RIVERSIDE CAPACITOR	6/1/2015	6/1/2015		
	Line - JOPLIN 59 161 kV - SUB 439 - STATELINE	6/1/2016	6/1/2016		
	Line - SUB 59 - JOPLIN 26TH ST. - SUB 258 - GATEWAY SOUTH	6/1/2016	6/1/2016		
	XFR - JOPLIN 59 161 kV - SUB 59 - JOPLIN 26TH ST. 69KV	6/1/2016	6/1/2016		

Customer Study Number  
INDP AG1-2006-051

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements	
INDP	1033791	KCPL	INDN	50	6/1/2010	6/1/2040			\$ -	\$ 15,840,000	\$ 938,195	\$ 3,340,156	
										\$ -	\$ 15,840,000	\$ 938,195	\$ 3,340,156

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1033791	166TH STREET - JAGGARD JUNCTION 115KV CKT 1	6/1/2009	6/1/2009			\$ 213,226	\$ 1,000,000	\$ 1,105,109
	166TH STREET - JARBALO JUNCTION SWITCHING STATION 115KV CKT 1	6/1/2009	6/1/2009			\$ 405,130	\$ 1,900,000	\$ 577,384
	JAGGARD JUNCTION - PENTAGON 115KV CKT 1	6/1/2009	6/1/2009			\$ 319,839	\$ 1,500,000	\$ 1,657,663
Total						\$ 938,195	\$ 4,400,000	\$ 3,340,156

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	EOC	Earliest Service Start Date	Redispatch Available
1033791	Stranger - Thornton 115 kV	6/1/2009	6/1/2009		

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	EOC	Earliest Service Start Date	Redispatch Available
1033791	IATAN - ST JOE 345KV CKT 1	6/1/2011	6/1/2011		
	IATAN5 161 - PLATTE CITY 161KV CKT 1	6/1/2011	6/1/2011		

Note: Expansion Plan Project Stranger - Thornton 115 kV replaces 2006-AG1-AFS-4 assignment of STRANGER CREEK - NW LEAVENWORTH 115KV

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

Customer Study Number  
 KCPS AG1-2006-009

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
KCPS	1179751	KCPL	KCPL	168	6/1/2009	6/1/2029			\$ 4,161,805	\$ -	\$ 4,161,805	\$ 10,566,295
									\$ 4,161,805	\$ -	\$ 4,161,805	\$ 10,566,295

  

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1179751	166TH STREET - JAGGARD JUNCTION 115KV CKT 1	6/1/2009	6/1/2009			\$ 786,774	\$ 1,000,000	\$ 2,927,001
	166TH STREET - JARBALO JUNCTION SWITCHING STATION 115KV CKT 1	6/1/2009	6/1/2009			\$ 1,494,870	\$ 1,900,000	\$ 1,529,261
	COLLEGE - CRAIG 161KV CKT 1	6/1/2016	6/1/2016			\$ 700,000	\$ 700,000	\$ 1,719,531
	JAGGARD JUNCTION - PENTAGON 115KV CKT 1	6/1/2009	6/1/2009			\$ 1,180,161	\$ 1,500,000	\$ 4,390,502
Total						\$ 4,161,805	\$ 5,100,000	\$ 10,566,295

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	EOC	Earliest Service Start Date	Redispatch Available
1179751	Stranger - Thornton 115 kV	6/1/2009	6/1/2009		
	AVONDALE - GLADSTONE 161KV CKT 1	6/1/2014	6/1/2014		

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	EOC	Earliest Service Start Date	Redispatch Available
1179751	IATAN - ST JOE 345KV CKT 1	6/1/2011	6/1/2011		
	IATAN5 161 - PLATTE CITY 161KV CKT 1	6/1/2011	6/1/2011		

Note: Expansion Plan Project Stranger - Thornton 115 kV replaces 2006-AG1-AFS-4 assignment of STRANGER CREEK - NW LEAVENWORTH 115KV

Customer Study Number  
 KCPS GEN-2004-008

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
KCPS	1115127	KCPL	KCPL	332	6/1/2009	6/1/2029			\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -

  

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
1115127	None					\$ -	\$ -	\$ -
Total						\$ -	\$ -	\$ -

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

Transmission Owner	Upgrade	Solution	Earliest Date Upgrade Required (COD)	Estimated Date of Upgrade Completion (EOC)	Estimated Engineering & Construction Cost
AEPW	COFFEYVILLE TAP - DEARING 138KV CKT 1 AEPW Displacement	Rebuild 1.09 miles of line using 1590 ACSR	6/1/2011	6/1/2011	\$ 500,000
AEPW	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1	Using IEEE Guide for Loading of Mineral-Oil Immersed Power Transformers (C57.91-2000) Re-rate the autos. Replace two 138 kV breakers and five 138 kV switches. Reset relays and CTs	6/1/2010	6/1/2010	\$ 1,500,000
AEPW	SOUTHWEST SHREVEPORT (SW SHV 2) 345/138/13.8KV TRANSFORMER CKT 2	Using IEEE Guide for Loading of Mineral-Oil Immersed Power Transformers (C57.91-2000) Re-rate the autos. Replace two 138 kV breakers and five 138 kV switches. Reset relays and CTs	6/1/2010	6/1/2010	\$ 1,500,000
EMDE	SUB 110 - ORONOGO JCT. - SUB 167 - RIVERTON 161KV CKT 1	Reconductor Oronogo 59467 to Riverton 59469 with Bundled 556 ACSR	6/1/2011	6/1/2011	\$ 5,400,000
EMDE	SUB 110 - ORONOGO JCT. (ORONOGO) 161/69/12.5KV TRANSFORMER CKT 1	Install new 161/12 kV 22.4 transmer and take load off 69 kV system	6/1/2011	6/1/2011	\$ 2,000,000
MIDW	ST JOHN CAPACITOR Displacement	20MVar capacitor at St John	6/1/2008	6/1/2008	\$ 854,000
OKGE	Sooner to Rose Hill 345 kV OKGE	New 345 kV line from Sooner to Oklahoma/Kansas	6/1/2016	6/1/2016	\$ 27,500,000
SPS	GSEC Midway Interconnection #1	New Delivery Point tapping 69 kV Tie Line from AEPW Shamrock to SPS Magic City	6/1/2011	6/1/2011	\$ 70,000
SPS	Mustang-San Andr-Amerada Hess 115KV Displacement	Terminate V53 at Mustang instead of Denver City - 3 mi of new 115 kV circuit. Mustang-San Andr-Amerada Hess 115 kV ckt	4/1/2007	6/1/2008	\$ 1,742,892
SPS	YOAKUM COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement	Upgrade Transformer 230/115 kV 252 MVA	6/1/2007	6/1/2008	\$ 2,500,000
WERE	166TH STREET - JAGGARD JUNCTION 115KV CKT 1	Tear down and rebuild 3.66 mile 166-Jaggard 115 kV line.	6/1/2009	6/1/2009	\$ 1,000,000
WERE	166TH STREET - JARBALO JUNCTION SWITCHING STATION 115KV CKT 1	Tear down and rebuild 7.22 mile Jarbalo-166 115 kV line.	6/1/2009	6/1/2009	\$ 1,900,000
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	\$ 3,000,000
WERE	JAGGARD JUNCTION - PENTAGON 115KV CKT 1	Tear down and rebuild Jaggard - Pentagon 115 kV line.	6/1/2009	6/1/2009	\$ 1,500,000
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	\$ 5,000,000
WERE	Sooner to Rose Hill 345 kV WERE	New 345 kV line from Oklahoma/Kansas Stateline to Rose Hill	6/1/2016	6/1/2016	\$ 27,500,000

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

Transmission Owner	Upgrade	Solution	Earliest Date Upgrade Required (COD)	Estimated Date of Upgrade Completion (EOC)
MIDW	HEIZER TO KNOLL 230KV	Convert Knoll to Heizer 115 kV line to 230kV (already constructed for 230kV).	6/1/2007	10/1/2007
MIPU	IATANS 161 - PLATTE CITY 161KV CKT 1	Terminal Equipment	6/1/2011	6/1/2011
MIPU	IATAN - ST JOE 345KV CKT 1	Circuit Breaker	6/1/2011	6/1/2011
SPS	TERRY COUNTY INTERCHANGE 115/69KV TRANSFORMERS	Upgrade both existing transformer by 10/1/2007	6/1/2007	6/1/2007
WERE	RENO - SUMMIT 345KV	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.	1/1/2011	1/1/2011
WERE	WICHITA - RENO 345KV	Substation work required at Summit for new 345 kV terminal	12/1/2006	7/1/2009
WFEC	HAMON BUTLER - MOREWOOD 69KV CKT 1	Reconductor 1/0 to 336 ACSR - 15.0 miles	12/1/2006	4/1/2008

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

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

Transmission Owner	Upgrade	Solution	Earliest Date Upgrade Required (COD)	Estimated Date of Upgrade Completion (EOC)
AEPW	ALUMAX TAP - NORTHWEST TEXARKANA 138KV CKT 1	Rebuild 1.68 miles of 1024 ACAR with 2156 ACSR, Replace wavetrap & jumpers with 2156 ACSR. Replace Switch 2285 @ Alumax Tap.	6/1/2008	6/1/2008
AEPW	CHAMBER SPRINGS - TONTIOWN 161KV CKT 1	Reconductor 666 ACSR (11.6 miles) and 1272 ACSR (.1 mile) to Drake ACCC (2156 ACSR section 0.6 miles is not replaced) and remove the series reactors at Chamber Springs on the Chamber Springs to Tontitown 161 kv line	12/1/2008	6/1/2007
AEPW	Chamber Springs - Tontitown 345 KV	New 345 kv Line and Tontitown 345/161 kv Transformer	6/1/2008	6/1/2008
AEPW	Flint Creek - East Centerton 345 kv	New 345 kv Line and East Centerton 345/161 kv Transformer	6/1/2011	6/1/2011
AEPW	LINWOOD - MCWILLIE STREET 138KV CKT 1	Rebuild 2.09 miles of 666 ACSR with 1272 ACSR	6/1/2007	6/1/2008
AEPW	Siloam Springs - South Fayetteville 161 kv	Convert Existing 69 kv Line to 161 kv Operation	6/1/2015	6/1/2015
AEPW	THOMAS TAP - WEATHERFORD 69KV CKT 1	Rebuild 0.9 miles of 4/0 ACSR with 795 ACSR. Replace Weatherford wavetrap.	6/1/2014	6/1/2014
AEPW	WEATHERFORD SOUTHEAST (WTH_SE) 138/69/13.8KV TRANSFORMER CKT 1	Install new 90 MVA Auto	6/1/2013	6/1/2013
AEPW/WFEC	SNYDER AEPW- SNYDER WFEC INTERCONNECTION	New Tie line between AEPW's Snyder and WFEC's Snyder	6/1/2016	6/1/2016
EMDE	Line - JOPLIN 59 161 kv - SUB 439 - STATELINE	Install new line from Sub #439 to new Sub Joplin 59.	6/1/2016	6/1/2016
EMDE	Line - SUB 59 - JOPLIN 26TH ST. - SUB 258 - GATEWAY SOUTH	Reconductor 1.6 miles of 69kv Joplin sub 59 to GAT sub 258 with same conductor as 69kv Joplin sub 64 to Joplin sub 145	6/1/2016	6/1/2016
EMDE	XFR - JOPLIN 59 161 kv - SUB 59 - JOPLIN 26TH ST. 69kv	Install 3-wind transformer from 161 kv Joplin 59 bus to Sub #59 Joplin 26th St.	6/1/2016	6/1/2016
KACP	AVONDALE - GLADSTONE 161KV CKT 1	Replace 800 amp wavetrap at Gladstone with 1200 amp wavetrap	6/1/2014	6/1/2014
MIDW	HAYS PLANT - SOUTH HAYS 115KV CKT 1	Reconductor line	6/1/2008	6/1/2009
MIDW	HAYS PLANT - VINE STREET 115KV CKT 1	Reconductor line	6/1/2008	6/1/2009
MIDW	HUNTSVILLE - ST JOHN 115KV CKT 1	Rebuild Huntsville - St. John 115 kv line and replace CT, wavetrap, breakers, and relays.	6/1/2014	6/1/2014
MIDW/WERE	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1	Rebuild HEC - Huntsville 115 kv line and replace CT, wavetrap and relays.	6/1/2014	6/1/2014
MIPU	MARTIN CITY - TURNER ROAD SUBSTATION 161KV CKT 1	Replace Wavetrap at Martin City	12/1/2006	10/1/2008
OKGE	5 TRIBES - HANCOCK 161KV CKT 1	Replace 800A Wave Trap, increase Relay CTR to 1200-5A.	6/1/2014	6/1/2014
OKGE	5 TRIBES - PECAN CREEK 161KV CKT 1	replace 686AS33 conductor with 795AS33	6/1/2014	6/1/2014
OKGE	AGENCY - PECAN CREEK 161KV CKT 1	Replace Terminal Equipment	6/1/2014	6/1/2014
OKGE	CANADIAN - CEDAR LANE 138KV CKT 1	Replace 800A trap at Cedar Lane	6/1/2015	6/1/2015
OKGE	CONTINENTAL BLACKS - OSAGE 69KV CKT 1	Rebuild & Reconductor 0.57 Miles of 477AS33 to 477 ACCC/TW	6/1/2016	6/1/2016
OKGE	PECAN CREEK (PECANCKT1) 345/161/13.8KV TRANSFORMER CKT 2	Add a 345/161 kv 369MVA transformer	6/1/2014	6/1/2014
SPS	BC-EARTH INTERCHANGE 115KV	Install 1 - 14.4 MVar capacitor bank	6/1/2016	6/1/2016
SPS	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2	Upgrade Roosevelt to Curry 115 kv circuit w/795 ACSR	6/1/2013	6/1/2013
SPS	Hart Interchange 230/115 kv	New 230/115 kv Hart Intg with 115 kv 397 ACSR ckt to Kress Int, 3-brk 230 kv ring, 150 MVA auto, 115 kv terminal	6/1/2011	6/1/2011
SPS	Highland 345 and 115 kv Interchange	Three breaker 345 kv bus, 345/115 kv transformer, five 115 kv breakers.	6/1/2010	6/1/2010
SPS	KRESS INTERCHANGE 115/69KV TRANSFORMERS	Upgrade both existing transformer	4/1/2007	4/1/2007
SPS	LC-SOL3 115KV	Install 14.4 MVAR cap at LC SOL	6/1/2016	6/1/2016
SPS	Mooreland - Potter 345 kv SPS	New 345 kv line from Potter to Mooreland on wooden h-frame structures.	6/1/2015	6/1/2015
SPS	MUSTANG STATION 230/115KV TRANSFORMER CKT 1	Install 252 MVA Transformer	4/1/2007	6/1/2008
SPS	Potter - Roosevelt 345kv	New 345 kv circuit from Potter - Roosevelt 2-795 ACSR & 345/230 kv 560 MVA transformer	6/1/2013	6/1/2013
SPS	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	New 345/230 kv 560 MVA transformer	6/1/2015	6/1/2015
SPS	Pringle - Etter 115 kv	Build New 115 kv line from Pringle to Etter	6/1/2010	6/1/2010
SPS	ROOSEVELT COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1	Add 2nd transformer 230/115 kv 252 MVA	6/1/2013	6/1/2013
SPS	Seven Rivers to Pecos to Potash Junction 230kv	Seven Rivers to Pecos to Potash Junction 230kv	6/1/2007	6/1/2009
SPS	Stateline Project	Tap Elk City - Grapevine. New line from Stateline Tap to Graves Co. New 115/69kvfmr at Graves Co.	6/1/2014	6/1/2014
SPS	Tex-Hitchland-Sherman Tap 115 kv ckt	Route Sherman Tap to Texas Co in/out of New Hitchland Interchange	6/1/2010	6/1/2010
SPS	TUCO INTERCHANGE 115/69KV TRANSFORMER	Move Load to 115 kv at TUCO	6/1/2008	6/1/2008
SPS	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	Install 345/115 kv Transformer at Tuco	6/1/2015	6/1/2015
SUNCG	Spearville - Mooreland 345 kv SUNCG	New 345 kv line from Spearville to Kansas/Oklahoma Stateline	6/1/2015	6/1/2015
WEPL	CLAY CENTER - GREENLEAF 115KV CKT 1	Building a new 115 kv tie with Westar from Greenleaf to Clay Center	6/1/2007	6/1/2009
WEPL	GREENSBURG - JUDSON LARGE 115KV CKT 1	Replace relay	4/1/2007	10/1/2007
WERE	CHAPMAN - CLAY CENTER JUNCTION 115KV CKT 1	Reset terminal equipment	6/1/2007	6/1/2009
WERE	CIRCLEVILLE - HOYT HTI SWITCHING JUNCTION 115KV CKT 1	Rebuild 16.66 mile Circleville-Hoyt HTI Junction 115 kv line.	12/1/2006	6/1/2010
WERE	COFFEYVILLE SUB - CRA 69KV CKT 1	Rebuild Coffeyville - CRA 69 kv line.	6/1/2011	6/1/2011
WERE	COFFEYVILLE SUB - DEARING 69KV CKT 1	Rebuild Dearing - Coffeyville 69 kv line.	6/1/2011	6/1/2011
WERE	COUNTY LINE - HOOK JCT 115KV CKT 1	Rebuild 2.52 mile line with 1192.5 kcmil ACSR	6/1/2011	6/1/2011
WERE	COUNTY LINE - TECUMSEH HILL 115KV CKT 1	Tear down and rebuild 5.32 mile Tecumseh Hill-County Line 115 kv line.	6/1/2011	6/1/2011
WERE	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER	Replace transformers	6/1/2012	6/1/2012
WERE	DEARING (DEARIN1X) 138/69/13.2KV TRANSFORMER CKT 1	2nd Dearing 138-69 kv Transformer	12/1/2011	12/1/2011
WERE	Evans - Grant - Chisolm Rebuild and Conversion Project	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.	6/1/2008	6/1/2009
WERE	GILL ENERGY CENTER EAST - GILLJCT269.0 69KV CKT 1	Rebuild Gill-Gill Jct	6/1/2007	6/1/2008
WERE	GILL ENERGY CENTER EAST - INTERSTATE 138KV CKT 1	Replace wave trap	6/1/2012	6/1/2012
WERE	GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1 #1	Replace bus, jumpers and disconnect switches at MacArthur 69 kv substation to increase line capacity to conductor rating	6/1/2007	7/1/2007
WERE	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1	Replace wave traps on TEC-County Line 115 kv line.	6/1/2011	6/1/2011
WERE	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2	Rebuild 1.52 mile line with 1192.5 kcmil ACSR	6/1/2011	6/1/2011
WERE	NEDSHO - NORTHEAST PARSONS 138KV CKT 1	Replace bus and Jumpers at NE Parsons 138 kv substation	6/1/2013	6/1/2013
WERE	Stranger - Thorton 115 kv	Build Stranger - Thorton 115kv	6/1/2009	6/1/2009
WERE	STRANGER CREEK TRANSFORMER CKT 2	Install second Stranger Creek 345-115 transformer	6/1/2011	6/1/2011
WERE	TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1	Uprate 0.24 mile TEC-Tecumseh Hill 115 kv line to 100 degree operation.	6/1/2010	6/1/2010
WFEC	ALTUS JCT TAP - RUSSELL 138KV CKT 1	Change CT Ratio	6/1/2014	6/1/2014
WFEC	Mooreland - Potter 345 kv WFEC	345 kv line Terminal	6/1/2015	6/1/2015
WFEC	Mooreland 345/138 kv Transformer	New Mooreland 345/138 kv Transformer	6/1/2015	6/1/2015
WFEC	Spearville - Mooreland 345 kv WFEC	New 345 kv line from Kansas/Oklahoma Stateline to Mooreland	6/1/2015	6/1/2015

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

Transmission Owner	Upgrade	Solution	Earliest Date Upgrade Required (COD)	Estimated Date of Upgrade Completion (EOC)
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
KACP	LACYGNE - WEST GARDNER 345KV CKT 1	KCPPL Sponsored Project to Reconductor Line to be In-Service by 6/1/2006	6/1/2006	6/1/2006
OKGE	ARCADIA - REDBUD 345 kv CKT 1	Sponsored Project to Upgrade Terminal Equipment	6/1/2006	6/1/2006
OKGE	ARCADIA - REDBUD 345 kv CKT 2	Sponsored Project to Upgrade Terminal Equipment	6/1/2006	6/1/2006
OKGE	BELINE - EXPLORER GLENPOOL 138KV CKT 1	Reconductor .92miles of line with Drake ACCC/TW.	6/1/2009	6/1/2009
OKGE	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	Reconductor 1.82 miles line with Drake ACCC/TW.	6/1/2009	6/1/2009
OKGE	FPL SWITCH - MOORELAND 138KV CKT 1 OKGE	OGE would rebuild .18 miles of 267AS33 with 795AS33. This would raise OGE's summer and winter Rate B to 287MVA. The limit will still be at WFEC's Mooreland at 390A & 600A.	6/1/2006	4/1/2008
WFEC	FPL SWITCH - MOORELAND 138KV CKT 1 WFEC	Upgrade terminal equipment FPL Sw & Mooreland	6/1/2006	4/1/2008



**Table 5 - Third Party Facility Constraints**

Transmission Owner	Upgrade	Solution	Earliest Data Upgrade Required (COD)	Estimated Date of Upgrade Completion (EOC)	Estimated Engineering & Construction Cost
GSEC	GSEC Midway Interconnection #2	Install 7.2 MVAR Capacitor at GSEC Midway 69 kV	6/1/2011	6/1/2011	\$200,000.00



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

WERE	'KNOLL 3 115 115KV'	75	-0.06968	WERE	'JEFFREY ENERGY CENTER 345KV'	940	-0.00193	-0.06775	46
WERE	'KNOLL 3 115 115KV'	75	-0.06968	WERE	'WACO 138KV'	17,947	-0.00253	-0.06715	46
WERE	'PAWNEE 115KV'	999	-0.03835	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00423	-0.04258	72
WERE	'RICE 115KV'	999	-0.03835	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00423	-0.04258	72
WERE	'PAWNEE 115KV'	999	-0.03835	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.00179	-0.04014	77
WERE	'RICE 115KV'	999	-0.03835	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.00179	-0.04014	77
WERE	'PAWNEE 115KV'	999	-0.03835	WERE	'LAWRENCE ENERGY CENTER 230KV'	230,2191	0.00132	-0.03967	78
WERE	'RICE 115KV'	999	-0.03835	WERE	'LAWRENCE ENERGY CENTER 230KV'	230,2191	0.00132	-0.03967	78
WERE	'PAWNEE 115KV'	999	-0.03835	WERE	'EVANS ENERGY CENTER 138KV'	305	-0.00181	-0.03654	84
WERE	'PAWNEE 115KV'	999	-0.03835	WERE	'JEFFREY ENERGY CENTER 230KV'	470	-0.00169	-0.03666	84
WERE	'RICE 115KV'	999	-0.03835	WERE	'EVANS ENERGY CENTER 138KV'	305	-0.00181	-0.03654	84
WERE	'RICE 115KV'	999	-0.03835	WERE	'JEFFREY ENERGY CENTER 230KV'	470	-0.00169	-0.03666	84
WERE	'PAWNEE 115KV'	999	-0.03835	WERE	'JEFFREY ENERGY CENTER 345KV'	940	-0.00193	-0.03642	85
WERE	'RICE 115KV'	999	-0.03835	WERE	'JEFFREY ENERGY CENTER 345KV'	940	-0.00193	-0.03642	85
WERE	'PAWNEE 115KV'	999	-0.03835	WERE	'GILL ENERGY CENTER 138KV'	77	-0.00262	-0.03573	86
WERE	'RICE 115KV'	999	-0.03835	WERE	'GILL ENERGY CENTER 138KV'	77	-0.00262	-0.03573	86
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.0258	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00423	-0.03003	103
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.02581	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00423	-0.03004	103

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

Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

Upgrade: CIRCLEVILLE - HOYT HTI SWITCHING JUNCTION 115KV CKT 1  
 Limiting Facility: CIRCLEVILLE - HOYT HTI SWITCHING JUNCTION 115KV CKT 1  
 Direction: To->From  
 Line Outage: CONCORDIA - EAST MANHATTAN 230KV CKT 1  
 Flowgate: 57152571651587585686114406WP  
 Date Redispatch Needed: 12/1/06 - 4/1/07  
 Season Flowgate Identified: 2006 Winter Peak

Reservation	Relief Amount	Aggregate Relief Amount
1090964	0.2	0.3
1090965	0.1	0.3

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CHANUTE 69KV'	35,344	0.00472	-0.68381	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CITY OF AUGUSTA 69KV'	17,25201	-0.00279	-0.6763	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CITY OF BURLINGTON 69KV'	4.8	0.00844	-0.68753	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CITY OF ERIE 69KV'	1,998	0.00472	-0.68381	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CITY OF FREDONIA 69KV'	1,298	0.00377	-0.68286	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CITY OF GIRARD 69KV'	1,493	0.00585	-0.68494	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CITY OF IOLA 69KV'	13,978	0.00547	-0.68456	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CITY OF MULVANE 69KV'	3,694	0.00398	-0.68307	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CITY OF WELLINGTON 69KV'	24	0.00392	-0.68301	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19,97	0.00844	-0.68753	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'COLBY 115KV'	6,639483	-0.01029	-0.6688	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'EVANS ENERGY CENTER 138KV'	118,696	0.00599	-0.68508	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'HUTCHINSON ENERGY CENTER 115KV'	40	0.01275	-0.69184	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03451	-0.7136	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03481	-0.7139	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.0283	-0.70739	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'LAWRENCE ENERGY CENTER 230KV'	225,5185	0.02863	-0.70772	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.72266	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'WACO 138KV'	17,953	0.00468	-0.68377	0
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CHANUTE 69KV'	35,344	0.00472	-0.3311	1
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CITY OF AUGUSTA 69KV'	17,25201	-0.00279	-0.32359	1
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CITY OF BURLINGTON 69KV'	4.8	0.00844	-0.33482	1
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CITY OF ERIE 69KV'	1,998	0.00472	-0.3311	1
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CITY OF FREDONIA 69KV'	1,298	0.00377	-0.33015	1
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CITY OF GIRARD 69KV'	1,493	0.00585	-0.33223	1
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CITY OF IOLA 69KV'	13,978	0.00547	-0.33185	1
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CITY OF MULVANE 69KV'	3,694	0.00398	-0.33036	1
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CITY OF WELLINGTON 69KV'	24	0.00392	-0.3303	1
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19,97	0.00844	-0.33482	1
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'COLBY 115KV'	6,639483	-0.01029	-0.31609	1
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'EVANS ENERGY CENTER 138KV'	118,696	0.00599	-0.33237	1
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'HUTCHINSON ENERGY CENTER 115KV'	40	0.01275	-0.33913	1
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03451	-0.36089	1
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03481	-0.36119	1
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.0283	-0.35468	1
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'LAWRENCE ENERGY CENTER 230KV'	225,5185	0.02863	-0.35501	1
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.36995	1
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'WACO 138KV'	17,953	0.00468	-0.33106	1
WEPL	'CLIFTON 115KV'	70	-0.1882	WEPL	'GRAY COUNTY WIND FARM 115KV'	36	-0.00502	-0.18319	1
WEPL	'CLIFTON 115KV'	70	-0.1882	WEPL	'JUDSON LARGE 115KV'	42,10201	-0.00501	-0.18319	1
WEPL	'GREENLEAF 115KV'	14.2	-0.21434	WEPL	'GRAY COUNTY WIND FARM 115KV'	36	-0.00502	-0.20932	1
WEPL	'GREENLEAF 115KV'	14.2	-0.21434	WEPL	'JUDSON LARGE 115KV'	42,10201	-0.00501	-0.20933	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CHANUTE 69KV'	35,344	0.00472	-0.3125	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CITY OF AUGUSTA 69KV'	17,25201	-0.00279	-0.30499	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CITY OF BURLINGTON 69KV'	4.8	0.00844	-0.31622	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CITY OF ERIE 69KV'	1,998	0.00472	-0.3125	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CITY OF FREDONIA 69KV'	1,298	0.00377	-0.31155	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CITY OF GIRARD 69KV'	1,493	0.00585	-0.31363	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CITY OF IOLA 69KV'	13,978	0.00547	-0.31325	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CITY OF MULVANE 69KV'	3,694	0.00398	-0.31176	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CITY OF WELLINGTON 69KV'	24	0.00392	-0.3117	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19,97	0.00844	-0.31622	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'COLBY 115KV'	6,639483	-0.01029	-0.29749	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'EVANS ENERGY CENTER 138KV'	118,696	0.00599	-0.31377	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'HUTCHINSON ENERGY CENTER 115KV'	40	0.01275	-0.32053	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03451	-0.34229	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03481	-0.34259	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.0283	-0.33608	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'LAWRENCE ENERGY CENTER 230KV'	225,5185	0.02863	-0.33641	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.35135	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'WACO 138KV'	17,953	0.00468	-0.31246	1
WEPL	'BELOIT 115KV'	16.6	-0.12815	WEPL	'GRAY COUNTY WIND FARM 115KV'	36	-0.00502	-0.12313	2
WEPL	'BELOIT 115KV'	16.6	-0.12815	WEPL	'JUDSON LARGE 115KV'	42,10201	-0.00501	-0.12314	2
WEPL	'SMITH CENTER 115KV'	6.15	-0.09275	WEPL	'GRAY COUNTY WIND FARM 115KV'	36	-0.00502	-0.08773	3
WEPL	'SMITH CENTER 115KV'	6.15	-0.09275	WEPL	'JUDSON LARGE 115KV'	42,10201	-0.00501	-0.08774	3
WERE	'ATWOOD 115KV'	4	-0.01002	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.05359	5
WERE	'CITY OF AUGUSTA 69KV'	10,08799	-0.00279	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.04636	5
WERE	'COLBY 115KV'	6,360517	-0.01029	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.05386	5
WERE	'GETTY 69KV'	35	-0.00763	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.0512	5
WERE	'GREAT BEND PLANT 69KV'	10	-0.0043	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.04787	5

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

WERE	'KNOLL 3 115 115KV'	75	-0.00767	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.05124	5
WERE	'ATWOOD 115KV'	4	-0.01002	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03451	-0.04453	6
WERE	'ATWOOD 115KV'	4	-0.01002	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03481	-0.04483	6
WERE	'CITY OF FREDONIA 69KV'	8.996	0.00377	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.0398	6
WERE	'CITY OF MULVANE 69KV'	12.096	0.00398	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03959	6
WERE	'CITY OF NEODESHA 69KV'	4.5	0.00402	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03955	6
WERE	'CITY OF WELLINGTON 69KV'	19.5	0.00392	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03965	6
WERE	'CITY OF WINFIELD 69KV'	40	0.00302	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.04055	6
WERE	'COLBY 115KV'	6.360517	-0.01029	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03451	-0.0448	6
WERE	'COLBY 115KV'	6.360517	-0.01029	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03481	-0.0451	6
WERE	'GETTY 69KV'	35	-0.00763	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03451	-0.04214	6
WERE	'GETTY 69KV'	35	-0.00763	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03481	-0.04244	6
WERE	'KNOLL 3 115 115KV'	75	-0.00767	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03451	-0.04218	6
WERE	'KNOLL 3 115 115KV'	75	-0.00767	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03481	-0.04248	6
WERE	'LYONS 115KV'	999	0.00428	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03929	6
WERE	'OXFORD 138KV'	3	0.00366	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03991	6
WERE	'PAWNEE 115KV'	999	-0.00053	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.0441	6
WERE	'RICE 115KV'	999	-0.00053	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.0441	6
WERE	'ST JOHN 115KV'	7.5	-0.00053	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.0441	6
WERE	'ATWOOD 115KV'	4	-0.01002	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.0283	-0.03832	7
WERE	'ATWOOD 115KV'	4	-0.01002	WERE	'LAWRENCE ENERGY CENTER 230KV'	225.5185	0.02863	-0.03865	7
WERE	'CHANUTE 69KV'	52.456	0.00472	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03885	7
WERE	'CITY OF AUGUSTA 69KV'	10.08799	-0.00279	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03451	-0.0373	7
WERE	'CITY OF AUGUSTA 69KV'	10.08799	-0.00279	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03481	-0.0376	7
WERE	'CITY OF BURLINGTON 69KV'	7.7	0.00844	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03513	7
WERE	'CITY OF ERIE 69KV'	24.532	0.00472	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03885	7
WERE	'CITY OF GIRARD 69KV'	9.207	0.00585	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03772	7
WERE	'CITY OF IOLA 69KV'	23.65	0.00547	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.0381	7
WERE	'COLBY 115KV'	6.360517	-0.01029	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.0283	-0.03859	7
WERE	'COLBY 115KV'	6.360517	-0.01029	WERE	'LAWRENCE ENERGY CENTER 230KV'	225.5185	0.02863	-0.03892	7

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: CIRCLEVILLE - HOYT HTI SWITCHING JUNCTION 115KV CKT 1  
 Limiting Facility: CIRCLEVILLE - HOYT HTI SWITCHING JUNCTION 115KV CKT 1  
 Direction: To->From  
 Line Outage: CONCORDIA (CONCORD6) 230/115/13.8KV TRANSFORMER CKT 1  
 Flowgate: 57152571651CONCORD6314406WP  
 Date Redispatch Needed: 12/1/06 - 4/1/07  
 Season Flowgate Identified: 2006 Winter Peak

Reservation	Relief Amount	Aggregate Relief Amount	Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
1090964	0.2	0.2	WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CHANUTE 69KV'	35.344	0.00472	-0.68381	0
1090965	0.1	0.2	WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CITY OF AUGUSTA 69KV'	17.25201	-0.00279	-0.6763	0
			WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CITY OF BURLINGTON 69KV'	4.8	0.00844	-0.68753	0
			WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CITY OF ERIE 69KV'	1.998	0.00472	-0.68381	0
			WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CITY OF FREDONIA 69KV'	1.298	0.00377	-0.68286	0
			WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CITY OF GIRARD 69KV'	1.493	0.00585	-0.68494	0
			WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CITY OF IOLA 69KV'	13.978	0.00547	-0.68456	0
			WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CITY OF MULVANE 69KV'	3.694	0.00398	-0.68307	0
			WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CITY OF WELLINGTON 69KV'	24	0.00392	-0.68301	0
			WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00844	-0.68753	0
			WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'COLBY 115KV'	6.639483	-0.01029	-0.6668	0
			WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'EVANS ENERGY CENTER 138KV'	118.696	0.00599	-0.68508	0
			WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'HUTCHINSON ENERGY CENTER 115KV'	40	0.01275	-0.69184	0
			WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03451	-0.7136	0
			WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03481	-0.7139	0
			WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.0283	-0.70739	0
			WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'LAWRENCE ENERGY CENTER 230KV'	225.5185	0.02863	-0.70772	0
			WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.72266	0
			WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'WACO 138KV'	17.953	0.00468	-0.68377	0
			WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CHANUTE 69KV'	35.344	0.00472	-0.3311	1
			WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CITY OF AUGUSTA 69KV'	17.25201	-0.00279	-0.32359	1
			WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CITY OF BURLINGTON 69KV'	4.8	0.00844	-0.33482	1
			WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CITY OF ERIE 69KV'	1.998	0.00472	-0.3311	1
			WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CITY OF FREDONIA 69KV'	1.298	0.00377	-0.33015	1
			WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CITY OF GIRARD 69KV'	1.493	0.00585	-0.33223	1
			WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CITY OF IOLA 69KV'	13.978	0.00547	-0.33185	1
			WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CITY OF MULVANE 69KV'	3.694	0.00398	-0.33036	1
			WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CITY OF WELLINGTON 69KV'	24	0.00392	-0.3303	1
			WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00844	-0.33482	1
			WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'COLBY 115KV'	6.639483	-0.01029	-0.31609	1
			WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'EVANS ENERGY CENTER 138KV'	118.696	0.00599	-0.33237	1
			WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'HUTCHINSON ENERGY CENTER 115KV'	40	0.01275	-0.33913	1
			WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03451	-0.36089	1
			WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03481	-0.36119	1
			WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.0283	-0.35468	1
			WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'LAWRENCE ENERGY CENTER 230KV'	225.5185	0.02863	-0.35501	1
			WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.36995	1
			WERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'WACO 138KV'	17.953	0.00468	-0.33106	1
			WEPL	'CLIFTON 115KV'	70	-0.1882	WEPL	'GRAY COUNTY WIND FARM 115KV'	36	-0.00502	-0.18318	1
			WEPL	'CLIFTON 115KV'	70	-0.1882	WEPL	'JUDSON LARGE 115KV'	42.10201	-0.00501	-0.18319	1
			WEPL	'GREENLEAF 115KV'	14.2	-0.21434	WEPL	'GRAY COUNTY WIND FARM 115KV'	36	-0.00502	-0.20932	1
			WEPL	'GREENLEAF 115KV'	14.2	-0.21434	WEPL	'JUDSON LARGE 115KV'	42.10201	-0.00501	-0.20933	1
			WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CHANUTE 69KV'	35.344	0.00472	-0.3125	1
			WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CITY OF AUGUSTA 69KV'	17.25201	-0.00279	-0.30499	1
			WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CITY OF BURLINGTON 69KV'	4.8	0.00844	-0.31622	1
			WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CITY OF ERIE 69KV'	1.998	0.00472	-0.3125	1
			WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CITY OF FREDONIA 69KV'	1.298	0.00377	-0.31155	1
			WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CITY OF GIRARD 69KV'	1.493	0.00585	-0.31363	1
			WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CITY OF IOLA 69KV'	13.978	0.00547	-0.31325	1
			WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CITY OF MULVANE 69KV'	3.694	0.00398	-0.31176	1
			WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CITY OF WELLINGTON 69KV'	24	0.00392	-0.3117	1
			WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00844	-0.31622	1
			WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'COLBY 115KV'	6.639483	-0.01029	-0.29749	1
			WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'EVANS ENERGY CENTER 138KV'	118.696	0.00599	-0.31377	1
			WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'HUTCHINSON ENERGY CENTER 115KV'	40	0.01275	-0.32053	1
			WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03451	-0.34229	1
			WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03481	-0.34259	1
			WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.0283	-0.33608	1

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

WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'LAWRENCE ENERGY CENTER 230KV'	225.5185	0.02863	-0.33641	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.35135	1
WERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'WACO 138KV'	17.953	0.00468	-0.31246	1
WEPL	'BELOIT 115KV'	16.6	-0.12815	WEPL	'GRAY COUNTY WIND FARM 115KV'	36	-0.00502	-0.12313	2
WEPL	'BELOIT 115KV'	16.6	-0.12815	WEPL	'JUDSON LARGE 115KV'	42.10201	-0.00501	-0.12314	2
WEPL	'SMITH CENTER 115KV'	6.15	-0.09275	WEPL	'GRAY COUNTY WIND FARM 115KV'	36	-0.00502	-0.08773	3
WEPL	'SMITH CENTER 115KV'	6.15	-0.09275	WEPL	'JUDSON LARGE 115KV'	42.10201	-0.00501	-0.08774	3
WERE	'ATWOOD 115KV'	4	-0.01002	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.05359	4
WERE	'COLBY 115KV'	6.360517	-0.01029	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.05386	4
WERE	'GETTY 69KV'	35	-0.00763	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.0512	4
WERE	'KNOLL 3 115 115KV'	75	-0.00767	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.05124	4
WERE	'ATWOOD 115KV'	4	-0.01002	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03451	-0.04453	5
WERE	'ATWOOD 115KV'	4	-0.01002	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03481	-0.04483	5
WERE	'CITY OF AUGUSTA 69KV'	10.08799	-0.00279	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.04636	5
WERE	'CITY OF WINFIELD 69KV'	40	0.00302	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.04055	5
WERE	'COLBY 115KV'	6.360517	-0.01029	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03451	-0.0448	5
WERE	'COLBY 115KV'	6.360517	-0.01029	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03481	-0.0451	5
WERE	'GETTY 69KV'	35	-0.00763	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03451	-0.04214	5
WERE	'GETTY 69KV'	35	-0.00763	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03481	-0.04244	5
WERE	'GREAT BEND PLANT 69KV'	10	-0.0043	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.04787	5
WERE	'KNOLL 3 115 115KV'	75	-0.00767	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03451	-0.04218	5
WERE	'KNOLL 3 115 115KV'	75	-0.00767	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03481	-0.04248	5
WERE	'PAWNEE 115KV'	999	-0.00053	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.0441	5
WERE	'RICE 115KV'	999	-0.00053	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.0441	5
WERE	'ST JOHN 115KV'	7.5	-0.00053	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.0441	5
WERE	'ATWOOD 115KV'	4	-0.01002	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.0283	-0.03832	6
WERE	'ATWOOD 115KV'	4	-0.01002	WERE	'LAWRENCE ENERGY CENTER 230KV'	225.5185	0.02863	-0.03865	6
WERE	'CHANUTE 69KV'	52.456	0.00472	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03885	6
WERE	'CITY OF AUGUSTA 69KV'	10.08799	-0.00279	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03451	-0.0373	6
WERE	'CITY OF AUGUSTA 69KV'	10.08799	-0.00279	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03481	-0.0376	6
WERE	'CITY OF BURLINGTON 69KV'	7.7	0.00844	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03513	6
WERE	'CITY OF ERIE 69KV'	24.532	0.00472	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03885	6
WERE	'CITY OF FREDONIA 69KV'	8.996	0.00377	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.0398	6
WERE	'CITY OF GIRARD 69KV'	9.207	0.00585	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03772	6
WERE	'CITY OF IOLA 69KV'	23.65	0.00547	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.0381	6
WERE	'CITY OF MULVANE 69KV'	12.096	0.00398	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03959	6
WERE	'CITY OF NEODESHA 69KV'	4.5	0.00402	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03955	6
WERE	'CITY OF WELLINGTON 69KV'	19.5	0.00392	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03965	6
WERE	'COLBY 115KV'	6.360517	-0.01029	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.0283	-0.03859	6
WERE	'COLBY 115KV'	6.360517	-0.01029	WERE	'LAWRENCE ENERGY CENTER 230KV'	225.5185	0.02863	-0.03892	6
WERE	'EVANS ENERGY CENTER 138KV'	674.304	0.00599	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03758	6
WERE	'GETTY 69KV'	35	-0.00763	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.0283	-0.03593	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: 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: CHISLM1X1421570405706512208SP  
 Date Redispatch Needed: Starting 2008 6/1 - 10/1 Until EOC  
 Season Flowgate Identified: 2008 Summer Peak

Reservation	Relief Amount	Aggregate Relief Amount							Aggregate Redispatch Amount (MW)
1086655	2.2	2.2							
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	'GILL ENERGY CENTER 69KV'	73	-0.05046	WERE	'CITY OF ERIE 69KV'	23.374	0.00084	-0.0513	42
WERE	'GILL ENERGY CENTER 69KV'	73	-0.05046	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	0.00167	-0.05213	42
WERE	'GILL ENERGY CENTER 69KV'	73	-0.05046	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.00006	-0.05052	43
WERE	'GILL ENERGY CENTER 69KV'	73	-0.05046	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.00006	-0.05052	43
WERE	'GILL ENERGY CENTER 69KV'	73	-0.05046	WERE	'LAWRENCE ENERGY CENTER 115KV'	85	0.00031	-0.05077	43
WERE	'GILL ENERGY CENTER 69KV'	73	-0.05046	WERE	'LAWRENCE ENERGY CENTER 230KV'	229.0237	0.0003	-0.05076	43
WERE	'GILL ENERGY CENTER 69KV'	73	-0.05046	WERE	'TECUMSEH ENERGY CENTER 115KV'	128	0.00035	-0.05081	43
WERE	'GILL ENERGY CENTER 69KV'	73	-0.05046	WERE	'BPU - CITY OF MCPHERSON 115KV'	135	-0.00136	-0.0491	44
WERE	'GILL ENERGY CENTER 69KV'	73	-0.05046	WERE	'HUTCHINSON ENERGY CENTER 115KV'	120	-0.00183	-0.04863	45
WERE	'GILL ENERGY CENTER 69KV'	73	-0.05046	WERE	'KNOLL 3 115 115KV'	75	-0.00192	-0.04854	45
WERE	'GILL ENERGY CENTER 69KV'	73	-0.05046	WERE	'EVANS ENERGY CENTER 138KV'	431.0884	-0.00301	-0.04745	46

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: GILL ENERGY CENTER EAST - GILLJCT269.0 69KV CKT 1  
 Limiting Facility: GILL ENERGY CENTER EAST - GILLJCT269.0 69KV CKT 1  
 Direction: From->To  
 Line Outage: GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1  
 Flowgate: 57795577981577955781311107SP  
 Date Redispatch Needed: 6/1/07 - 10/1/07  
 Season Flowgate Identified: 2007 Summer Peak

Reservation	Relief Amount	Aggregate Relief Amount							Aggregate Redispatch Amount (MW)
1090817	2.3	6.6							
1090964	3.3	6.6							
1090965	0.9	6.6							
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	'CITY OF MULVANE 69KV'	7.502	-0.08073	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.31352	21
WERE	'CITY OF IOLA 69KV'	13.361	-0.00105	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.23384	28
WERE	'CLAY CENTER JUNCTION 115KV'	15.161	0.00069	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.2321	28
WERE	'GETTY 69KV'	35	-0.00422	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.23701	28
WERE	'HOLTON 115KV'	19.8	-0.00022	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.23301	28
WERE	'JEFFREY ENERGY CENTER 230KV'	24	-0.00007	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.23286	28
WERE	'JEFFREY ENERGY CENTER 345KV'	42	-0.00007	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.23286	28
WERE	'LATHAM1234.0 345KV'	150	-0.00298	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.23577	28
WERE	'LYONS 115KV'	999	-0.00036	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.23315	28
WERE	'NEOSHO ENERGY CENTER 138KV'	47	-0.00104	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.23383	28
WERE	'SMOKYHILL 230 230KV'	72	0.00205	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.23074	28
WERE	'SOUTH SENECA 115KV'	16.7	0	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.23279	28
WERE	'BPU - CITY OF MCPHERSON 115KV'	21.13672	0.00286	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.22993	29
WERE	'GREAT BEND PLANT 69KV'	10	0.00699	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.2258	29
WERE	'HUTCHINSON ENERGY CENTER 115KV'	133	0.00389	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.2289	29
WERE	'HUTCHINSON ENERGY CENTER 69KV'	12	0.0039	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.22889	29

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

WERE	'KNOLL 3 115 115KV'	75	0.00351	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.22928	29
WERE	'PAWNEE 115KV'	999	0.01303	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.21976	30
WERE	'RICE 115KV'	999	0.01303	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.21976	30
WERE	'CITY OF WINFIELD 69KV'	40	0.02493	WERE	'GILL ENERGY CENTER 69KV'	75	0.23279	-0.20786	32
WERE	'GETTY 69KV'	35	-0.00422	WERE	'GILL ENERGY CENTER 138KV'	171	0.07582	-0.08004	82
WERE	'LATHAM1234.0 345KV'	150	-0.00298	WERE	'GILL ENERGY CENTER 138KV'	171	0.07582	-0.0788	83
WERE	'NEOSHO ENERGY CENTER 138KV'	47	-0.00104	WERE	'GILL ENERGY CENTER 138KV'	171	0.07582	-0.07686	85
WERE	'LYONS 115KV'	999	-0.00036	WERE	'GILL ENERGY CENTER 138KV'	171	0.07582	-0.07618	86
WERE	'JEFFREY ENERGY CENTER 345KV'	42	-0.00077	WERE	'GILL ENERGY CENTER 138KV'	171	0.07582	-0.07589	87
WERE	'SMOKYHIL 230 230KV'	72	0.00205	WERE	'GILL ENERGY CENTER 138KV'	171	0.07582	-0.07377	89
WERE	'HUTCHINSON ENERGY CENTER 115KV'	133	0.00389	WERE	'GILL ENERGY CENTER 138KV'	171	0.07582	-0.07193	91
WERE	'KNOLL 3 115 115KV'	75	0.00351	WERE	'GILL ENERGY CENTER 138KV'	171	0.07582	-0.07231	91

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: GILL ENERGY CENTER EAST - GILLJCT269.0 69KV CKT 1  
 Limiting Facility: GILL ENERGY CENTER EAST - GILLJCT269.0 69KV CKT 1  
 Direction: From->To  
 Line Outage: HOOVER NORTH (HOOVER1X) 138/69/13.2KV TRANSFORMER CKT 1  
 Flowgate: 57795577981HOOVER1X4211107SP  
 Date Redispatch Needed: 6/1/07 - 10/1/07  
 Season Flowgate Identified: 2007 Summer Peak

Reservation	Relief Amount	Aggregate Relief Amount
1090817	1.6	4.5
1090964	2.3	4.5
1090965	0.6	4.5

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	'CITY OF MULVANE 69KV'	7.502	-0.0605	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.21929	21
WERE	'CITY OF IOLA 69KV'	13.361	-0.00102	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15981	28
WERE	'GETTY 69KV'	35	-0.00446	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.16325	28
WERE	'HOLTON 115KV'	19.8	-0.00003	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15882	28
WERE	'JEFFREY ENERGY CENTER 230KV'	24	0.00018	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15861	28
WERE	'JEFFREY ENERGY CENTER 345KV'	42	0.00017	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15862	28
WERE	'LATHAM1234.0 345KV'	150	-0.00277	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.16156	28
WERE	'LYONS 115KV'	999	-0.00033	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15912	28
WERE	'NEOSHO ENERGY CENTER 138KV'	47	-0.001	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15979	28
WERE	'SOUTH SENECA 115KV'	16.7	0.0001	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15869	28
WERE	'BPU - CITY OF MCPHERSON 115KV'	21.13672	0.0024	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15639	29
WERE	'CLAY CENTER JUNCTION 115KV'	15.161	0.00077	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15802	29
WERE	'GREAT BEND PLANT 69KV'	10	0.00548	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15331	29
WERE	'HUTCHINSON ENERGY CENTER 115KV'	133	0.00318	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15561	29
WERE	'HUTCHINSON ENERGY CENTER 69KV'	12	0.00319	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.1556	29
WERE	'KNOLL 3 115 115KV'	75	0.00286	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15593	29
WERE	'SMOKYHIL 230 230KV'	72	0.00179	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.157	29
WERE	'PAWNEE 115KV'	999	0.01005	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.14874	30
WERE	'RICE 115KV'	999	0.01005	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.14874	30
WERE	'CITY OF WINFIELD 69KV'	40	0.01599	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.1428	32
WERE	'GETTY 69KV'	35	-0.00446	WERE	'GILL ENERGY CENTER 138KV'	171	0.07582	-0.062	73
WERE	'LATHAM1234.0 345KV'	150	-0.00277	WERE	'GILL ENERGY CENTER 138KV'	171	0.07582	-0.06031	75
WERE	'NEOSHO ENERGY CENTER 138KV'	47	-0.001	WERE	'GILL ENERGY CENTER 138KV'	171	0.07582	-0.05854	77
WERE	'LYONS 115KV'	999	-0.00033	WERE	'GILL ENERGY CENTER 138KV'	171	0.07582	-0.05787	78
WERE	'JEFFREY ENERGY CENTER 345KV'	42	0.00017	WERE	'GILL ENERGY CENTER 138KV'	171	0.07582	-0.05737	79
WERE	'SMOKYHIL 230 230KV'	72	0.00179	WERE	'GILL ENERGY CENTER 138KV'	171	0.07582	-0.05575	81
WERE	'HUTCHINSON ENERGY CENTER 115KV'	133	0.00318	WERE	'GILL ENERGY CENTER 138KV'	171	0.07582	-0.05436	83
WERE	'KNOLL 3 115 115KV'	75	0.00286	WERE	'GILL ENERGY CENTER 138KV'	171	0.07582	-0.05468	83
WERE	'CITY OF WINFIELD 69KV'	40	0.01599	WERE	'GILL ENERGY CENTER 138KV'	171	0.07582	-0.04155	109

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: GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1  
 Limiting Facility: GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1  
 Direction: From->To  
 Line Outage: GILL ENERGY CENTER EAST - GILLJCT269.0 69KV CKT 1  
 Flowgate: 57795578131577955779811107SP  
 Date Redispatch Needed: 7/1/07 - 10/1/07  
 Season Flowgate Identified: 2007 Summer Peak

Reservation	Relief Amount	Aggregate Relief Amount
1090817	2.0	5.6
1090964	2.8	5.6
1090965	0.8	5.6

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	'CITY OF MULVANE 69KV'	7.502	-0.08353	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.28339	20
WERE	'CITY OF IOLA 69KV'	13.361	-0.00097	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.20083	28
WERE	'CLAY CENTER JUNCTION 115KV'	15.161	0.00067	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.19919	28
WERE	'GETTY 69KV'	35	-0.004	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.20386	28
WERE	'HOLTON 115KV'	19.8	-0.00015	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.20001	28
WERE	'JEFFREY ENERGY CENTER 230KV'	24	0.00001	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.19985	28
WERE	'JEFFREY ENERGY CENTER 345KV'	42	0	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.19986	28
WERE	'LATHAM1234.0 345KV'	150	-0.00271	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.20257	28
WERE	'LYONS 115KV'	999	-0.00033	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.20019	28
WERE	'NEOSHO ENERGY CENTER 138KV'	47	-0.00096	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.20082	28
WERE	'SOUTH SENECA 115KV'	16.7	0.00003	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.19983	28
WERE	'BPU - CITY OF MCPHERSON 115KV'	21.13672	0.00255	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.19731	29
WERE	'GREAT BEND PLANT 69KV'	10	0.00614	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.19372	29
WERE	'HUTCHINSON ENERGY CENTER 115KV'	133	0.00345	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.19641	29
WERE	'HUTCHINSON ENERGY CENTER 69KV'	12	0.00346	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.1964	29
WERE	'KNOLL 3 115 115KV'	75	0.00311	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.19675	29
WERE	'SMOKYHIL 230 230KV'	72	0.00185	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.19801	29
WERE	'PAWNEE 115KV'	999	0.01139	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.18847	30
WERE	'RICE 115KV'	999	0.01139	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.18847	30
WERE	'CITY OF WINFIELD 69KV'	40	0.02087	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.17899	32
WERE	'GETTY 69KV'	35	-0.004	WERE	'GILL ENERGY CENTER 138KV'	171	0.06603	-0.07003	81
WERE	'LATHAM1234.0 345KV'	150	-0.00271	WERE	'GILL ENERGY CENTER 138KV'	171	0.06603	-0.06874	82
WERE	'NEOSHO ENERGY CENTER 138KV'	47	-0.00096	WERE	'GILL ENERGY CENTER 138KV'	171	0.06603	-0.06699	84
WERE	'LYONS 115KV'	999	-0.00033	WERE	'GILL ENERGY CENTER 138KV'	171	0.06603	-0.06636	85
WERE	'JEFFREY ENERGY CENTER 345KV'	42	0	WERE	'GILL ENERGY CENTER 138KV'	171	0.06603	-0.06603	86
WERE	'SMOKYHIL 230 230KV'	72	0.00185	WERE	'GILL ENERGY CENTER 138KV'	171	0.06603	-0.06418	88

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

WERE	HUTCHINSON ENERGY CENTER 115KV'	133	0.00345	WERE	GILL ENERGY CENTER 138KV'	171	0.06603	-0.06258	90
WERE	KNOLL 3 115 115KV'	75	0.00311	WERE	GILL ENERGY CENTER 138KV'	171	0.06603	-0.06292	90

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: GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1 #1  
 Limiting Facility: GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1  
 Direction: From->To  
 Line Outage: GILLJCT269.0 - OATVILLE 69KV CKT 1  
 Flowgate: 57795578131577985782511107SP  
 Date Redispatch Needed: 7/1/07 - 10/1/07  
 Season Flowgate Identified: 2007 Summer Peak

Reservation	Relief Amount	Aggregate Relief Amount
1090817	1.6	4.4
1090964	2.2	4.4
1090965	0.6	4.4

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	CITY OF MULVANE 69KV'	7.502	-0.09763	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.25205	17
WERE	CITY OF IOLA 69KV'	13.361	-0.00091	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.15533	28
WERE	GETTY 69KV'	35	-0.00398	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.1584	28
WERE	HOLTON 115KV'	19.8	-0.00002	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.15444	28
WERE	JEFFREY ENERGY CENTER 230KV'	24	0.00016	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.15426	28
WERE	JEFFREY ENERGY CENTER 345KV'	42	0.00015	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.15427	28
WERE	LATHAM1234.0 345KV'	150	-0.00245	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.15687	28
WERE	LYONS 115KV'	999	-0.0003	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.15472	28
WERE	NEOSHO ENERGY CENTER 138KV'	47	-0.00089	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.15531	28
WERE	SOUTH SENECA 115KV'	16.7	0.0001	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.15432	28
WERE	BPU - CITY OF MCPHERSON 115KV'	21.13672	0.00221	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.15221	29
WERE	CLAY CENTER JUNCTION 115KV'	15.161	0.0007	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.15372	29
WERE	GREAT BEND PLANT 69KV'	10	0.00505	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.14937	29
WERE	HUTCHINSON ENERGY CENTER 115KV'	133	0.00293	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.15149	29
WERE	HUTCHINSON ENERGY CENTER 69KV'	12	0.00293	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.15149	29
WERE	KNOLL 3 115 115KV'	75	0.00263	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.15179	29
WERE	SMOKYHIL 230 230KV'	72	0.00164	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.15278	29
WERE	PAWNEE 115KV'	999	0.00929	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.14513	30
WERE	RICE 115KV'	999	0.00929	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.14513	30
WERE	CITY OF WINFIELD 69KV'	40	0.01487	WERE	GILL ENERGY CENTER 69KV'	75	0.15442	-0.13955	31
WERE	GETTY 69KV'	35	-0.00398	WERE	GILL ENERGY CENTER 138KV'	171	0.0532	-0.05718	77
WERE	LATHAM1234.0 345KV'	150	-0.00245	WERE	GILL ENERGY CENTER 138KV'	171	0.0532	-0.05565	79
WERE	NEOSHO ENERGY CENTER 138KV'	47	-0.00089	WERE	GILL ENERGY CENTER 138KV'	171	0.0532	-0.05409	81
WERE	LYONS 115KV'	999	-0.0003	WERE	GILL ENERGY CENTER 138KV'	171	0.0532	-0.0535	82
WERE	JEFFREY ENERGY CENTER 345KV'	42	0.00015	WERE	GILL ENERGY CENTER 138KV'	171	0.0532	-0.05305	83
WERE	SMOKYHIL 230 230KV'	72	0.00164	WERE	GILL ENERGY CENTER 138KV'	171	0.0532	-0.05156	85
WERE	HUTCHINSON ENERGY CENTER 115KV'	133	0.00293	WERE	GILL ENERGY CENTER 138KV'	171	0.0532	-0.05027	87
WERE	KNOLL 3 115 115KV'	75	0.00263	WERE	GILL ENERGY CENTER 138KV'	171	0.0532	-0.05057	87
WERE	CITY OF WINFIELD 69KV'	40	0.01487	WERE	GILL ENERGY CENTER 138KV'	171	0.0532	-0.03833	114

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: HAYS PLANT - SOUTH HAYS 115KV CKT 1  
 Limiting Facility: HAYS PLANT - SOUTH HAYS 115KV CKT 1  
 Direction: To->From  
 Line Outage: KNOLL 230/115KV TRANSFORMER CKT 1  
 Flowgate: 56562565531565585656111208SP  
 Date Redispatch Needed: Starting 2008 6/1 - 10/1 Until EOC  
 Season Flowgate Identified: 2008 Summer Peak

Reservation	Relief Amount	Aggregate Relief Amount
1090817	6.2	23.7
1090829	3.8	23.7
1090964	8.7	23.7
1090965	2.5	23.7
1091057	2.5	23.7

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	KNOLL 3 115 115KV'	75	-0.64896	WERE	BPU - CITY OF MCPHERSON 115KV'	135	0.03494	-0.6839	35
WERE	KNOLL 3 115 115KV'	75	-0.64896	WERE	HUTCHINSON ENERGY CENTER 115KV'	180	0.03708	-0.68604	35
WERE	KNOLL 3 115 115KV'	75	-0.64896	WERE	HUTCHINSON ENERGY CENTER 69KV'	40	0.03708	-0.68604	35
WERE	KNOLL 3 115 115KV'	75	-0.64896	WERE	ABILENE ENERGY CENTER 115KV'	40	0.02013	-0.66909	35
WERE	KNOLL 3 115 115KV'	75	-0.64896	WERE	JEFFREY ENERGY CENTER 345KV'	940	0.00657	-0.65553	36
WERE	KNOLL 3 115 115KV'	75	-0.64896	WERE	CITY OF ERIE 69KV'	23.374	0.00208	-0.65104	36
WERE	KNOLL 3 115 115KV'	75	-0.64896	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98	0.00308	-0.65204	36
WERE	KNOLL 3 115 115KV'	75	-0.64896	WERE	EVANS ENERGY CENTER 138KV'	510	0.00389	-0.65285	36
WERE	KNOLL 3 115 115KV'	75	-0.64896	WERE	GILL ENERGY CENTER 138KV'	155	0.00438	-0.65334	36
WERE	KNOLL 3 115 115KV'	75	-0.64896	WERE	GILL ENERGY CENTER 69KV'	45	0.00418	-0.65314	36
WERE	KNOLL 3 115 115KV'	75	-0.64896	WERE	JEFFREY ENERGY CENTER 230KV'	470	0.00397	-0.65293	36
WERE	KNOLL 3 115 115KV'	75	-0.64896	WERE	LAWRENCE ENERGY CENTER 115KV'	105	0.00392	-0.65288	36
WERE	KNOLL 3 115 115KV'	75	-0.64896	WERE	LAWRENCE ENERGY CENTER 230KV'	221.8893	0.00429	-0.65325	36
WERE	KNOLL 3 115 115KV'	75	-0.64896	WERE	TECUMSEH ENERGY CENTER 115KV'	145.8125	0.00402	-0.65298	36
WERE	KNOLL 3 115 115KV'	75	-0.64896	WERE	WACO 138KV'	17.967	0.00433	-0.65329	36

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: LINWOOD - MCWILLIE STREET 138KV CKT 1  
 Limiting Facility: LINWOOD - MCWILLIE STREET 138KV CKT 1  
 Direction: From->To  
 Line Outage: HARTS ISLAND - SOUTH SHREVEPORT 138KV CKT 1  
 Flowgate: 53422534281534145344612407SP  
 Date Redispatch Needed: 6/1/07 - 10/1/07  
 Season Flowgate Identified: 2007 Summer Peak

Reservation	Relief Amount	Aggregate Relief Amount
1087745	4.7	4.7

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
AEPW	ARSENAL HILL 69KV'	75	-0.36077	AEPW	COGENTRIX 345KV'	200	-0.00426	-0.35651	13

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

AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	COMANCHE 138KV	160	-0.00567	-0.3551	13
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	COMANCHE 69KV	63	-0.00568	-0.35509	13
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	FITZHUGH 161KV	30.99999	-0.00243	-0.35834	13
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	FLINT CREEK 161KV	420	-0.00354	-0.35723	13
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	KNOXLEE 138KV	280.2402	-0.00927	-0.3515	13
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	NORTHEASTERN STATION 138KV	405	-0.00394	-0.35683	13
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	NORTHEASTERN STATION 138KV	95	-0.00394	-0.35683	13
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	NORTHEASTERN STATION 345KV	645	-0.00393	-0.35684	13
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	OEC 345KV	269	-0.00413	-0.35664	13
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	RIVERSIDE STATION 138KV	646	-0.00427	-0.3565	13
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	SOUTHWESTERN STATION 138KV	335	-0.00561	-0.35516	13
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	TULSA POWER STATION 138KV	112	-0.00423	-0.35654	13
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	TULSA POWER STATION 138KV	147	-0.00423	-0.35654	13
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	WEELETKA 138KV	70	-0.00514	-0.35563	13
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	EASTMAN 138KV	155	-0.01316	-0.34761	14
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	LEBROCK 345KV	515	-0.01836	-0.34241	14
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	PIRKEY GENERATION 138KV	475	-0.02464	-0.33613	14
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	WELSH 345KV	990	-0.01279	-0.34798	14
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	WILKES 138KV	346.8935	-0.0287	-0.33207	14
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	WILKES 345KV	311	-0.01662	-0.34415	14
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	COGENTRIX 345KV	200	-0.00426	-0.2077	23
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	COMANCHE 138KV	160	-0.00567	-0.20629	23
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	COMANCHE 69KV	63	-0.00568	-0.20628	23
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	FITZHUGH 161KV	30.99999	-0.00243	-0.20953	23
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	FLINT CREEK 161KV	420	-0.00354	-0.20842	23
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	KNOXLEE 138KV	280.2402	-0.00927	-0.20269	23
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	NORTHEASTERN STATION 138KV	405	-0.00394	-0.20802	23
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	NORTHEASTERN STATION 138KV	95	-0.00394	-0.20802	23
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	NORTHEASTERN STATION 345KV	645	-0.00393	-0.20803	23
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	OEC 345KV	269	-0.00413	-0.20783	23
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	RIVERSIDE STATION 138KV	646	-0.00427	-0.20769	23
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	SOUTHWESTERN STATION 138KV	335	-0.00561	-0.20635	23
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	TULSA POWER STATION 138KV	112	-0.00423	-0.20773	23
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	TULSA POWER STATION 138KV	147	-0.00423	-0.20773	23
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	WEELETKA 138KV	70	-0.00514	-0.20682	23
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	EASTMAN 138KV	155	-0.01316	-0.1988	24
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	LEBROCK 345KV	515	-0.01836	-0.1936	24
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	WELSH 345KV	990	-0.01279	-0.19917	24
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	WILKES 345KV	311	-0.01662	-0.19534	24
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	PIRKEY GENERATION 138KV	475	-0.02464	-0.18732	25
AEPW	LIEBERMAN 138KV	137	-0.21196	AEPW	WILKES 138KV	346.8935	-0.0287	-0.18326	26
AEPW	ARSENAL HILL 69KV	75	-0.36077	AEPW	LIEBERMAN 138KV	91	-0.21196	-0.14881	32

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: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Limiting Facility: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Direction: From->To  
 Line Outage: YOAKUM COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1  
 Flowgate: 51966519691518915189011107SP  
 Date Redispatch Needed: 6/1/07 - 10/1/07  
 Season Flowgate Identified: 2007 Summer Peak

Reservation	Relief Amount	Aggregate Relief Amount								
1090487	42.2	42.2								
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)	
SPS	MADDOX 115KV	75	-0.12508	SPS	MUSTG5 118.0 230KV	360	0.24436	-0.36944	114	
SPS	CUNNINGHAM 115KV	50.00977	-0.1221	SPS	MUSTG5 118.0 230KV	360	0.24436	-0.36646	115	

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: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Limiting Facility: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Direction: From->To  
 Line Outage: YOAKUM COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1  
 Flowgate: 51966519691518915189011407AP  
 Date Redispatch Needed: Starting 2007 4/1 - 6/1 Until EOC of Upgrade  
 Season Flowgate Identified: 2007 April Minimum

Reservation	Relief Amount	Aggregate Relief Amount								
1090487	24.7	24.7								
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)	
SPS	MUSTANG 115KV	150	-0.44259	SPS	MUSTG5 118.0 230KV	125	0.24436	-0.68695	36	
SPS	MUSTANG 115KV	150	-0.44259	SPS	TOLK 230KV	1014.384	0.01795	-0.46054	54	
SPS	MUSTANG 115KV	150	-0.44259	SPS	BLACKHAWK 115KV	220	0.00538	-0.44797	55	
SPS	MUSTANG 115KV	150	-0.44259	SPS	CZ 69KV	35	0.00489	-0.44748	55	
SPS	MUSTANG 115KV	150	-0.44259	SPS	HARRINGTON 230KV	706	0.00545	-0.44804	55	
SPS	MUSTANG 115KV	150	-0.44259	SPS	SAN JUAN 230KV	54	0.00307	-0.44566	55	
SPS	MUSTANG 115KV	150	-0.44259	SPS	STEER WATER 115KV	36	0.00508	-0.44767	55	
SPS	MUSTANG 115KV	150	-0.44259	SPS	WILWIND 230KV	72	0.00748	-0.45007	55	
SPS	MUSTANG 115KV	150	-0.44259	SPS	JONES 230KV	104	-0.01198	-0.43061	57	
SPS	MUSTANG 115KV	150	-0.44259	SPS	LP-BRND2 69KV	49.53857	-0.01318	-0.42941	58	
SPS	MUSTANG 115KV	150	-0.44259	SPS	CUNNINGHAM 230KV	56	-0.02568	-0.41691	59	
SPS	CUNNINGHAM 115KV	71	-0.1221	SPS	MUSTG5 118.0 230KV	125	0.24436	-0.36646	67	
SPS	CUNNINGHAM 115KV	110	-0.1221	SPS	MUSTG5 118.0 230KV	125	0.24436	-0.36646	67	
SPS	MADDOX 115KV	193	-0.12508	SPS	MUSTG5 118.0 230KV	125	0.24436	-0.36944	67	
SPS	CUNNINGHAM 230KV	250	-0.02568	SPS	MUSTG5 118.0 230KV	125	0.24436	-0.27004	92	
SPS	JONES 230KV	382	-0.01198	SPS	MUSTG5 118.0 230KV	125	0.24436	-0.25634	96	
SPS	LP-BRND2 69KV	182.4614	-0.01318	SPS	MUSTG5 118.0 230KV	125	0.24436	-0.25754	96	
SPS	PLANTX 115KV	253	0.00765	SPS	MUSTG5 118.0 230KV	125	0.24436	-0.23671	104	
SPS	PLANTX 230KV	189	0.01616	SPS	MUSTG5 118.0 230KV	125	0.24436	-0.2282	108	
SPS	TOLK 230KV	65.61575	0.01795	SPS	MUSTG5 118.0 230KV	125	0.24436	-0.22641	109	
SPS	MADDOX 115KV	193	-0.12508	SPS	TOLK 230KV	1014.384	0.01795	-0.14303	173	
SPS	CUNNINGHAM 115KV	71	-0.1221	SPS	TOLK 230KV	1014.384	0.01795	-0.14005	177	
SPS	CUNNINGHAM 115KV	110	-0.1221	SPS	TOLK 230KV	1014.384	0.01795	-0.14005	177	
SPS	MADDOX 115KV	193	-0.12508	SPS	WILWIND 230KV	72	0.00748	-0.13256	187	
SPS	MADDOX 115KV	193	-0.12508	SPS	HARRINGTON 230KV	706	0.00545	-0.13053	189	
SPS	MADDOX 115KV	193	-0.12508	SPS	BLACKHAWK 115KV	220	0.00538	-0.13046	190	
SPS	CUNNINGHAM 115KV	71	-0.1221	SPS	WILWIND 230KV	72	0.00748	-0.12958	191	



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

SPS	CUNNINGHAM 115KV'	110	-0.1221	SPS	WILWIND 230KV'	72	0.00748	-0.12958	191
SPS	CUNNINGHAM 115KV'	71	-0.1221	SPS	BLACKHAWK 115KV'	220	0.00538	-0.12748	194
SPS	CUNNINGHAM 115KV'	110	-0.1221	SPS	BLACKHAWK 115KV'	220	0.00538	-0.12748	194
SPS	CUNNINGHAM 115KV'	71	-0.1221	SPS	HARRINGTON 230KV'	706	0.00545	-0.12755	194
SPS	CUNNINGHAM 115KV'	110	-0.1221	SPS	HARRINGTON 230KV'	706	0.00545	-0.12755	194
SPS	MADDOX 115KV'	193	-0.12508	SPS	JONES 230KV'	104	-0.01198	-0.1131	219
SPS	CUNNINGHAM 115KV'	110	-0.1221	SPS	JONES 230KV'	104	-0.01198	-0.11012	225
SPS	CUNNINGHAM 230KV'	250	-0.02568	SPS	TOLK 230KV'	1014.384	0.01795	-0.04363	567

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: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Limiting Facility: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Direction: From->To  
 Line Outage: YOAKUM COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1  
 Flowgate: 51966519691518915189014107G  
 Date Redispatch Needed: Starting 2007 4/1 - 6/1 Until EOC of Upgrade  
 Season Flowgate Identified: 2007 Spring Peak

Reservation	Relief Amount	Aggregate Relief Amount							Aggregate Redispatch Amount (MW)
1090487		2.2							2.2
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
SPS	CUNNINGHAM 115KV'	71	-0.1221	SPS	MUSTG5 118.0 230KV'	210	0.24436	-0.36646	6
SPS	MADDOX 115KV'	75	-0.12508	SPS	MUSTG5 118.0 230KV'	210	0.24436	-0.36944	6
SPS	CARLSBAD 69KV'	18	-0.03923	SPS	MUSTG5 118.0 230KV'	210	0.24436	-0.28359	8
SPS	CZ 69KV'	4	0.00489	SPS	MUSTG5 118.0 230KV'	210	0.24436	-0.23947	9
SPS	HARRINGTON 230KV'	360	0.00544	SPS	MUSTG5 118.0 230KV'	210	0.24436	-0.23892	9
SPS	HUBRCO2 69KV'	6	0.00538	SPS	MUSTG5 118.0 230KV'	210	0.24436	-0.23898	9
SPS	LP-BRND2 69KV'	152	-0.01318	SPS	MUSTG5 118.0 230KV'	210	0.24436	-0.25754	9
SPS	MOORE COUNTY 115KV'	48	0.00567	SPS	MUSTG5 118.0 230KV'	210	0.24436	-0.23869	9
SPS	NICHOLS 115KV'	107	0.00525	SPS	MUSTG5 118.0 230KV'	210	0.24436	-0.23911	9
SPS	NICHOLS 230KV'	113.3726	0.00538	SPS	MUSTG5 118.0 230KV'	210	0.24436	-0.23898	9
SPS	PLANTX 115KV'	48	0.00765	SPS	MUSTG5 118.0 230KV'	210	0.24436	-0.23671	9
SPS	RIVERVIEW 69KV'	23	0.00538	SPS	MUSTG5 118.0 230KV'	210	0.24436	-0.23898	9
SPS	SIDRCH 69KV'	6	0.00538	SPS	MUSTG5 118.0 230KV'	210	0.24436	-0.23898	9
SPS	TOLK 230KV'	65.29117	0.01795	SPS	MUSTG5 118.0 230KV'	210	0.24436	-0.22641	10
SPS	TUCUMCARI 115KV'	15	0.0126	SPS	MUSTG5 118.0 230KV'	210	0.24436	-0.23176	10
SPS	MADDOX 115KV'	75	-0.12508	SPS	TOLK 230KV'	1014.709	0.01795	-0.14303	15
SPS	CUNNINGHAM 115KV'	71	-0.1221	SPS	CAPROCK 115KV'	79.99996	0.0126	-0.1347	16
SPS	CUNNINGHAM 115KV'	71	-0.1221	SPS	PLANTX 230KV'	189	0.01615	-0.13825	16
SPS	CUNNINGHAM 115KV'	71	-0.1221	SPS	TOLK 230KV'	1014.709	0.01795	-0.14005	16
SPS	MADDOX 115KV'	75	-0.12508	SPS	CAPROCK 115KV'	79.99996	0.0126	-0.13768	16
SPS	MADDOX 115KV'	75	-0.12508	SPS	PLANTX 230KV'	189	0.01615	-0.14123	16
SPS	CUNNINGHAM 115KV'	71	-0.1221	SPS	HARRINGTON 230KV'	706	0.00544	-0.12754	17
SPS	CUNNINGHAM 115KV'	71	-0.1221	SPS	NICHOLS 230KV'	130.6274	0.00538	-0.12748	17
SPS	CUNNINGHAM 115KV'	71	-0.1221	SPS	PLANTX 115KV'	205	0.00765	-0.12975	17
SPS	CUNNINGHAM 115KV'	71	-0.1221	SPS	WILWIND 230KV'	159.9999	0.00748	-0.12958	17
SPS	MADDOX 115KV'	75	-0.12508	SPS	HARRINGTON 230KV'	706	0.00544	-0.13052	17
SPS	MADDOX 115KV'	75	-0.12508	SPS	NICHOLS 230KV'	130.6274	0.00538	-0.13046	17
SPS	MADDOX 115KV'	75	-0.12508	SPS	PLANTX 115KV'	205	0.00765	-0.13273	17
SPS	MADDOX 115KV'	75	-0.12508	SPS	SAN JUAN 230KV'	119.9999	0.00307	-0.12815	17
SPS	MADDOX 115KV'	75	-0.12508	SPS	WILWIND 230KV'	159.9999	0.00748	-0.13256	17
SPS	CUNNINGHAM 115KV'	71	-0.1221	SPS	SAN JUAN 230KV'	119.9999	0.00307	-0.12517	18
SPS	CUNNINGHAM 115KV'	71	-0.1221	SPS	JONES 230KV'	486	-0.01198	-0.11012	20
SPS	CUNNINGHAM 115KV'	71	-0.1221	SPS	LP-BRND2 69KV'	80	-0.01318	-0.10892	20
SPS	MADDOX 115KV'	75	-0.12508	SPS	JONES 230KV'	486	-0.01198	-0.1131	20
SPS	MADDOX 115KV'	75	-0.12508	SPS	LP-BRND2 69KV'	80	-0.01318	-0.1119	20
SPS	MADDOX 115KV'	75	-0.12508	SPS	CUNNINGHAM 230KV'	306	-0.02568	-0.0994	22
SPS	CUNNINGHAM 115KV'	71	-0.1221	SPS	CUNNINGHAM 230KV'	306	-0.02568	-0.09642	23
SPS	CARLSBAD 69KV'	18	-0.03923	SPS	TOLK 230KV'	1014.709	0.01795	-0.05718	39
SPS	CARLSBAD 69KV'	18	-0.03923	SPS	PLANTX 230KV'	189	0.01615	-0.05538	40
SPS	CARLSBAD 69KV'	18	-0.03923	SPS	CAPROCK 115KV'	79.99996	0.0126	-0.05183	43
SPS	CARLSBAD 69KV'	18	-0.03923	SPS	PLANTX 115KV'	205	0.00765	-0.04688	47
SPS	CARLSBAD 69KV'	18	-0.03923	SPS	WILWIND 230KV'	159.9999	0.00748	-0.04671	47
SPS	CARLSBAD 69KV'	18	-0.03923	SPS	HARRINGTON 230KV'	706	0.00544	-0.04467	49
SPS	CARLSBAD 69KV'	18	-0.03923	SPS	NICHOLS 230KV'	130.6274	0.00538	-0.04461	50
SPS	CARLSBAD 69KV'	18	-0.03923	SPS	SAN JUAN 230KV'	119.9999	0.00307	-0.0423	52
SPS	LP-BRND2 69KV'	152	-0.01318	SPS	TOLK 230KV'	1014.709	0.01795	-0.03113	71

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: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Limiting Facility: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Direction: From->To  
 Line Outage: LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1  
 Flowgate: 51966519691522055189111107FA  
 Date Redispatch Needed: Starting 2007 10/1 - 12/1 Until EOC of Upgrade  
 Season Flowgate Identified: 2007 Fall Peak

Reservation	Relief Amount	Aggregate Relief Amount							Aggregate Redispatch Amount (MW)
1090487		42.2							42.2
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
SPS	CUNNINGHAM 115KV'	71	-0.21032	SPS	MUSTG5 118.0 230KV'	210	0.25702	-0.46734	90
SPS	CUNNINGHAM 115KV'	110	-0.21032	SPS	MUSTG5 118.0 230KV'	210	0.25702	-0.46734	90
SPS	MADDOX 115KV'	102.3579	-0.21294	SPS	MUSTG5 118.0 230KV'	210	0.25702	-0.46996	90
SPS	CUNNINGHAM 230KV'	306	-0.16698	SPS	MUSTG5 118.0 230KV'	210	0.25702	-0.424	99
SPS	NICHOLS 115KV'	213	0.00271	SPS	MUSTG5 118.0 230KV'	210	0.25702	-0.25431	166
SPS	NICHOLS 230KV'	244	0.0028	SPS	MUSTG5 118.0 230KV'	210	0.25702	-0.25422	166
SPS	PLANTX 115KV'	253	0.0048	SPS	MUSTG5 118.0 230KV'	210	0.25702	-0.25222	167
SPS	TOLK 230KV'	60.2673	0.00822	SPS	MUSTG5 118.0 230KV'	210	0.25702	-0.2488	169
SPS	PLANTX 230KV'	189	0.0095	SPS	MUSTG5 118.0 230KV'	210	0.25702	-0.24752	170
SPS	MADDOX 115KV'	102.3579	-0.21294	SPS	TOLK 230KV'	1019.733	0.00822	-0.22116	191
SPS	CUNNINGHAM 115KV'	71	-0.21032	SPS	TOLK 230KV'	1019.733	0.00822	-0.21854	193
SPS	CUNNINGHAM 115KV'	110	-0.21032	SPS	TOLK 230KV'	1019.733	0.00822	-0.21854	193
SPS	MADDOX 115KV'	102.3579	-0.21294	SPS	BLACKHAWK 115KV'	220	0.0028	-0.21574	195
SPS	MADDOX 115KV'	102.3579	-0.21294	SPS	HARRINGTON 230KV'	1066	0.00284	-0.21578	195
SPS	MADDOX 115KV'	102.3579	-0.21294	SPS	WILWIND 230KV'	160	0.00387	-0.21681	195
SPS	MADDOX 115KV'	102.3579	-0.21294	SPS	STEER WATER 115KV'	79.94999	0.00262	-0.21556	196
SPS	CUNNINGHAM 115KV'	71	-0.21032	SPS	WILWIND 230KV'	160	0.00387	-0.21419	197

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

SPS	CUNNINGHAM 115KV'	110	-0.21032	SPS	WILWIND 230KV'	160	0.00387	-0.21419	197
SPS	CUNNINGHAM 115KV'	71	-0.21032	SPS	BLACKHAWK 115KV'	220	0.0028	-0.21312	198
SPS	CUNNINGHAM 115KV'	110	-0.21032	SPS	BLACKHAWK 115KV'	220	0.0028	-0.21312	198
SPS	CUNNINGHAM 115KV'	71	-0.21032	SPS	HARRINGTON 230KV'	1066	0.00284	-0.21316	198
SPS	CUNNINGHAM 115KV'	110	-0.21032	SPS	HARRINGTON 230KV'	1066	0.00284	-0.21316	198
SPS	CUNNINGHAM 115KV'	71	-0.21032	SPS	STEER WATER 115KV'	79.94999	0.00262	-0.21294	198
SPS	CUNNINGHAM 115KV'	110	-0.21032	SPS	STEER WATER 115KV'	79.94999	0.00262	-0.21294	198
SPS	MADDOX 115KV'	102.3579	-0.21294	SPS	CAPROCK 115KV'	79.94999	-0.00487	-0.20807	203
SPS	MADDOX 115KV'	102.3579	-0.21294	SPS	JONES 230KV'	486	-0.00528	-0.20766	203
SPS	CUNNINGHAM 115KV'	71	-0.21032	SPS	CAPROCK 115KV'	79.94999	-0.00487	-0.20545	205
SPS	CUNNINGHAM 115KV'	110	-0.21032	SPS	CAPROCK 115KV'	79.94999	-0.00487	-0.20545	205
SPS	CUNNINGHAM 115KV'	71	-0.21032	SPS	JONES 230KV'	486	-0.00528	-0.20504	206
SPS	CUNNINGHAM 115KV'	110	-0.21032	SPS	JONES 230KV'	486	-0.00528	-0.20504	206
SPS	CUNNINGHAM 230KV'	306	-0.16698	SPS	TOLK 230KV'	1019.733	0.00822	-0.1752	241
SPS	MADDOX 115KV'	102.3579	-0.21294	SPS	SAN JUAN 230KV'	120	-0.03776	-0.17518	241
SPS	CUNNINGHAM 115KV'	110	-0.21032	SPS	SAN JUAN 230KV'	120	-0.03776	-0.17256	244
SPS	CUNNINGHAM 230KV'	306	-0.16698	SPS	WILWIND 230KV'	160	0.00387	-0.17085	247
SPS	CUNNINGHAM 230KV'	306	-0.16698	SPS	HARRINGTON 230KV'	1066	0.00284	-0.16982	248
SPS	CUNNINGHAM 230KV'	306	-0.16698	SPS	JONES 230KV'	486	-0.00528	-0.1617	261
SPS	CUNNINGHAM 230KV'	306	-0.16698	SPS	SAN JUAN 230KV'	120	-0.03776	-0.12922	326

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: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Limiting Facility: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Direction: From->To  
 Line Outage: LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1  
 Flowgate: 5196651969152205518911107SH  
 Date Redispatch Needed: 6/1 - 10/1 Until EOC of Upgrade  
 Season Flowgate Identified: 2007 Summer Shoulder

Reservation	Relief Amount	Aggregate Relief Amount									Aggregate Redispatch Amount (MW)
1090487	25.3	25.3									
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)		
SPS	CUNNINGHAM 115KV'	71	-0.21033	SPS	MUSTG5 118.0 230KV'	210	0.257	-0.46733	54		
SPS	CUNNINGHAM 115KV'	110	-0.21033	SPS	MUSTG5 118.0 230KV'	210	0.257	-0.46733	54		
SPS	MADDOX 115KV'	75	-0.21295	SPS	MUSTG5 118.0 230KV'	210	0.257	-0.46995	54		
SPS	CUNNINGHAM 230KV'	110	-0.16699	SPS	MUSTG5 118.0 230KV'	210	0.257	-0.42399	60		
SPS	LP-BRND2 69KV'	162	-0.00604	SPS	MUSTG5 118.0 230KV'	210	0.257	-0.26304	96		
SPS	MOORE COUNTY 115KV'	48	0.00305	SPS	MUSTG5 118.0 230KV'	210	0.257	-0.25395	100		
SPS	NICHOLS 115KV'	131	0.0028	SPS	MUSTG5 118.0 230KV'	210	0.257	-0.2542	100		
SPS	NICHOLS 230KV'	244	0.00289	SPS	MUSTG5 118.0 230KV'	210	0.257	-0.25411	100		
SPS	PLANTX 115KV'	89.47412	0.00502	SPS	MUSTG5 118.0 230KV'	210	0.257	-0.25198	100		
SPS	TOLK 230KV'	52.01129	0.00826	SPS	MUSTG5 118.0 230KV'	210	0.257	-0.24874	102		
SPS	MADDOX 115KV'	75	-0.21295	SPS	PLANTX 230KV'	189	0.00956	-0.22251	114		
SPS	MADDOX 115KV'	75	-0.21295	SPS	TOLK 230KV'	1027.989	0.00826	-0.22121	114		
SPS	CUNNINGHAM 115KV'	71	-0.21033	SPS	PLANTX 230KV'	189	0.00956	-0.21989	115		
SPS	CUNNINGHAM 115KV'	110	-0.21033	SPS	PLANTX 230KV'	189	0.00956	-0.21989	115		
SPS	CUNNINGHAM 115KV'	71	-0.21033	SPS	TOLK 230KV'	1027.989	0.00826	-0.21859	116		
SPS	CUNNINGHAM 115KV'	110	-0.21033	SPS	TOLK 230KV'	1027.989	0.00826	-0.21859	116		
SPS	MADDOX 115KV'	75	-0.21295	SPS	PLANTX 115KV'	163.6259	0.00502	-0.21797	116		
SPS	MADDOX 115KV'	75	-0.21295	SPS	BLACKHAWK 115KV'	220	0.00288	-0.21583	117		
SPS	MADDOX 115KV'	75	-0.21295	SPS	HARRINGTON 230KV'	1066	0.00292	-0.21587	117		
SPS	MADDOX 115KV'	75	-0.21295	SPS	NICHOLS 115KV'	82	0.0028	-0.21575	117		
SPS	MADDOX 115KV'	75	-0.21295	SPS	STEER WATER 115KV'	79.98182	0.00271	-0.21566	117		
SPS	MADDOX 115KV'	75	-0.21295	SPS	WILWIND 230KV'	159.9636	0.00395	-0.2169	117		
SPS	CUNNINGHAM 115KV'	71	-0.21033	SPS	PLANTX 115KV'	163.6259	0.00502	-0.21535	118		
SPS	CUNNINGHAM 115KV'	110	-0.21033	SPS	PLANTX 115KV'	163.6259	0.00502	-0.21535	118		
SPS	CUNNINGHAM 115KV'	71	-0.21033	SPS	WILWIND 230KV'	159.9636	0.00395	-0.21428	118		
SPS	CUNNINGHAM 115KV'	110	-0.21033	SPS	WILWIND 230KV'	159.9636	0.00395	-0.21428	118		
SPS	CUNNINGHAM 115KV'	71	-0.21033	SPS	BLACKHAWK 115KV'	220	0.00288	-0.21321	119		
SPS	CUNNINGHAM 115KV'	110	-0.21033	SPS	BLACKHAWK 115KV'	220	0.00288	-0.21321	119		
SPS	CUNNINGHAM 115KV'	71	-0.21033	SPS	HARRINGTON 230KV'	1066	0.00292	-0.21325	119		
SPS	CUNNINGHAM 115KV'	110	-0.21033	SPS	HARRINGTON 230KV'	1066	0.00292	-0.21325	119		
SPS	CUNNINGHAM 115KV'	71	-0.21033	SPS	NICHOLS 115KV'	82	0.0028	-0.21313	119		
SPS	CUNNINGHAM 115KV'	110	-0.21033	SPS	NICHOLS 115KV'	82	0.0028	-0.21313	119		
SPS	CUNNINGHAM 115KV'	71	-0.21033	SPS	STEER WATER 115KV'	79.98182	0.00271	-0.21304	119		
SPS	CUNNINGHAM 115KV'	110	-0.21033	SPS	STEER WATER 115KV'	79.98182	0.00271	-0.21304	119		
SPS	MADDOX 115KV'	75	-0.21295	SPS	CAPROCK 115KV'	79.98182	-0.00481	-0.20814	122		
SPS	MADDOX 115KV'	75	-0.21295	SPS	JONES 230KV'	486	-0.00544	-0.20751	122		
SPS	MADDOX 115KV'	75	-0.21295	SPS	LP-BRND2 69KV'	80	-0.00604	-0.20691	122		
SPS	CUNNINGHAM 115KV'	71	-0.21033	SPS	CAPROCK 115KV'	79.98182	-0.00481	-0.20552	123		
SPS	CUNNINGHAM 115KV'	110	-0.21033	SPS	CAPROCK 115KV'	79.98182	-0.00481	-0.20552	123		
SPS	CUNNINGHAM 115KV'	71	-0.21033	SPS	JONES 230KV'	486	-0.00544	-0.20489	124		
SPS	CUNNINGHAM 115KV'	110	-0.21033	SPS	JONES 230KV'	486	-0.00544	-0.20489	124		
SPS	CUNNINGHAM 230KV'	110	-0.16699	SPS	PLANTX 230KV'	189	0.00956	-0.17655	143		
SPS	CUNNINGHAM 230KV'	110	-0.16699	SPS	TOLK 230KV'	1027.989	0.00826	-0.17525	144		
SPS	MADDOX 115KV'	75	-0.21295	SPS	SAN JUAN 230KV'	119.9727	-0.03772	-0.17523	144		
SPS	CUNNINGHAM 115KV'	71	-0.21033	SPS	SAN JUAN 230KV'	119.9727	-0.03772	-0.17261	147		
SPS	CUNNINGHAM 115KV'	110	-0.21033	SPS	SAN JUAN 230KV'	119.9727	-0.03772	-0.17261	147		
SPS	CUNNINGHAM 230KV'	110	-0.16699	SPS	PLANTX 115KV'	163.6259	0.00502	-0.17201	147		
SPS	CUNNINGHAM 230KV'	110	-0.16699	SPS	WILWIND 230KV'	159.9636	0.00395	-0.17094	148		
SPS	CUNNINGHAM 230KV'	110	-0.16699	SPS	BLACKHAWK 115KV'	220	0.00288	-0.16987	149		
SPS	CUNNINGHAM 230KV'	110	-0.16699	SPS	HARRINGTON 230KV'	1066	0.00292	-0.16991	149		
SPS	CUNNINGHAM 230KV'	110	-0.16699	SPS	NICHOLS 115KV'	82	0.0028	-0.16979	149		
SPS	CUNNINGHAM 230KV'	110	-0.16699	SPS	STEER WATER 115KV'	79.98182	0.00271	-0.1697	149		
SPS	CUNNINGHAM 230KV'	110	-0.16699	SPS	CAPROCK 115KV'	79.98182	-0.00481	-0.16218	156		
SPS	CUNNINGHAM 230KV'	110	-0.16699	SPS	JONES 230KV'	486	-0.00544	-0.16155	157		
SPS	CUNNINGHAM 230KV'	110	-0.16699	SPS	SAN JUAN 230KV'	119.9727	-0.03772	-0.12927	196		

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: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Limiting Facility: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Direction: From->To  
 Line Outage: LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1  
 Flowgate: 51966519691522055189111407AP  
 Date Redispatch Needed: Starting 2007 4/1 - 6/1 Until EOC of Upgrade  
 Season Flowgate Identified: 2007 April Minimum

Reservation	Relief Amount	Aggregate Relief Amount
-------------	---------------	-------------------------

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

1090487		41.8	41.8							Aggregate Redispatch Amount (MW)
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor		
SPS	MUSTANG 115KV'	150	-0.38901	SPS	MUSTG5 118.0 230KV'	125	0.257	-0.64601		65
SPS	CUNNINGHAM 115KV'	71	-0.21033	SPS	MUSTG5 118.0 230KV'	125	0.257	-0.46733		89
SPS	CUNNINGHAM 115KV'	110	-0.21033	SPS	MUSTG5 118.0 230KV'	125	0.257	-0.46733		89
SPS	MADDOX 115KV'	193	-0.21295	SPS	MUSTG5 118.0 230KV'	125	0.257	-0.46995		89
SPS	CUNNINGHAM 230KV'	250	-0.16699	SPS	MUSTG5 118.0 230KV'	125	0.257	-0.42399		99
SPS	MUSTANG 115KV'	150	-0.38901	SPS	TOLK 230KV'	1014.384	0.00827	-0.39728		105
SPS	MUSTANG 115KV'	150	-0.38901	SPS	WILWIND 230KV'	72	0.00396	-0.39297		106
SPS	MUSTANG 115KV'	150	-0.38901	SPS	BLACKHAWK 115KV'	220	0.00288	-0.39189		107
SPS	MUSTANG 115KV'	150	-0.38901	SPS	HARRINGTON 230KV'	706	0.00292	-0.39193		107
SPS	MUSTANG 115KV'	150	-0.38901	SPS	STEER WATER 115KV'	36	0.00271	-0.39172		107
SPS	MUSTANG 115KV'	150	-0.38901	SPS	JONES 230KV'	104	-0.00544	-0.38357		109
SPS	MUSTANG 115KV'	150	-0.38901	SPS	LP-BRND2 69KV'	49.53857	-0.00604	-0.38297		109
SPS	MUSTANG 115KV'	150	-0.38901	SPS	SAN JUAN 230KV'	54	-0.03772	-0.35129		119
SPS	JONES 230KV'	382	-0.00544	SPS	MUSTG5 118.0 230KV'	125	0.257	-0.26244		159
SPS	LP-BRND2 69KV'	182.4614	-0.00604	SPS	MUSTG5 118.0 230KV'	125	0.257	-0.26304		159
SPS	PLANTX 115KV'	253	0.00502	SPS	MUSTG5 118.0 230KV'	125	0.257	-0.25198		166
SPS	TOLK 230KV'	65.61575	0.00827	SPS	MUSTG5 118.0 230KV'	125	0.257	-0.24873		168
SPS	PLANTX 230KV'	189	0.00957	SPS	MUSTG5 118.0 230KV'	125	0.257	-0.24743		169
SPS	MADDOX 115KV'	193	-0.21295	SPS	TOLK 230KV'	1014.384	0.00827	-0.22122		189
SPS	CUNNINGHAM 115KV'	71	-0.21033	SPS	TOLK 230KV'	1014.384	0.00827	-0.2186		191
SPS	CUNNINGHAM 115KV'	110	-0.21033	SPS	TOLK 230KV'	1014.384	0.00827	-0.2186		191
SPS	MADDOX 115KV'	193	-0.21295	SPS	WILWIND 230KV'	72	0.00396	-0.21691		193
SPS	MADDOX 115KV'	193	-0.21295	SPS	HARRINGTON 230KV'	706	0.00292	-0.21587		194
SPS	CUNNINGHAM 115KV'	71	-0.21033	SPS	WILWIND 230KV'	72	0.00396	-0.21429		195
SPS	CUNNINGHAM 115KV'	110	-0.21033	SPS	WILWIND 230KV'	72	0.00396	-0.21429		195
SPS	CUNNINGHAM 115KV'	71	-0.21033	SPS	BLACKHAWK 115KV'	220	0.00288	-0.21321		196
SPS	CUNNINGHAM 115KV'	110	-0.21033	SPS	BLACKHAWK 115KV'	220	0.00288	-0.21321		196
SPS	CUNNINGHAM 115KV'	71	-0.21033	SPS	HARRINGTON 230KV'	706	0.00292	-0.21325		196
SPS	CUNNINGHAM 115KV'	110	-0.21033	SPS	HARRINGTON 230KV'	706	0.00292	-0.21325		196
SPS	MADDOX 115KV'	193	-0.21295	SPS	JONES 230KV'	104	-0.00544	-0.20751		201
SPS	CUNNINGHAM 115KV'	71	-0.21033	SPS	JONES 230KV'	104	-0.00544	-0.20489		204
SPS	CUNNINGHAM 115KV'	110	-0.21033	SPS	JONES 230KV'	104	-0.00544	-0.20489		204
SPS	CUNNINGHAM 230KV'	250	-0.16699	SPS	TOLK 230KV'	1014.384	0.00827	-0.17526		238
SPS	CUNNINGHAM 230KV'	250	-0.16699	SPS	HARRINGTON 230KV'	706	0.00292	-0.16991		246
SPS	CUNNINGHAM 230KV'	250	-0.16699	SPS	JONES 230KV'	104	-0.00544	-0.16155		259

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: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Limiting Facility: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Direction: From->To  
 Line Outage: LEA COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1  
 Flowgate: 51966519691522055189111407WP  
 Date Redispatch Needed: 12/1/07 - 4/1/08  
 Season Flowgate Identified: 2007 Winter Peak

1090487		15.2	15.2							Aggregate Relief Amount
Reservation	Relief Amount	Aggregate Relief Amount								
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor		Aggregate Redispatch Amount (MW)
SPS	MUSTANG 115KV'	29	-0.38898	SPS	MUSTG5 118.0 230KV'	210	0.25703	-0.64601		24
SPS	MADDOX 115KV'	88.39449	-0.21294	SPS	MUSTG5 118.0 230KV'	210	0.25703	-0.46997		32
SPS	CUNNINGHAM 115KV'	71	-0.21032	SPS	MUSTG5 118.0 230KV'	210	0.25703	-0.46735		33
SPS	CUNNINGHAM 115KV'	110	-0.21032	SPS	MUSTG5 118.0 230KV'	210	0.25703	-0.46735		33
SPS	CUNNINGHAM 230KV'	110	-0.16698	SPS	MUSTG5 118.0 230KV'	210	0.25703	-0.42401		36
SPS	MUSTANG 115KV'	29	-0.38898	SPS	TOLK 230KV'	1019.563	0.00822	-0.3972		38
SPS	CARLSBAD 69KV'	18	-0.1354	SPS	MUSTG5 118.0 230KV'	210	0.25703	-0.39243		39
SPS	MUSTANG 115KV'	29	-0.38898	SPS	BLACKHAWK 115KV'	220	0.00288	-0.39178		39
SPS	MUSTANG 115KV'	29	-0.38898	SPS	CZ 69KV'	35	0.00253	-0.39151		39
SPS	MUSTANG 115KV'	29	-0.38898	SPS	HARRINGTON 230KV'	1066	0.00284	-0.39182		39
SPS	MUSTANG 115KV'	29	-0.38898	SPS	SIDRCH 69KV'	14	0.0028	-0.39178		39
SPS	MUSTANG 115KV'	29	-0.38898	SPS	STEER WATER 115KV'	24	0.00262	-0.3916		39
SPS	MUSTANG 115KV'	29	-0.38898	SPS	WILWIND 230KV'	48	0.00387	-0.39285		39
SPS	MUSTANG 115KV'	29	-0.38898	SPS	CAPROCK 115KV'	24	-0.00486	-0.38412		40
SPS	MUSTANG 115KV'	29	-0.38898	SPS	JONES 230KV'	243	-0.00528	-0.3837		40
SPS	MUSTANG 115KV'	29	-0.38898	SPS	LP-BRND2 69KV'	60	-0.00588	-0.3831		40
SPS	MUSTANG 115KV'	29	-0.38898	SPS	SAN JUAN 230KV'	36	-0.03776	-0.35122		43
SPS	JONES 230KV'	243	-0.00528	SPS	MUSTG5 118.0 230KV'	210	0.25703	-0.26231		58
SPS	LP-BRND2 69KV'	172	-0.00588	SPS	MUSTG5 118.0 230KV'	210	0.25703	-0.26291		58
SPS	MOORE COUNTY 115KV'	48	0.00296	SPS	MUSTG5 118.0 230KV'	210	0.25703	-0.25407		60
SPS	NICHOLS 115KV'	213	0.00271	SPS	MUSTG5 118.0 230KV'	210	0.25703	-0.25432		60
SPS	NICHOLS 230KV'	244	0.0028	SPS	MUSTG5 118.0 230KV'	210	0.25703	-0.25423		60
SPS	PLANTX 115KV'	253	0.0048	SPS	MUSTG5 118.0 230KV'	210	0.25703	-0.25223		60
SPS	RIVERVIEW 69KV'	23	0.0028	SPS	MUSTG5 118.0 230KV'	210	0.25703	-0.25423		60
SPS	PLANTX 230KV'	189	0.0095	SPS	MUSTG5 118.0 230KV'	210	0.25703	-0.24753		61
SPS	TOLK 230KV'	60.43671	0.00822	SPS	MUSTG5 118.0 230KV'	210	0.25703	-0.24881		61
SPS	MADDOX 115KV'	88.39449	-0.21294	SPS	TOLK 230KV'	1019.563	0.00822	-0.22116		69
SPS	MUSTANG 115KV'	29	-0.38898	SPS	CUNNINGHAM 230KV'	196	-0.16698	-0.222		69
SPS	CUNNINGHAM 115KV'	71	-0.21032	SPS	TOLK 230KV'	1019.563	0.00822	-0.21854		70
SPS	CUNNINGHAM 115KV'	110	-0.21032	SPS	TOLK 230KV'	1019.563	0.00822	-0.21854		70
SPS	MADDOX 115KV'	88.39449	-0.21294	SPS	BLACKHAWK 115KV'	220	0.00288	-0.21574		70
SPS	MADDOX 115KV'	88.39449	-0.21294	SPS	HARRINGTON 230KV'	1066	0.00284	-0.21578		70
SPS	MADDOX 115KV'	88.39449	-0.21294	SPS	WILWIND 230KV'	48	0.00387	-0.21681		70
SPS	CUNNINGHAM 115KV'	71	-0.21032	SPS	BLACKHAWK 115KV'	220	0.00288	-0.21312		71
SPS	CUNNINGHAM 115KV'	110	-0.21032	SPS	BLACKHAWK 115KV'	220	0.00288	-0.21312		71
SPS	CUNNINGHAM 115KV'	71	-0.21032	SPS	CZ 69KV'	35	0.00253	-0.21285		71
SPS	CUNNINGHAM 115KV'	110	-0.21032	SPS	CZ 69KV'	35	0.00253	-0.21285		71
SPS	CUNNINGHAM 115KV'	71	-0.21032	SPS	HARRINGTON 230KV'	1066	0.00284	-0.21316		71
SPS	CUNNINGHAM 115KV'	110	-0.21032	SPS	HARRINGTON 230KV'	1066	0.00284	-0.21316		71
SPS	CUNNINGHAM 115KV'	71	-0.21032	SPS	STEER WATER 115KV'	24	0.00262	-0.21294		71
SPS	CUNNINGHAM 115KV'	110	-0.21032	SPS	STEER WATER 115KV'	24	0.00262	-0.21294		71
SPS	CUNNINGHAM 115KV'	71	-0.21032	SPS	WILWIND 230KV'	48	0.00387	-0.21419		71
SPS	CUNNINGHAM 115KV'	110	-0.21032	SPS	WILWIND 230KV'	48	0.00387	-0.21419		71
SPS	MADDOX 115KV'	88.39449	-0.21294	SPS	CZ 69KV'	35	0.00253	-0.21547		71
SPS	MADDOX 115KV'	88.39449	-0.21294	SPS	STEER WATER 115KV'	24	0.00262	-0.21556		71
SPS	MADDOX 115KV'	88.39449	-0.21294	SPS	JONES 230KV'	243	-0.00528	-0.20766		73
SPS	MADDOX 115KV'	88.39449	-0.21294	SPS	LP-BRND2 69KV'	60	-0.00588	-0.20706		73
SPS	CUNNINGHAM 115KV'	71	-0.21032	SPS	JONES 230KV'	243	-0.00528	-0.20504		74
SPS	CUNNINGHAM 115KV'	110	-0.21032	SPS	JONES 230KV'	243	-0.00528	-0.20504		74
SPS	CUNNINGHAM 115KV'	71	-0.21032	SPS	LP-BRND2 69KV'	60	-0.00588	-0.20444		74



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

SPS	MADDOX 115KV'	102.3579	-0.1187	SPS	TOLK 230KV'	1019.733	0.01153	-0.13023	250
SPS	CUNNINGHAM 115KV'	110	-0.11612	SPS	TOLK 230KV'	1019.733	0.01153	-0.12765	255
SPS	MADDOX 115KV'	102.3579	-0.1187	SPS	WILWIND 230KV'	160	0.00487	-0.12357	263
SPS	MADDOX 115KV'	102.3579	-0.1187	SPS	BLACKHAWK 115KV'	220	0.00348	-0.12218	266
SPS	MADDOX 115KV'	102.3579	-0.1187	SPS	HARRINGTON 230KV'	1066	0.00352	-0.12222	266
SPS	CUNNINGHAM 115KV'	110	-0.11612	SPS	WILWIND 230KV'	160	0.00487	-0.12099	269
SPS	CUNNINGHAM 115KV'	110	-0.11612	SPS	BLACKHAWK 115KV'	220	0.00348	-0.1196	272
SPS	CUNNINGHAM 115KV'	110	-0.11612	SPS	HARRINGTON 230KV'	1066	0.00352	-0.11964	272
SPS	MADDOX 115KV'	102.3579	-0.1187	SPS	SAN JUAN 230KV'	120	-0.0036	-0.1151	282
SPS	CUNNINGHAM 115KV'	110	-0.11612	SPS	WILWIND 230KV'	120	-0.0036	-0.11252	289
SPS	MADDOX 115KV'	102.3579	-0.1187	SPS	JONES 230KV'	486	-0.00751	-0.11119	292
SPS	CUNNINGHAM 115KV'	110	-0.11612	SPS	JONES 230KV'	486	-0.00751	-0.10861	299
SPS	CUNNINGHAM 230KV'	306	-0.03606	SPS	TOLK 230KV'	1019.733	0.01153	-0.04759	683

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

Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

Upgrade: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Limiting Facility: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Direction: From->To  
 Line Outage: GEN:51971 1  
 Flowgate: 51966519691GEN5197111107SH  
 Date Redispatch Needed: 6/1 - 10/1 Until EOC of Upgrade  
 Season Flowgate Identified: 2007 Summer Shoulder

Reservation	Relief Amount	Aggregate Relief Amount							
1090487	29.2	29.2							
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
SPS	MADDOX 115KV'	75	-0.11872	SPS	MUSTG5 118.0 230KV'	210	0.21119	-0.32991	88
SPS	CUNNINGHAM 115KV'	71	-0.11614	SPS	MUSTG5 118.0 230KV'	210	0.21119	-0.32733	89
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	MUSTG5 118.0 230KV'	210	0.21119	-0.32733	89
SPS	CUNNINGHAM 230KV'	110	-0.03607	SPS	MUSTG5 118.0 230KV'	210	0.21119	-0.24726	118
SPS	NICHOLS 115KV'	131	0.0035	SPS	MUSTG5 118.0 230KV'	210	0.21119	-0.20769	140
SPS	MOORE COUNTY 115KV'	48	0.00378	SPS	MUSTG5 118.0 230KV'	210	0.21119	-0.20741	141
SPS	NICHOLS 230KV'	244	0.00359	SPS	MUSTG5 118.0 230KV'	210	0.21119	-0.2076	141
SPS	PLANTX 115KV'	89.47412	0.00555	SPS	MUSTG5 118.0 230KV'	210	0.21119	-0.20564	142
SPS	TOLK 230KV'	52.01129	0.01159	SPS	MUSTG5 118.0 230KV'	210	0.21119	-0.1996	146
SPS	MADDOX 115KV'	75	-0.11872	SPS	TOLK 230KV'	1027.989	0.01159	-0.13031	224
SPS	MADDOX 115KV'	75	-0.11872	SPS	PLANTX 230KV'	189	0.01083	-0.12955	225
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	TOLK 230KV'	1027.989	0.01159	-0.12773	228
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	PLANTX 230KV'	189	0.01083	-0.12697	230
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	WILWIND 230KV'	159.9636	0.00497	-0.12111	241
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	BLACKHAWK 115KV'	220	0.00358	-0.11972	244
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	HARRINGTON 230KV'	1066	0.00363	-0.11977	244
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	NICHOLS 115KV'	82	0.0035	-0.11964	244
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	SAN JUAN 230KV'	119.9727	-0.00356	-0.11258	259
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	JONES 230KV'	486	-0.0077	-0.10844	269

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

Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

Upgrade: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Limiting Facility: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Direction: From->To  
 Line Outage: GEN:51971 1  
 Flowgate: 51966519691GEN5197111107SP  
 Date Redispatch Needed: 6/1/07 - 10/1/07  
 Season Flowgate Identified: 2007 Summer Peak

Reservation	Relief Amount	Aggregate Relief Amount							
1090487	35.6	35.6							
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
SPS	MADDOX 115KV'	75	-0.11872	SPS	MUSTG5 118.0 230KV'	360	0.21119	-0.32991	108
SPS	CUNNINGHAM 115KV'	50.00977	-0.11614	SPS	MUSTG5 118.0 230KV'	360	0.21119	-0.32733	109

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

Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

Upgrade: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Limiting Facility: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Direction: From->To  
 Line Outage: GEN:51971 1  
 Flowgate: 51966519691GEN5197111107WP  
 Date Redispatch Needed: 12/1/07 - 4/1/08  
 Season Flowgate Identified: 2007 Winter Peak

Reservation	Relief Amount	Aggregate Relief Amount							
1090487	22.4	22.4							
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
SPS	MUSTANG 115KV'	29	-0.39789	SPS	MUSTG5 118.0 230KV'	210	0.21121	-0.6091	37
SPS	MUSTANG 115KV'	29	-0.39789	SPS	CAPROCK 115KV'	79.98182	0.00659	-0.40448	55
SPS	MUSTANG 115KV'	29	-0.39789	SPS	TOLK 230KV'	1019.542	0.01154	-0.40943	55
SPS	MUSTANG 115KV'	29	-0.39789	SPS	BLACKHAWK 115KV'	220	0.00348	-0.40137	56
SPS	MUSTANG 115KV'	29	-0.39789	SPS	CZ 69KV'	35	0.00316	-0.40105	56
SPS	MUSTANG 115KV'	29	-0.39789	SPS	HARRINGTON 230KV'	1066	0.00353	-0.40142	56
SPS	MUSTANG 115KV'	29	-0.39789	SPS	STEER WATER 115KV'	79.98182	0.00328	-0.40117	56
SPS	MUSTANG 115KV'	29	-0.39789	SPS	WILWIND 230KV'	159.9636	0.00487	-0.40276	56
SPS	MUSTANG 115KV'	29	-0.39789	SPS	JONES 230KV'	243	-0.00751	-0.39038	57
SPS	MUSTANG 115KV'	29	-0.39789	SPS	LP-BRND2 69KV'	60	-0.00834	-0.38955	57
SPS	MUSTANG 115KV'	29	-0.39789	SPS	SAN JUAN 230KV'	119.9727	-0.0036	-0.39429	57
SPS	MUSTANG 115KV'	29	-0.39789	SPS	CUNNINGHAM 230KV'	196	-0.03606	-0.36183	62
SPS	CUNNINGHAM 115KV'	71	-0.11611	SPS	MUSTG5 118.0 230KV'	210	0.21121	-0.32732	68
SPS	CUNNINGHAM 115KV'	110	-0.11611	SPS	MUSTG5 118.0 230KV'	210	0.21121	-0.32732	68
SPS	MADDOX 115KV'	100.0889	-0.1187	SPS	MUSTG5 118.0 230KV'	210	0.21121	-0.32991	68
SPS	MUSTANG 115KV'	29	-0.39789	SPS	MADDOX 115KV'	92.91113	-0.1187	-0.27919	80
SPS	CUNNINGHAM 230KV'	110	-0.03606	SPS	MUSTG5 118.0 230KV'	210	0.21121	-0.24727	90
SPS	JONES 230KV'	243	-0.00751	SPS	MUSTG5 118.0 230KV'	210	0.21121	-0.21872	102
SPS	LP-BRND2 69KV'	172	-0.00834	SPS	MUSTG5 118.0 230KV'	210	0.21121	-0.21955	102

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

SPS	'MOORE COUNTY 115KV'	48	0.00368	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.20753	108
SPS	'NICHOLS 115KV'	213	0.00339	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.20782	108
SPS	'NICHOLS 230KV'	244	0.00349	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.20772	108
SPS	'PLANTX 115KV'	253	0.00528	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.20593	109
SPS	'PLANTX 230KV'	189	0.01076	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.20045	112
SPS	'TOLK 230KV'	60.45752	0.01154	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.19967	112
SPS	'MADDOX 115KV'	100.0889	-0.1187	SPS	'TOLK 230KV'	1019.542	0.01154	-0.13024	172
SPS	'CUNNINGHAM 115KV'	71	-0.11611	SPS	'TOLK 230KV'	1019.542	0.01154	-0.12765	175
SPS	'CUNNINGHAM 115KV'	110	-0.11611	SPS	'TOLK 230KV'	1019.542	0.01154	-0.12765	175
SPS	'MADDOX 115KV'	100.0889	-0.1187	SPS	'CAPROCK 115KV'	79.98182	0.00659	-0.12529	178
SPS	'MADDOX 115KV'	100.0889	-0.1187	SPS	'WILWIND 230KV'	159.9636	0.00487	-0.12357	181
SPS	'CUNNINGHAM 115KV'	71	-0.11611	SPS	'CAPROCK 115KV'	79.98182	0.00659	-0.1227	182
SPS	'CUNNINGHAM 115KV'	110	-0.11611	SPS	'CAPROCK 115KV'	79.98182	0.00659	-0.1227	182
SPS	'MADDOX 115KV'	100.0889	-0.1187	SPS	'BLACKHAWK 115KV'	220	0.00348	-0.12218	183
SPS	'MADDOX 115KV'	100.0889	-0.1187	SPS	'HARRINGTON 230KV'	1066	0.00353	-0.12223	183
SPS	'MADDOX 115KV'	100.0889	-0.1187	SPS	'STEER WATER 115KV'	79.98182	0.00328	-0.12198	183
SPS	'CUNNINGHAM 115KV'	71	-0.11611	SPS	'WILWIND 230KV'	159.9636	0.00487	-0.12098	185
SPS	'CUNNINGHAM 115KV'	110	-0.11611	SPS	'WILWIND 230KV'	159.9636	0.00487	-0.12098	185
SPS	'CUNNINGHAM 115KV'	71	-0.11611	SPS	'BLACKHAWK 115KV'	220	0.00348	-0.11959	187
SPS	'CUNNINGHAM 115KV'	110	-0.11611	SPS	'BLACKHAWK 115KV'	220	0.00348	-0.11959	187
SPS	'CUNNINGHAM 115KV'	71	-0.11611	SPS	'HARRINGTON 230KV'	1066	0.00353	-0.11964	187
SPS	'CUNNINGHAM 115KV'	110	-0.11611	SPS	'HARRINGTON 230KV'	1066	0.00353	-0.11964	187
SPS	'CUNNINGHAM 115KV'	71	-0.11611	SPS	'STEER WATER 115KV'	79.98182	0.00328	-0.11939	187
SPS	'CUNNINGHAM 115KV'	110	-0.11611	SPS	'STEER WATER 115KV'	79.98182	0.00328	-0.11939	187
SPS	'MADDOX 115KV'	100.0889	-0.1187	SPS	'SAN JUAN 230KV'	119.9727	-0.0036	-0.1151	194
SPS	'CUNNINGHAM 115KV'	71	-0.11611	SPS	'SAN JUAN 230KV'	119.9727	-0.0036	-0.11251	199
SPS	'CUNNINGHAM 115KV'	110	-0.11611	SPS	'SAN JUAN 230KV'	119.9727	-0.0036	-0.11251	199
SPS	'MADDOX 115KV'	100.0889	-0.1187	SPS	'JONES 230KV'	243	-0.00751	-0.11119	201
SPS	'CUNNINGHAM 115KV'	71	-0.11611	SPS	'JONES 230KV'	243	-0.00751	-0.1086	206
SPS	'CUNNINGHAM 115KV'	110	-0.11611	SPS	'JONES 230KV'	243	-0.00751	-0.1086	206
SPS	'MADDOX 115KV'	100.0889	-0.1187	SPS	'CUNNINGHAM 230KV'	196	-0.03606	-0.08264	271
SPS	'CUNNINGHAM 115KV'	110	-0.11611	SPS	'CUNNINGHAM 230KV'	196	-0.03606	-0.08005	279

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: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Limiting Facility: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Direction: From->To  
 Line Outage: GEN:51971 1  
 Flowgate: 51966519691GEN5197114107G  
 Date Redispatch Needed: Starting 2007 4/1 - 6/1 Until EOC of Upgrade  
 Season Flowgate Identified: 2007 Spring Peak

Reservation	Relief Amount	Aggregate Relief Amount							Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
1090487		17.0										
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)			
SPS	'CUNNINGHAM 115KV'	71	-0.11614	SPS	'MUSTG5 118.0 230KV'	210	0.21119	-0.32733	52			
SPS	'MADDOX 115KV'	75	-0.11872	SPS	'MUSTG5 118.0 230KV'	210	0.21119	-0.32991	52			
SPS	'LP-BRND2 69KV'	152	-0.00854	SPS	'MUSTG5 118.0 230KV'	210	0.21119	-0.21973	78			
SPS	'HARRINGTON 230KV'	360	0.00363	SPS	'MUSTG5 118.0 230KV'	210	0.21119	-0.20756	82			
SPS	'MOORE COUNTY 115KV'	48	0.00378	SPS	'MUSTG5 118.0 230KV'	210	0.21119	-0.20741	82			
SPS	'NICHOLS 115KV'	107	0.0035	SPS	'MUSTG5 118.0 230KV'	210	0.21119	-0.20769	82			
SPS	'NICHOLS 230KV'	113.3726	0.00359	SPS	'MUSTG5 118.0 230KV'	210	0.21119	-0.2076	82			
SPS	'PLANTX 115KV'	48	0.00555	SPS	'MUSTG5 118.0 230KV'	210	0.21119	-0.20564	83			
SPS	'TOLK 230KV'	65.29117	0.01159	SPS	'MUSTG5 118.0 230KV'	210	0.21119	-0.1996	85			
SPS	'MADDOX 115KV'	75	-0.11872	SPS	'TOLK 230KV'	1014.709	0.01159	-0.13031	131			
SPS	'MADDOX 115KV'	75	-0.11872	SPS	'PLANTX 230KV'	189	0.01083	-0.12955	132			
SPS	'CUNNINGHAM 115KV'	71	-0.11614	SPS	'TOLK 230KV'	1014.709	0.01159	-0.12773	133			
SPS	'CUNNINGHAM 115KV'	71	-0.11614	SPS	'PLANTX 230KV'	189	0.01083	-0.12697	134			
SPS	'MADDOX 115KV'	75	-0.11872	SPS	'CAPROCK 115KV'	79.99996	0.00665	-0.12537	136			
SPS	'MADDOX 115KV'	75	-0.11872	SPS	'PLANTX 115KV'	205	0.00555	-0.12427	137			
SPS	'MADDOX 115KV'	75	-0.11872	SPS	'WILWIND 230KV'	159.9999	0.00497	-0.12369	138			
SPS	'CUNNINGHAM 115KV'	71	-0.11614	SPS	'CAPROCK 115KV'	79.99996	0.00665	-0.12279	139			
SPS	'MADDOX 115KV'	75	-0.11872	SPS	'HARRINGTON 230KV'	706	0.00363	-0.12235	139			
SPS	'MADDOX 115KV'	75	-0.11872	SPS	'NICHOLS 230KV'	130.6274	0.00359	-0.12231	139			
SPS	'CUNNINGHAM 115KV'	71	-0.11614	SPS	'PLANTX 115KV'	205	0.00555	-0.12169	140			
SPS	'CUNNINGHAM 115KV'	71	-0.11614	SPS	'WILWIND 230KV'	159.9999	0.00497	-0.12111	141			
SPS	'CUNNINGHAM 115KV'	71	-0.11614	SPS	'HARRINGTON 230KV'	706	0.00363	-0.11977	142			
SPS	'CUNNINGHAM 115KV'	71	-0.11614	SPS	'NICHOLS 230KV'	130.6274	0.00359	-0.11973	142			
SPS	'MADDOX 115KV'	75	-0.11872	SPS	'SAN JUAN 230KV'	119.9999	-0.00356	-0.11516	148			
SPS	'CUNNINGHAM 115KV'	71	-0.11614	SPS	'SAN JUAN 230KV'	119.9999	-0.00356	-0.11258	151			
SPS	'MADDOX 115KV'	75	-0.11872	SPS	'JONES 230KV'	486	-0.0077	-0.11102	153			
SPS	'CUNNINGHAM 115KV'	71	-0.11614	SPS	'JONES 230KV'	486	-0.0077	-0.10844	157			
SPS	'MADDOX 115KV'	75	-0.11872	SPS	'CUNNINGHAM 230KV'	306	-0.03607	-0.08265	206			
SPS	'CUNNINGHAM 115KV'	71	-0.11614	SPS	'CUNNINGHAM 230KV'	306	-0.03607	-0.08007	213			

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: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Limiting Facility: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Direction: From->To  
 Line Outage: GEN:51972 1  
 Flowgate: 51966519691GEN5197211107FA  
 Date Redispatch Needed: Starting 2007 10/1 - 12/1 Until EOC of Upgrade  
 Season Flowgate Identified: 2007 Fall Peak

Reservation	Relief Amount	Aggregate Relief Amount							Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
1090487		31.8										
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)			
SPS	'MADDOX 115KV'	102.3579	-0.1187	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.32991	96			
SPS	'CUNNINGHAM 115KV'	71	-0.11612	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.32733	97			
SPS	'CUNNINGHAM 115KV'	110	-0.11612	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.32733	97			
SPS	'CUNNINGHAM 230KV'	306	-0.03606	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.24727	129			
SPS	'NICHOLS 115KV'	213	0.00339	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.20782	153			
SPS	'NICHOLS 230KV'	244	0.00348	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.20773	153			
SPS	'PLANTX 115KV'	253	0.00527	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.20594	154			
SPS	'PLANTX 230KV'	189	0.01075	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.20046	159			
SPS	'TOLK 230KV'	60.2673	0.01153	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.19968	159			
SPS	'MADDOX 115KV'	102.3579	-0.1187	SPS	'TOLK 230KV'	1019.733	0.01153	-0.13023	244			

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

SPS	CUNNINGHAM 115KV'	110	-0.11612	SPS	TOLK 230KV'	1019.733	0.01153	-0.12765	249
SPS	MADDOX 115KV'	102.3579	-0.1187	SPS	WILWIND 230KV'	160	0.00487	-0.12357	257
SPS	MADDOX 115KV'	102.3579	-0.1187	SPS	BLACKHAWK 115KV'	220	0.00348	-0.12218	260
SPS	MADDOX 115KV'	102.3579	-0.1187	SPS	HARRINGTON 230KV'	1066	0.00352	-0.12222	260
SPS	CUNNINGHAM 115KV'	110	-0.11612	SPS	WILWIND 230KV'	160	0.00487	-0.12099	263
SPS	CUNNINGHAM 115KV'	110	-0.11612	SPS	BLACKHAWK 115KV'	220	0.00348	-0.1196	266
SPS	CUNNINGHAM 115KV'	110	-0.11612	SPS	HARRINGTON 230KV'	1066	0.00352	-0.11964	266
SPS	MADDOX 115KV'	102.3579	-0.1187	SPS	SAN JUAN 230KV'	120	-0.0036	-0.1151	276
SPS	CUNNINGHAM 115KV'	110	-0.11612	SPS	SAN JUAN 230KV'	120	-0.0036	-0.11252	283
SPS	MADDOX 115KV'	102.3579	-0.1187	SPS	JONES 230KV'	486	-0.00751	-0.11119	286
SPS	CUNNINGHAM 115KV'	110	-0.11612	SPS	JONES 230KV'	486	-0.00751	-0.10861	293
SPS	CUNNINGHAM 230KV'	306	-0.03606	SPS	TOLK 230KV'	1019.733	0.01153	-0.04759	688

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

Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

Upgrade: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Limiting Facility: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Direction: From->To  
 Line Outage: GEN:51972 1  
 Flowgate: 51966519691GEN5197211107SH  
 Date Redispatch Needed: 6/1 - 10/1 Until EOC of Upgrade  
 Season Flowgate Identified: 2007 Summer Shoulder

Reservation	Relief Amount	Aggregate Relief Amount							
1090487	28.5	28.5							
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
SPS	MADDOX 115KV'	75	-0.11872	SPS	MUSTG5 118.0 230KV'	210	0.21119	-0.32991	86
SPS	CUNNINGHAM 115KV'	71	-0.11614	SPS	MUSTG5 118.0 230KV'	210	0.21119	-0.32733	87
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	MUSTG5 118.0 230KV'	210	0.21119	-0.32733	87
SPS	CUNNINGHAM 230KV'	110	-0.03607	SPS	MUSTG5 118.0 230KV'	210	0.21119	-0.24726	115
SPS	MOORE COUNTY 115KV'	48	0.00378	SPS	MUSTG5 118.0 230KV'	210	0.21119	-0.20741	137
SPS	NICHOLS 115KV'	131	0.0035	SPS	MUSTG5 118.0 230KV'	210	0.21119	-0.20769	137
SPS	NICHOLS 230KV'	244	0.00359	SPS	MUSTG5 118.0 230KV'	210	0.21119	-0.2076	137
SPS	PLANTX 115KV'	89.47412	0.00555	SPS	MUSTG5 118.0 230KV'	210	0.21119	-0.20564	138
SPS	TOLK 230KV'	52.01129	0.01159	SPS	MUSTG5 118.0 230KV'	210	0.21119	-0.1996	143
SPS	MADDOX 115KV'	75	-0.11872	SPS	TOLK 230KV'	1027.989	0.01159	-0.13031	218
SPS	MADDOX 115KV'	75	-0.11872	SPS	PLANTX 230KV'	189	0.01083	-0.12955	220
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	TOLK 230KV'	1027.989	0.01159	-0.12773	223
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	PLANTX 230KV'	189	0.01083	-0.12697	224
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	PLANTX 115KV'	163.5259	0.00555	-0.12169	234
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	WILWIND 230KV'	159.9636	0.00497	-0.12111	235
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	BLACKHAWK 115KV'	220	0.00358	-0.11972	238
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	HARRINGTON 230KV'	1066	0.00363	-0.11977	238
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	NICHOLS 115KV'	82	0.0035	-0.11964	238
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	STEER WATER 115KV'	79.98182	0.00328	-0.11952	238
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	SAN JUAN 230KV'	119.9727	-0.00356	-0.11258	253
SPS	CUNNINGHAM 115KV'	110	-0.11614	SPS	JONES 230KV'	486	-0.0077	-0.10844	263

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

Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

Upgrade: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Limiting Facility: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Direction: From->To  
 Line Outage: GEN:51972 1  
 Flowgate: 51966519691GEN5197211107SP  
 Date Redispatch Needed: 6/1/07 - 10/1/07  
 Season Flowgate Identified: 2007 Summer Peak

Reservation	Relief Amount	Aggregate Relief Amount							
1090487	35.6	35.6							
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
SPS	MADDOX 115KV'	75	-0.11872	SPS	MUSTG5 118.0 230KV'	360	0.21119	-0.32991	108
SPS	CUNNINGHAM 115KV'	50.00977	-0.11614	SPS	MUSTG5 118.0 230KV'	360	0.21119	-0.32733	109

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

Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

Upgrade: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Limiting Facility: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Direction: From->To  
 Line Outage: GEN:51972 1  
 Flowgate: 51966519691GEN5197211107WP  
 Date Redispatch Needed: 12/1/07 - 4/1/08  
 Season Flowgate Identified: 2007 Winter Peak

Reservation	Relief Amount	Aggregate Relief Amount							
1090487	21.9	21.9							
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
SPS	MUSTANG 115KV'	29	-0.39789	SPS	MUSTG5 118.0 230KV'	210	0.21121	-0.6091	36
SPS	MUSTANG 115KV'	29	-0.39789	SPS	TOLK 230KV'	1019.542	0.01154	-0.40943	53
SPS	MUSTANG 115KV'	29	-0.39789	SPS	CAPROCK 115KV'	79.98182	0.00659	-0.40448	54
SPS	MUSTANG 115KV'	29	-0.39789	SPS	WILWIND 230KV'	159.9636	0.00487	-0.40276	54
SPS	MUSTANG 115KV'	29	-0.39789	SPS	BLACKHAWK 115KV'	220	0.00348	-0.40137	55
SPS	MUSTANG 115KV'	29	-0.39789	SPS	CZ 69KV'	35	0.00316	-0.40105	55
SPS	MUSTANG 115KV'	29	-0.39789	SPS	HARRINGTON 230KV'	1066	0.00353	-0.40142	55
SPS	MUSTANG 115KV'	29	-0.39789	SPS	STEER WATER 115KV'	79.98182	0.00328	-0.40117	55
SPS	MUSTANG 115KV'	29	-0.39789	SPS	JONES 230KV'	243	-0.00751	-0.39038	56
SPS	MUSTANG 115KV'	29	-0.39789	SPS	LP-BRND2 69KV'	60	-0.00834	-0.38955	56
SPS	MUSTANG 115KV'	29	-0.39789	SPS	SAN JUAN 230KV'	119.9727	-0.0036	-0.39429	56
SPS	MUSTANG 115KV'	29	-0.39789	SPS	CUNNINGHAM 230KV'	196	-0.03606	-0.36183	60
SPS	MADDOX 115KV'	100.0889	-0.1187	SPS	MUSTG5 118.0 230KV'	210	0.21121	-0.32991	66
SPS	CUNNINGHAM 115KV'	71	-0.11611	SPS	MUSTG5 118.0 230KV'	210	0.21121	-0.32732	67
SPS	CUNNINGHAM 115KV'	110	-0.11611	SPS	MUSTG5 118.0 230KV'	210	0.21121	-0.32732	67
SPS	MUSTANG 115KV'	29	-0.39789	SPS	MADDOX 115KV'	92.91113	-0.1187	-0.27919	78
SPS	CUNNINGHAM 230KV'	110	-0.03606	SPS	MUSTG5 118.0 230KV'	210	0.21121	-0.24727	89
SPS	JONES 230KV'	243	-0.00751	SPS	MUSTG5 118.0 230KV'	210	0.21121	-0.21872	100

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

SPS	LP-BRND2 69KV	172	-0.00834	SPS	MUSTG5 118.0 230KV	210	0.21121	-0.21955	100
SPS	MOORE COUNTY 115KV	48	0.00368	SPS	MUSTG5 118.0 230KV	210	0.21121	-0.20753	105
SPS	NICHOLS 115KV	213	0.00339	SPS	MUSTG5 118.0 230KV	210	0.21121	-0.20782	105
SPS	NICHOLS 230KV	244	0.00349	SPS	MUSTG5 118.0 230KV	210	0.21121	-0.20772	105
SPS	PLANTX 115KV	253	0.00528	SPS	MUSTG5 118.0 230KV	210	0.21121	-0.20593	106
SPS	PLANTX 230KV	189	0.01076	SPS	MUSTG5 118.0 230KV	210	0.21121	-0.20045	109
SPS	TOLK 230KV	60.45752	0.01154	SPS	MUSTG5 118.0 230KV	210	0.21121	-0.19967	110
SPS	MADDOX 115KV	100.0889	-0.1187	SPS	TOLK 230KV	1019.542	0.01154	-0.13024	168
SPS	CUNNINGHAM 115KV	71	-0.11611	SPS	TOLK 230KV	1019.542	0.01154	-0.12765	171
SPS	CUNNINGHAM 115KV	110	-0.11611	SPS	TOLK 230KV	1019.542	0.01154	-0.12765	171
SPS	MADDOX 115KV	100.0889	-0.1187	SPS	CAPROCK 115KV	79.98182	0.00659	-0.12529	175
SPS	MADDOX 115KV	100.0889	-0.1187	SPS	WILWIND 230KV	159.9636	0.00487	-0.12357	177
SPS	CUNNINGHAM 115KV	71	-0.11611	SPS	CAPROCK 115KV	79.98182	0.00659	-0.1227	178
SPS	CUNNINGHAM 115KV	110	-0.11611	SPS	CAPROCK 115KV	79.98182	0.00659	-0.1227	178
SPS	MADDOX 115KV	100.0889	-0.1187	SPS	BLACKHAWK 115KV	220	0.00348	-0.12218	179
SPS	MADDOX 115KV	100.0889	-0.1187	SPS	HARRINGTON 230KV	1066	0.00353	-0.12223	179
SPS	MADDOX 115KV	100.0889	-0.1187	SPS	STEER WATER 115KV	79.98182	0.00328	-0.12198	179
SPS	CUNNINGHAM 115KV	71	-0.11611	SPS	WILWIND 230KV	159.9636	0.00487	-0.12098	181
SPS	CUNNINGHAM 115KV	110	-0.11611	SPS	WILWIND 230KV	159.9636	0.00487	-0.12098	181
SPS	CUNNINGHAM 115KV	71	-0.11611	SPS	BLACKHAWK 115KV	220	0.00348	-0.11959	183
SPS	CUNNINGHAM 115KV	110	-0.11611	SPS	BLACKHAWK 115KV	220	0.00348	-0.11959	183
SPS	CUNNINGHAM 115KV	71	-0.11611	SPS	HARRINGTON 230KV	1066	0.00353	-0.11964	183
SPS	CUNNINGHAM 115KV	110	-0.11611	SPS	HARRINGTON 230KV	1066	0.00353	-0.11964	183
SPS	CUNNINGHAM 115KV	71	-0.11611	SPS	STEER WATER 115KV	79.98182	0.00328	-0.11939	183
SPS	CUNNINGHAM 115KV	110	-0.11611	SPS	STEER WATER 115KV	79.98182	0.00328	-0.11939	183
SPS	MADDOX 115KV	100.0889	-0.1187	SPS	SAN JUAN 230KV	119.9727	-0.0036	-0.1151	190
SPS	CUNNINGHAM 115KV	71	-0.11611	SPS	SAN JUAN 230KV	119.9727	-0.0036	-0.11251	195
SPS	CUNNINGHAM 115KV	110	-0.11611	SPS	SAN JUAN 230KV	119.9727	-0.0036	-0.11251	195
SPS	MADDOX 115KV	100.0889	-0.1187	SPS	JONES 230KV	243	-0.00751	-0.11119	197
SPS	CUNNINGHAM 115KV	71	-0.11611	SPS	JONES 230KV	243	-0.00751	-0.1086	202
SPS	CUNNINGHAM 115KV	110	-0.11611	SPS	JONES 230KV	243	-0.00751	-0.1086	202
SPS	MADDOX 115KV	100.0889	-0.1187	SPS	CUNNINGHAM 230KV	196	-0.03606	-0.08264	265
SPS	CUNNINGHAM 115KV	110	-0.11611	SPS	CUNNINGHAM 230KV	196	-0.03606	-0.08005	273

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

Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

Upgrade: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Limiting Facility: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Direction: From->To  
 Line Outage: GEN:51972 1  
 Flowgate: 51966519691GEN5197214107G  
 Date Redispatch Needed: Starting 2007 4/1 - 6/1 Until EOC of Upgrade  
 Season Flowgate Identified: 2007 Spring Peak

Reservation	Relief Amount	Aggregate Relief Amount							
1090487	16.1	16.1							
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
SPS	CUNNINGHAM 115KV	71	-0.11614	SPS	MUSTG5 118.0 230KV	210	0.21119	-0.32733	49
SPS	MADDOX 115KV	75	-0.11872	SPS	MUSTG5 118.0 230KV	210	0.21119	-0.32991	49
SPS	LP-BRND2 69KV	152	-0.00854	SPS	MUSTG5 118.0 230KV	210	0.21119	-0.21973	73
SPS	HARRINGTON 230KV	360	0.00363	SPS	MUSTG5 118.0 230KV	210	0.21119	-0.20756	78
SPS	MOORE COUNTY 115KV	48	0.00378	SPS	MUSTG5 118.0 230KV	210	0.21119	-0.20741	78
SPS	NICHOLS 115KV	107	0.0035	SPS	MUSTG5 118.0 230KV	210	0.21119	-0.20769	78
SPS	NICHOLS 230KV	113.3726	0.00359	SPS	MUSTG5 118.0 230KV	210	0.21119	-0.2076	78
SPS	PLANTX 115KV	48	0.00555	SPS	MUSTG5 118.0 230KV	210	0.21119	-0.20564	78
SPS	TOLK 230KV	65.29117	0.01159	SPS	MUSTG5 118.0 230KV	210	0.21119	-0.1996	81
SPS	MADDOX 115KV	75	-0.11872	SPS	PLANTX 230KV	189	0.01083	-0.12955	124
SPS	MADDOX 115KV	75	-0.11872	SPS	TOLK 230KV	1014.709	0.01159	-0.13031	124
SPS	CUNNINGHAM 115KV	71	-0.11614	SPS	TOLK 230KV	1014.709	0.01159	-0.12773	126
SPS	CUNNINGHAM 115KV	71	-0.11614	SPS	PLANTX 230KV	189	0.01083	-0.12697	127
SPS	MADDOX 115KV	75	-0.11872	SPS	CAPROCK 115KV	79.99996	0.00665	-0.12537	128
SPS	MADDOX 115KV	75	-0.11872	SPS	PLANTX 115KV	205	0.00555	-0.12427	130
SPS	MADDOX 115KV	75	-0.11872	SPS	WILWIND 230KV	159.9999	0.00497	-0.12369	130
SPS	CUNNINGHAM 115KV	71	-0.11614	SPS	CAPROCK 115KV	79.99996	0.00665	-0.12279	131
SPS	CUNNINGHAM 115KV	71	-0.11614	SPS	PLANTX 115KV	205	0.00555	-0.12169	132
SPS	MADDOX 115KV	75	-0.11872	SPS	HARRINGTON 230KV	706	0.00363	-0.12235	132
SPS	MADDOX 115KV	75	-0.11872	SPS	NICHOLS 230KV	130.6274	0.00359	-0.12231	132
SPS	CUNNINGHAM 115KV	71	-0.11614	SPS	WILWIND 230KV	159.9999	0.00497	-0.12111	133
SPS	CUNNINGHAM 115KV	71	-0.11614	SPS	HARRINGTON 230KV	706	0.00363	-0.11977	134
SPS	CUNNINGHAM 115KV	71	-0.11614	SPS	NICHOLS 230KV	130.6274	0.00359	-0.11973	134
SPS	MADDOX 115KV	75	-0.11872	SPS	SAN JUAN 230KV	119.9999	-0.00356	-0.11516	140
SPS	CUNNINGHAM 115KV	71	-0.11614	SPS	SAN JUAN 230KV	119.9999	-0.00356	-0.11258	143
SPS	MADDOX 115KV	75	-0.11872	SPS	JONES 230KV	486	-0.0077	-0.11102	145
SPS	CUNNINGHAM 115KV	71	-0.11614	SPS	JONES 230KV	486	-0.0077	-0.10844	148
SPS	MADDOX 115KV	75	-0.11872	SPS	CUNNINGHAM 230KV	306	-0.03607	-0.08265	195
SPS	CUNNINGHAM 115KV	71	-0.11614	SPS	CUNNINGHAM 230KV	306	-0.03607	-0.08007	201

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

Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

Upgrade: Mustang-San Andr-Amerada Hess 115KV Displacement  
 Limiting Facility: DENVER CITY INTERCHANGE N - MUSTANG STATION 115KV CKT 1  
 Direction: To->From  
 Line Outage: DENVER CITY INTERCHANGE S - MUSTANG STATION 115KV CKT 1  
 Flowgate: 51960519661519625196811107SH  
 Date Redispatch Needed: 6/1 - 10/1 Until EOC of Upgrade  
 Season Flowgate Identified: 2007 Summer Shoulder

Reservation	Relief Amount	Aggregate Relief Amount							
1090487	13.3	13.3							
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
SPS	MADDOX 115KV	75	-0.16452	SPS	MUSTG5 118.0 230KV	210	0.15058	-0.3151	42
SPS	CUNNINGHAM 115KV	71	-0.16155	SPS	MUSTG5 118.0 230KV	210	0.15058	-0.31213	43
SPS	CUNNINGHAM 115KV	110	-0.16155	SPS	MUSTG5 118.0 230KV	210	0.15058	-0.31213	43
SPS	CUNNINGHAM 230KV	110	-0.07301	SPS	MUSTG5 118.0 230KV	210	0.15058	-0.22359	60
SPS	MADDOX 115KV	75	-0.16452	SPS	PLANTX 230KV	189	0.00438	-0.1689	79
SPS	MADDOX 115KV	75	-0.16452	SPS	TOLK 230KV	1027.989	0.00375	-0.16827	79
SPS	CUNNINGHAM 115KV	71	-0.16155	SPS	PLANTX 230KV	189	0.00438	-0.16593	80
SPS	CUNNINGHAM 115KV	110	-0.16155	SPS	PLANTX 230KV	189	0.00438	-0.16593	80
SPS	MADDOX 115KV	75	-0.16452	SPS	BLACKHAWK 115KV	220	0.0013	-0.16582	80



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

SPS	MADDOX 115KV	75	-0.16452	SPS	HARRINGTON 230KV	1066	0.00132	-0.16584	80
SPS	MADDOX 115KV	75	-0.16452	SPS	NICHOLS 115KV	82	0.00126	-0.16578	80
SPS	MADDOX 115KV	75	-0.16452	SPS	PLANTX 115KV	163.6259	0.0022	-0.16672	80
SPS	MADDOX 115KV	75	-0.16452	SPS	STEER WATER 115KV	79.98182	0.00122	-0.16574	80
SPS	MADDOX 115KV	75	-0.16452	SPS	WILWIND 230KV	159.9636	0.00178	-0.1663	80
SPS	CUNNINGHAM 115KV	71	-0.16155	SPS	PLANTX 115KV	163.6259	0.0022	-0.16375	81
SPS	CUNNINGHAM 115KV	110	-0.16155	SPS	PLANTX 115KV	163.6259	0.0022	-0.16375	81
SPS	CUNNINGHAM 115KV	71	-0.16155	SPS	TOLK 230KV	1027.989	0.00375	-0.1653	81
SPS	CUNNINGHAM 115KV	110	-0.16155	SPS	TOLK 230KV	1027.989	0.00375	-0.1653	81
SPS	CUNNINGHAM 115KV	71	-0.16155	SPS	BLACKHAWK 115KV	220	0.0013	-0.16285	82
SPS	CUNNINGHAM 115KV	110	-0.16155	SPS	BLACKHAWK 115KV	220	0.0013	-0.16285	82
SPS	CUNNINGHAM 115KV	71	-0.16155	SPS	HARRINGTON 230KV	1066	0.00132	-0.16287	82
SPS	CUNNINGHAM 115KV	110	-0.16155	SPS	HARRINGTON 230KV	1066	0.00132	-0.16287	82
SPS	CUNNINGHAM 115KV	71	-0.16155	SPS	NICHOLS 115KV	82	0.00126	-0.16281	82
SPS	CUNNINGHAM 115KV	110	-0.16155	SPS	NICHOLS 115KV	82	0.00126	-0.16281	82
SPS	CUNNINGHAM 115KV	71	-0.16155	SPS	STEER WATER 115KV	79.98182	0.00122	-0.16277	82
SPS	CUNNINGHAM 115KV	110	-0.16155	SPS	STEER WATER 115KV	79.98182	0.00122	-0.16277	82
SPS	CUNNINGHAM 115KV	71	-0.16155	SPS	WILWIND 230KV	159.9636	0.00178	-0.16333	82
SPS	CUNNINGHAM 115KV	110	-0.16155	SPS	WILWIND 230KV	159.9636	0.00178	-0.16333	82
SPS	MADDOX 115KV	75	-0.16452	SPS	CAPROCK 115KV	79.98182	-0.00267	-0.16185	82
SPS	MADDOX 115KV	75	-0.16452	SPS	JONES 230KV	486	-0.00223	-0.16229	82
SPS	MADDOX 115KV	75	-0.16452	SPS	LP-BRND2 69KV	80	-0.00258	-0.16194	82
SPS	CUNNINGHAM 115KV	71	-0.16155	SPS	CAPROCK 115KV	79.98182	-0.00267	-0.15888	84
SPS	CUNNINGHAM 115KV	110	-0.16155	SPS	CAPROCK 115KV	79.98182	-0.00267	-0.15888	84
SPS	CUNNINGHAM 115KV	71	-0.16155	SPS	JONES 230KV	486	-0.00223	-0.15932	84
SPS	CUNNINGHAM 115KV	110	-0.16155	SPS	JONES 230KV	486	-0.00223	-0.15932	84
SPS	CUNNINGHAM 115KV	71	-0.16155	SPS	LP-BRND2 69KV	80	-0.00258	-0.15897	84
SPS	LP-BRND2 69KV	152	-0.00258	SPS	MUSTG5 118.0 230KV	210	0.15058	-0.15316	87
SPS	MOORE COUNTY 115KV	48	0.00138	SPS	MUSTG5 118.0 230KV	210	0.15058	-0.1492	89
SPS	NICHOLS 115KV	131	0.00126	SPS	MUSTG5 118.0 230KV	210	0.15058	-0.14932	89
SPS	NICHOLS 230KV	244	0.0013	SPS	MUSTG5 118.0 230KV	210	0.15058	-0.14928	89
SPS	PLANTX 115KV	89.47412	0.0022	SPS	MUSTG5 118.0 230KV	210	0.15058	-0.14838	90
SPS	TOLK 230KV	52.01129	0.00375	SPS	MUSTG5 118.0 230KV	210	0.15058	-0.14683	91
SPS	MADDOX 115KV	75	-0.16452	SPS	SAN JUAN 230KV	119.9727	-0.01887	-0.14565	92
SPS	CUNNINGHAM 115KV	71	-0.16155	SPS	SAN JUAN 230KV	119.9727	-0.01887	-0.14268	93
SPS	CUNNINGHAM 115KV	110	-0.16155	SPS	SAN JUAN 230KV	119.9727	-0.01887	-0.14268	93
SPS	MADDOX 115KV	75	-0.16452	SPS	CUNNINGHAM 230KV	196	-0.07301	-0.09151	146
SPS	CUNNINGHAM 115KV	71	-0.16155	SPS	CUNNINGHAM 230KV	196	-0.07301	-0.08854	151
SPS	CUNNINGHAM 115KV	110	-0.16155	SPS	CUNNINGHAM 230KV	196	-0.07301	-0.08854	151
SPS	CUNNINGHAM 230KV	110	-0.07301	SPS	PLANTX 230KV	189	0.00438	-0.07739	172
SPS	CUNNINGHAM 230KV	110	-0.07301	SPS	TOLK 230KV	1027.989	0.00375	-0.07676	174
SPS	CUNNINGHAM 230KV	110	-0.07301	SPS	PLANTX 115KV	163.6259	0.0022	-0.07521	177
SPS	CUNNINGHAM 230KV	110	-0.07301	SPS	WILWIND 230KV	159.9636	0.00178	-0.07479	178
SPS	CUNNINGHAM 230KV	110	-0.07301	SPS	HARRINGTON 230KV	1066	0.00132	-0.07433	179
SPS	CUNNINGHAM 230KV	110	-0.07301	SPS	BLACKHAWK 115KV	220	0.0013	-0.07431	180
SPS	CUNNINGHAM 230KV	110	-0.07301	SPS	NICHOLS 115KV	82	0.00126	-0.07427	180
SPS	CUNNINGHAM 230KV	110	-0.07301	SPS	STEER WATER 115KV	79.98182	0.00122	-0.07423	180
SPS	CUNNINGHAM 230KV	110	-0.07301	SPS	JONES 230KV	486	-0.00223	-0.07078	188
SPS	CUNNINGHAM 230KV	110	-0.07301	SPS	CAPROCK 115KV	79.98182	-0.00267	-0.07034	190
SPS	CUNNINGHAM 230KV	110	-0.07301	SPS	SAN JUAN 230KV	119.9727	-0.01887	-0.05414	246

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

Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

Upgrade: Mustang-San Andr-Amerada Hess 115KV Displacement  
 Limiting Facility: DENVER CITY INTERCHANGE N - MUSTANG STATION 115KV CKT 1  
 Direction: To->From  
 Line Outage: DENVER CITY INTERCHANGE S - MUSTANG STATION 115KV CKT 1  
 Flowgate: 51960519661519625196811107SP  
 Date Redispatch Needed: 6/1/07 - 10/1/07  
 Season Flowgate Identified: 2007 Summer Peak

Reservation	Relief Amount	Aggregate Relief Amount								Aggregate Redispatch Amount (MW)
1090487	23.8	23.8								
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)	
SPS	CUNNINGHAM 115KV	50.00977	-0.16155	SPS	MUSTG5 118.0 230KV	360	0.15058	-0.31213	76	
SPS	MADDOX 115KV	75	-0.16452	SPS	MUSTG5 118.0 230KV	360	0.15058	-0.3151	76	
SPS	MADDOX 115KV	75	-0.16452	SPS	PLANTX 230KV	189	0.00438	-0.1689	141	
SPS	MADDOX 115KV	75	-0.16452	SPS	TOLK 230KV	1024.722	0.00375	-0.16827	142	
SPS	MADDOX 115KV	75	-0.16452	SPS	PLANTX 115KV	205	0.0022	-0.16672	143	
SPS	MADDOX 115KV	75	-0.16452	SPS	WILWIND 230KV	159.9636	0.00178	-0.1663	143	
SPS	CUNNINGHAM 115KV	50.00977	-0.16155	SPS	PLANTX 230KV	189	0.00438	-0.16593	144	
SPS	CUNNINGHAM 115KV	50.00977	-0.16155	SPS	TOLK 230KV	1024.722	0.00375	-0.1653	144	
SPS	MADDOX 115KV	75	-0.16452	SPS	BLACKHAWK 115KV	220	0.0013	-0.16582	144	
SPS	MADDOX 115KV	75	-0.16452	SPS	HARRINGTON 230KV	1066	0.00132	-0.16584	144	
SPS	MADDOX 115KV	75	-0.16452	SPS	NICHOLS 115KV	147	0.00126	-0.16578	144	
SPS	MADDOX 115KV	75	-0.16452	SPS	NICHOLS 115KV	147	0.0013	-0.16582	144	
SPS	MADDOX 115KV	75	-0.16452	SPS	STEER WATER 115KV	79.98182	0.00122	-0.16574	144	
SPS	CUNNINGHAM 115KV	50.00977	-0.16155	SPS	PLANTX 115KV	205	0.0022	-0.16375	145	
SPS	CUNNINGHAM 115KV	50.00977	-0.16155	SPS	BLACKHAWK 115KV	220	0.0013	-0.16285	146	
SPS	CUNNINGHAM 115KV	50.00977	-0.16155	SPS	HARRINGTON 230KV	1066	0.00132	-0.16287	146	
SPS	CUNNINGHAM 115KV	50.00977	-0.16155	SPS	NICHOLS 115KV	147	0.00126	-0.16281	146	
SPS	CUNNINGHAM 115KV	50.00977	-0.16155	SPS	NICHOLS 230KV	147	0.0013	-0.16285	146	
SPS	CUNNINGHAM 115KV	50.00977	-0.16155	SPS	STEER WATER 115KV	79.98182	0.00122	-0.16277	146	
SPS	CUNNINGHAM 115KV	50.00977	-0.16155	SPS	WILWIND 230KV	159.9636	0.00178	-0.16333	146	
SPS	MADDOX 115KV	75	-0.16452	SPS	CAPROCK 115KV	79.98182	-0.00267	-0.16185	147	
SPS	MADDOX 115KV	75	-0.16452	SPS	JONES 230KV	486	-0.00223	-0.16229	147	
SPS	CUNNINGHAM 115KV	50.00977	-0.16155	SPS	CAPROCK 115KV	79.98182	-0.00267	-0.15888	150	
SPS	CUNNINGHAM 115KV	50.00977	-0.16155	SPS	JONES 230KV	486	-0.00223	-0.15932	150	
SPS	TOLK 230KV	55.27795	0.00375	SPS	MUSTG5 118.0 230KV	360	0.15058	-0.14683	162	
SPS	MADDOX 115KV	75	-0.16452	SPS	SAN JUAN 230KV	119.9727	-0.01887	-0.14565	164	

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

Factor = Source GSF - Sink GSF

Redispatch Amount = Relief Amount / Factor

Upgrade: Mustang-San Andr-Amerada Hess 115KV Displacement  
 Limiting Facility: DENVER CITY INTERCHANGE N - MUSTANG STATION 115KV CKT 1  
 Direction: To->From  
 Line Outage: DENVER CITY INTERCHANGE S - MUSTANG STATION 115KV CKT 1  
 Flowgate: 51960519661519625196811407G  
 Date Redispatch Needed: Starting 2007 4/1 - 6/1 Until EOC of Upgrade  
 Season Flowgate Identified: 2007 Spring Peak

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

Reservation	Relief Amount	Aggregate Relief Amount										
1090487	1.9	1.9										
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)			
SPS	CUNNINGHAM 115KV'	71	-0.16155	SPS	MUSTG5 118.0 230KV'	210	0.15058	-0.31213	6			
SPS	MADDOX 115KV'	75	-0.16452	SPS	MUSTG5 118.0 230KV'	210	0.15058	-0.3151	6			
SPS	CARLSBAD 69KV'	18	-0.07652	SPS	MUSTG5 118.0 230KV'	210	0.15058	-0.2271	8			
SPS	CUNNINGHAM 115KV'	71	-0.16155	SPS	PLANTX 230KV'	189	0.00438	-0.16593	11			
SPS	CUNNINGHAM 115KV'	71	-0.16155	SPS	TOLK 230KV'	1012.904	0.00374	-0.16529	11			
SPS	MADDOX 115KV'	75	-0.16452	SPS	HARRINGTON 230KV'	706	0.00132	-0.16584	11			
SPS	MADDOX 115KV'	75	-0.16452	SPS	PLANTX 115KV'	205	0.0022	-0.16672	11			
SPS	MADDOX 115KV'	75	-0.16452	SPS	PLANTX 230KV'	189	0.00438	-0.16689	11			
SPS	MADDOX 115KV'	75	-0.16452	SPS	TOLK 230KV'	1012.904	0.00374	-0.16826	11			
SPS	MADDOX 115KV'	75	-0.16452	SPS	WILWIND 230KV'	72	0.00178	-0.16663	11			
SPS	CUNNINGHAM 115KV'	71	-0.16155	SPS	CAPROCK 115KV'	36	-0.00267	-0.15888	12			
SPS	CUNNINGHAM 115KV'	71	-0.16155	SPS	HARRINGTON 230KV'	706	0.00132	-0.16287	12			
SPS	CUNNINGHAM 115KV'	71	-0.16155	SPS	JONES 230KV'	486	-0.00223	-0.15932	12			
SPS	CUNNINGHAM 115KV'	71	-0.16155	SPS	LP-BRND2 69KV'	80	-0.00258	-0.15897	12			
SPS	CUNNINGHAM 115KV'	71	-0.16155	SPS	PLANTX 115KV'	205	0.0022	-0.16375	12			
SPS	CUNNINGHAM 115KV'	71	-0.16155	SPS	WILWIND 230KV'	72	0.00178	-0.16333	12			
SPS	LP-BRND2 69KV'	152	-0.00258	SPS	MUSTG5 118.0 230KV'	210	0.15058	-0.15316	12			
SPS	MADDOX 115KV'	75	-0.16452	SPS	CAPROCK 115KV'	36	-0.00267	-0.16185	12			
SPS	MADDOX 115KV'	75	-0.16452	SPS	JONES 230KV'	486	-0.00223	-0.16229	12			
SPS	MADDOX 115KV'	75	-0.16452	SPS	LP-BRND2 69KV'	80	-0.00258	-0.16194	12			
SPS	TUCUMCARI 115KV'	15	-0.00267	SPS	MUSTG5 118.0 230KV'	210	0.15058	-0.15325	12			
SPS	CUNNINGHAM 115KV'	71	-0.16155	SPS	SAN JUAN 230KV'	54	-0.01887	-0.14268	13			
SPS	HARRINGTON 230KV'	360	0.00132	SPS	MUSTG5 118.0 230KV'	210	0.15058	-0.14926	13			
SPS	HUBRCO2 69KV'	6	0.0013	SPS	MUSTG5 118.0 230KV'	210	0.15058	-0.14928	13			
SPS	MADDOX 115KV'	75	-0.16452	SPS	SAN JUAN 230KV'	54	-0.01887	-0.14565	13			
SPS	MOORE COUNTY 115KV'	48	0.00138	SPS	MUSTG5 118.0 230KV'	210	0.15058	-0.1492	13			
SPS	NICHOLS 115KV'	132.2241	0.00126	SPS	MUSTG5 118.0 230KV'	210	0.15058	-0.14932	13			
SPS	NICHOLS 230KV'	244	0.0013	SPS	MUSTG5 118.0 230KV'	210	0.15058	-0.14928	13			
SPS	PLANTX 115KV'	48	0.0022	SPS	MUSTG5 118.0 230KV'	210	0.15058	-0.14838	13			
SPS	RIVERVIEW 69KV'	23	0.0013	SPS	MUSTG5 118.0 230KV'	210	0.15058	-0.14928	13			
SPS	SIDRCH 69KV'	6	0.0013	SPS	MUSTG5 118.0 230KV'	210	0.15058	-0.14928	13			
SPS	TOLK 230KV'	67.09586	0.00374	SPS	MUSTG5 118.0 230KV'	210	0.15058	-0.14684	13			
SPS	CUNNINGHAM 115KV'	71	-0.16155	SPS	CUNNINGHAM 230KV'	306	-0.07301	-0.08854	21			
SPS	MADDOX 115KV'	75	-0.16452	SPS	CUNNINGHAM 230KV'	306	-0.07301	-0.09151	21			
SPS	CARLSBAD 69KV'	18	-0.07652	SPS	PLANTX 230KV'	189	0.00438	-0.0809	23			
SPS	CARLSBAD 69KV'	18	-0.07652	SPS	HARRINGTON 230KV'	706	0.00132	-0.07784	24			
SPS	CARLSBAD 69KV'	18	-0.07652	SPS	PLANTX 115KV'	205	0.0022	-0.07872	24			
SPS	CARLSBAD 69KV'	18	-0.07652	SPS	TOLK 230KV'	1012.904	0.00374	-0.08026	24			
SPS	CARLSBAD 69KV'	18	-0.07652	SPS	WILWIND 230KV'	72	0.00178	-0.0783	24			
SPS	CARLSBAD 69KV'	18	-0.07652	SPS	JONES 230KV'	486	-0.00223	-0.07429	25			
SPS	CARLSBAD 69KV'	18	-0.07652	SPS	CAPROCK 115KV'	36	-0.00267	-0.07385	26			
SPS	CARLSBAD 69KV'	18	-0.07652	SPS	LP-BRND2 69KV'	80	-0.00258	-0.07394	26			
SPS	CARLSBAD 69KV'	18	-0.07652	SPS	SAN JUAN 230KV'	54	-0.01887	-0.05765	33			

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: Mustang-San Andr-Amerada Hess 115KV Displacement  
 Limiting Facility: DENVER CITY INTERCHANGE S - MUSTANG STATION 115KV CKT 1  
 Direction: To->From  
 Line Outage: DENVER CITY INTERCHANGE N - MUSTANG STATION 115KV CKT 1  
 Flowgate: 51962519681519605196611107SH  
 Date Redispatch Needed: 6/1 - 10/1 Until EOC of Upgrade  
 Season Flowgate Identified: 2007 Summer Shoulder

Reservation	Relief Amount	Aggregate Relief Amount										
1090487	9.5	9.5										
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)			
SPS	MADDOX 115KV'	75	-0.16383	SPS	MUSTG5 118.0 230KV'	210	0.14753	-0.31136	30			
SPS	CUNNINGHAM 115KV'	71	-0.16067	SPS	MUSTG5 118.0 230KV'	210	0.14753	-0.3082	31			
SPS	CUNNINGHAM 115KV'	110	-0.16067	SPS	MUSTG5 118.0 230KV'	210	0.14753	-0.3082	31			
SPS	CARLSBAD 69KV'	18	-0.07637	SPS	MUSTG5 118.0 230KV'	210	0.14753	-0.2239	42			
SPS	CUNNINGHAM 230KV'	110	-0.07304	SPS	MUSTG5 118.0 230KV'	210	0.14753	-0.22057	43			
SPS	MADDOX 115KV'	75	-0.16383	SPS	PLANTX 230KV'	189	0.00419	-0.16802	56			
SPS	MADDOX 115KV'	75	-0.16383	SPS	BLACKHAWK 115KV'	220	0.00124	-0.16507	57			
SPS	MADDOX 115KV'	75	-0.16383	SPS	HARRINGTON 230KV'	1066	0.00125	-0.16508	57			
SPS	MADDOX 115KV'	75	-0.16383	SPS	NICHOLS 115KV'	82	0.0012	-0.16503	57			
SPS	MADDOX 115KV'	75	-0.16383	SPS	PLANTX 115KV'	163.5259	0.0021	-0.16593	57			
SPS	MADDOX 115KV'	75	-0.16383	SPS	STEER WATER 115KV'	79.98182	0.00116	-0.16499	57			
SPS	MADDOX 115KV'	75	-0.16383	SPS	TOLK 230KV'	1027.989	0.00353	-0.16736	57			
SPS	MADDOX 115KV'	75	-0.16383	SPS	WILWIND 230KV'	159.9636	0.00169	-0.16552	57			
SPS	CUNNINGHAM 115KV'	71	-0.16067	SPS	PLANTX 115KV'	163.5259	0.0021	-0.16277	58			
SPS	CUNNINGHAM 115KV'	110	-0.16067	SPS	PLANTX 115KV'	163.5259	0.0021	-0.16277	58			
SPS	CUNNINGHAM 115KV'	71	-0.16067	SPS	PLANTX 230KV'	189	0.00419	-0.16486	58			
SPS	CUNNINGHAM 115KV'	110	-0.16067	SPS	PLANTX 230KV'	189	0.00419	-0.16486	58			
SPS	CUNNINGHAM 115KV'	71	-0.16067	SPS	TOLK 230KV'	1027.989	0.00353	-0.1642	58			
SPS	CUNNINGHAM 115KV'	110	-0.16067	SPS	TOLK 230KV'	1027.989	0.00353	-0.1642	58			
SPS	CUNNINGHAM 115KV'	71	-0.16067	SPS	WILWIND 230KV'	159.9636	0.00169	-0.16236	58			
SPS	CUNNINGHAM 115KV'	110	-0.16067	SPS	WILWIND 230KV'	159.9636	0.00169	-0.16236	58			
SPS	CUNNINGHAM 115KV'	71	-0.16067	SPS	BLACKHAWK 115KV'	220	0.00124	-0.16191	59			
SPS	CUNNINGHAM 115KV'	110	-0.16067	SPS	BLACKHAWK 115KV'	220	0.00124	-0.16191	59			
SPS	CUNNINGHAM 115KV'	71	-0.16067	SPS	HARRINGTON 230KV'	1066	0.00125	-0.16192	59			
SPS	CUNNINGHAM 115KV'	110	-0.16067	SPS	HARRINGTON 230KV'	1066	0.00125	-0.16192	59			
SPS	CUNNINGHAM 115KV'	71	-0.16067	SPS	NICHOLS 115KV'	82	0.0012	-0.16187	59			
SPS	CUNNINGHAM 115KV'	110	-0.16067	SPS	NICHOLS 115KV'	82	0.0012	-0.16187	59			
SPS	CUNNINGHAM 115KV'	71	-0.16067	SPS	STEER WATER 115KV'	79.98182	0.00116	-0.16183	59			
SPS	CUNNINGHAM 115KV'	110	-0.16067	SPS	STEER WATER 115KV'	79.98182	0.00116	-0.16183	59			
SPS	MADDOX 115KV'	75	-0.16383	SPS	CAPROCK 115KV'	79.98182	-0.00285	-0.16098	59			
SPS	MADDOX 115KV'	75	-0.16383	SPS	JONES 230KV'	486	-0.00208	-0.16175	59			
SPS	MADDOX 115KV'	75	-0.16383	SPS	LP-BRND2 69KV'	80	-0.00242	-0.16141	59			
SPS	CUNNINGHAM 115KV'	71	-0.16067	SPS	CAPROCK 115KV'	79.98182	-0.00285	-0.15782	60			
SPS	CUNNINGHAM 115KV'	110	-0.16067	SPS	CAPROCK 115KV'	79.98182	-0.00285	-0.15782	60			
SPS	CUNNINGHAM 115KV'	71	-0.16067	SPS	JONES 230KV'	486	-0.00208	-0.15859	60			
SPS	CUNNINGHAM 115KV'	110	-0.16067	SPS	JONES 230KV'	486	-0.00208	-0.15859	60			
SPS	CUNNINGHAM 115KV'	71	-0.16067	SPS	LP-BRND2 69KV'	80	-0.00242	-0.15825	60			
SPS	CUNNINGHAM 115KV'	110	-0.16067	SPS	LP-BRND2 69KV'	80	-0.00242	-0.15825	60			
SPS	LP-BRND2 69KV'	152	-0.00242	SPS	MUSTG5 118.0 230KV'	210	0.14753	-0.14995	63			
SPS	MADDOX 115KV'	75	-0.16383	SPS	SAN JUAN 230KV'	119.9727	-0.019	-0.14483	65			

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

SPS	'MOORE COUNTY 115KV'	48	0.00131	SPS	'MUSTG5 118.0 230KV'	210	0.14753	-0.14622	65
SPS	'NICHOLS 115KV'	131	0.0012	SPS	'MUSTG5 118.0 230KV'	210	0.14753	-0.14633	65
SPS	'NICHOLS 230KV'	244	0.00124	SPS	'MUSTG5 118.0 230KV'	210	0.14753	-0.14629	65
SPS	'PLANTX 115KV'	89.47412	0.0021	SPS	'MUSTG5 118.0 230KV'	210	0.14753	-0.14543	65
SPS	'RIVERVIEW 69KV'	23	0.00123	SPS	'MUSTG5 118.0 230KV'	210	0.14753	-0.14663	65
SPS	'TOLK 230KV'	52.01129	0.00353	SPS	'MUSTG5 118.0 230KV'	210	0.14753	-0.144	66
SPS	'CUNNINGHAM 115KV'	71	-0.16067	SPS	'SAN JUAN 230KV'	119.9727	-0.019	-0.14167	67
SPS	'CUNNINGHAM 115KV'	110	-0.16067	SPS	'SAN JUAN 230KV'	119.9727	-0.019	-0.14167	67
SPS	'MADDOX 115KV'	75	-0.16383	SPS	'CUNNINGHAM 230KV'	196	-0.07304	-0.09079	104
SPS	'CUNNINGHAM 115KV'	71	-0.16067	SPS	'CUNNINGHAM 230KV'	196	-0.07304	-0.08763	108
SPS	'CUNNINGHAM 115KV'	110	-0.16067	SPS	'CUNNINGHAM 230KV'	196	-0.07304	-0.08763	108
SPS	'CUNNINGHAM 230KV'	110	-0.07304	SPS	'PLANTX 230KV'	189	0.00419	-0.07723	123
SPS	'CUNNINGHAM 230KV'	110	-0.07304	SPS	'TOLK 230KV'	1027.989	0.00353	-0.07657	124
SPS	'CUNNINGHAM 230KV'	110	-0.07304	SPS	'PLANTX 115KV'	163.6259	0.0021	-0.07514	126
SPS	'CUNNINGHAM 230KV'	110	-0.07304	SPS	'WILWIND 230KV'	159.9636	0.00169	-0.07473	127
SPS	'CUNNINGHAM 230KV'	110	-0.07304	SPS	'BLACKHAWK 115KV'	220	0.00124	-0.07428	128
SPS	'CUNNINGHAM 230KV'	110	-0.07304	SPS	'HARRINGTON 230KV'	1066	0.00125	-0.07429	128
SPS	'CUNNINGHAM 230KV'	110	-0.07304	SPS	'NICHOLS 115KV'	82	0.0012	-0.07424	128
SPS	'CUNNINGHAM 230KV'	110	-0.07304	SPS	'STEER WATER 115KV'	79.98182	0.00116	-0.0742	128
SPS	'CUNNINGHAM 230KV'	110	-0.07304	SPS	'JONES 230KV'	486	-0.00208	-0.07096	134
SPS	'CUNNINGHAM 230KV'	110	-0.07304	SPS	'CAPROCK 115KV'	79.98182	-0.00285	-0.07019	135
SPS	'CUNNINGHAM 230KV'	110	-0.07304	SPS	'SAN JUAN 230KV'	119.9727	-0.019	-0.05404	175

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: Mustang-San Andr-Amerada Hess 115KV Displacement  
 Limiting Facility: DENVER CITY INTERCHANGE S - MUSTANG STATION 115KV CKT 1  
 Direction: To->From  
 Line Outage: DENVER CITY INTERCHANGE N - MUSTANG STATION 115KV CKT 1  
 Flowgate: 51962519681519605196611107SP  
 Date Redispatch Needed: 6/1/07 - 10/1/07  
 Season Flowgate Identified: 2007 Summer Peak

Reservation	Relief Amount	Aggregate Relief Amount								
1090487	23.3	23.3								
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)	
SPS	'MADDOX 115KV'	75	-0.16383	SPS	'MUSTG5 118.0 230KV'	360	0.14753	-0.31136	75	
SPS	'CUNNINGHAM 115KV'	50.00977	-0.16067	SPS	'MUSTG5 118.0 230KV'	360	0.14753	-0.3082	76	
SPS	'MADDOX 115KV'	75	-0.16383	SPS	'PLANTX 230KV'	189	0.00419	-0.16802	139	
SPS	'MADDOX 115KV'	75	-0.16383	SPS	'TOLK 230KV'	1024.722	0.00353	-0.16736	139	
SPS	'CUNNINGHAM 115KV'	50.00977	-0.16067	SPS	'PLANTX 230KV'	189	0.00419	-0.16486	141	
SPS	'MADDOX 115KV'	75	-0.16383	SPS	'BLACKHAWK 115KV'	220	0.00124	-0.16507	141	
SPS	'MADDOX 115KV'	75	-0.16383	SPS	'HARRINGTON 230KV'	1066	0.00125	-0.16508	141	
SPS	'MADDOX 115KV'	75	-0.16383	SPS	'NICHOLS 115KV'	147	0.0012	-0.16503	141	
SPS	'MADDOX 115KV'	75	-0.16383	SPS	'NICHOLS 230KV'	147	0.00124	-0.16507	141	
SPS	'MADDOX 115KV'	75	-0.16383	SPS	'PLANTX 115KV'	205	0.0021	-0.16593	141	
SPS	'MADDOX 115KV'	75	-0.16383	SPS	'STEER WATER 115KV'	79.98182	0.00116	-0.16499	141	
SPS	'MADDOX 115KV'	75	-0.16383	SPS	'WILWIND 230KV'	159.9636	0.00169	-0.16552	141	
SPS	'CUNNINGHAM 115KV'	50.00977	-0.16067	SPS	'TOLK 230KV'	1024.722	0.00353	-0.1642	142	
SPS	'CUNNINGHAM 115KV'	50.00977	-0.16067	SPS	'PLANTX 115KV'	205	0.0021	-0.16277	143	
SPS	'CUNNINGHAM 115KV'	50.00977	-0.16067	SPS	'BLACKHAWK 115KV'	220	0.00124	-0.16191	144	
SPS	'CUNNINGHAM 115KV'	50.00977	-0.16067	SPS	'HARRINGTON 230KV'	1066	0.00125	-0.16192	144	
SPS	'CUNNINGHAM 115KV'	50.00977	-0.16067	SPS	'NICHOLS 115KV'	147	0.0012	-0.16187	144	
SPS	'CUNNINGHAM 115KV'	50.00977	-0.16067	SPS	'NICHOLS 230KV'	147	0.00124	-0.16191	144	
SPS	'CUNNINGHAM 115KV'	50.00977	-0.16067	SPS	'STEER WATER 115KV'	79.98182	0.00116	-0.16183	144	
SPS	'CUNNINGHAM 115KV'	50.00977	-0.16067	SPS	'WILWIND 230KV'	159.9636	0.00169	-0.16236	144	
SPS	'MADDOX 115KV'	75	-0.16383	SPS	'JONES 230KV'	486	-0.00208	-0.16175	144	
SPS	'MADDOX 115KV'	75	-0.16383	SPS	'CAPROCK 115KV'	79.98182	-0.00285	-0.16098	145	
SPS	'CUNNINGHAM 115KV'	50.00977	-0.16067	SPS	'JONES 230KV'	486	-0.00208	-0.15859	147	
SPS	'CUNNINGHAM 115KV'	50.00977	-0.16067	SPS	'CAPROCK 115KV'	79.98182	-0.00285	-0.15782	148	
SPS	'MADDOX 115KV'	75	-0.16383	SPS	'SAN JUAN 230KV'	119.9727	-0.019	-0.14483	161	
SPS	'TOLK 230KV'	55.27795	0.00353	SPS	'MUSTG5 118.0 230KV'	360	0.14753	-0.144	162	

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: Seven Rivers to Pecos to Potash Junction 230kV  
 Limiting Facility: CARLSBAD PLANT - POTASH JUNCTION INTERCHANGE 115KV CKT 1  
 Direction: To->From  
 Line Outage: CUNNINGHAM STATION - EDDY COUNTY INTERCHANGE 230KV CKT 1  
 Flowgate: 52310522521522095218512407SP  
 Date Redispatch Needed: 6/1/07 - 10/1/07  
 Season Flowgate Identified: 2007 Summer Peak

Reservation	Relief Amount	Aggregate Relief Amount								
1090487	3.3	3.3								
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)	
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'MUSTG5 118.0 230KV'	360	0.0485	-0.31381	10	
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'BLACKHAWK 115KV'	220	-0.00367	-0.26164	12	
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'CZ 69KV'	39	-0.00335	-0.26196	12	
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'HARRINGTON 230KV'	1066	-0.0037	-0.26161	12	
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'HUBRCO2 69KV'	11	-0.00367	-0.26164	12	
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'JONES 230KV'	486	0.01395	-0.27926	12	
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'LP-BRND2 69KV'	80	0.01302	-0.27833	12	
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'MOORE COUNTY 115KV'	48	-0.00385	-0.26146	12	
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'NICHOLS 115KV'	147	-0.00362	-0.26169	12	
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'NICHOLS 230KV'	147	-0.00366	-0.26165	12	
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'SIDRCH 69KV'	20	-0.00367	-0.26164	12	
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'STEER WATER 115KV'	8	-0.00349	-0.26182	12	
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'PLANTX 115KV'	205	-0.00587	-0.25944	13	
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'PLANTX 230KV'	189	-0.00909	-0.25622	13	
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'TOLK 230KV'	1018.154	-0.01292	-0.25239	13	
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'WILWIND 230KV'	15	-0.00514	-0.26017	13	
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'CAPROCK 115KV'	8	-0.02602	-0.23929	14	
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'SAN JUAN 230KV'	12	-0.06421	-0.2011	16	
SPS	'TUCUMCARI 115KV'	15	-0.02602	SPS	'MUSTG5 118.0 230KV'	360	0.0485	-0.07452	44	
SPS	'TOLK 230KV'	61.84583	-0.01292	SPS	'MUSTG5 118.0 230KV'	360	0.0485	-0.06142	53	
SPS	'PLANTX 115KV'	48	-0.00587	SPS	'MUSTG5 118.0 230KV'	360	0.0485	-0.05437	60	
SPS	'RIVERVIEW 69KV'	23	-0.00367	SPS	'MUSTG5 118.0 230KV'	360	0.0485	-0.05217	63	
SPS	'LP-BRND2 69KV'	152	0.01302	SPS	'MUSTG5 118.0 230KV'	360	0.0485	-0.03548	92	

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

Maximum Decrement and Maximum Increment were determined from the Source 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: 57368573811568725687312206WP  
 Date Redispatch Needed: 12/1/06 - 4/1/07  
 Season Flowgate Identified: 2006 Winter Peak

Reservation	Relief Amount	Aggregate Relief Amount
1086655	1.5	2.6
1090964	0.8	2.6
1090965	0.3	2.6

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29594	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01746	-0.3134	8
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29594	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02327	-0.31921	8
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29594	WERE	LAWRENCE ENERGY CENTER 230KV	130.0238	0.00966	-0.3056	8
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29594	WERE	CHANUTE 69KV	35.344	0.00148	-0.29742	9
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29594	WERE	CITY OF AUGUSTA 69KV	17.25201	0.00019	-0.29613	9
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29594	WERE	CITY OF BURLINGTON 69KV	4.8	0.00281	-0.29875	9
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29594	WERE	CITY OF IOLA 69KV	13.978	0.00175	-0.29769	9
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29594	WERE	CITY OF MULVANE 69KV	3.694	-0.00102	-0.29492	9
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29594	WERE	CITY OF WELLINGTON 69KV	24	-0.00179	-0.29415	9
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29594	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.97	0.00281	-0.29875	9
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29594	WERE	EVANS ENERGY CENTER 138KV	25.88745	0.00002	-0.29596	9
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29594	WERE	WACO 138KV	17.953	-0.003	-0.29294	9
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29594	WERE	COLBY 115KV	6.280901	-0.03582	-0.26012	10
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.23852	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01746	-0.25598	10
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.23852	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02327	-0.26179	10
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.23852	WERE	LAWRENCE ENERGY CENTER 230KV	130.0238	0.00966	-0.24818	10
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23841	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01746	-0.25587	10
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23841	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02327	-0.26168	10
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23841	WERE	LAWRENCE ENERGY CENTER 230KV	130.0238	0.00966	-0.24807	10
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.23852	WERE	CHANUTE 69KV	35.344	0.00148	-0.24	11
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.23852	WERE	CITY OF AUGUSTA 69KV	17.25201	0.00019	-0.23871	11
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.23852	WERE	CITY OF BURLINGTON 69KV	4.8	0.00281	-0.24133	11
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.23852	WERE	CITY OF IOLA 69KV	13.978	0.00175	-0.24027	11
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.23852	WERE	CITY OF MULVANE 69KV	3.694	-0.00102	-0.2375	11
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.23852	WERE	CITY OF WELLINGTON 69KV	24	-0.00179	-0.23673	11
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.23852	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.97	0.00281	-0.24133	11
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.23852	WERE	EVANS ENERGY CENTER 138KV	25.88745	0.00002	-0.23854	11
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.23852	WERE	WACO 138KV	17.953	-0.003	-0.23552	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23841	WERE	CHANUTE 69KV	35.344	0.00148	-0.23989	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23841	WERE	CITY OF AUGUSTA 69KV	17.25201	0.00019	-0.2386	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23841	WERE	CITY OF BURLINGTON 69KV	4.8	0.00281	-0.24122	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23841	WERE	CITY OF IOLA 69KV	13.978	0.00175	-0.24016	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23841	WERE	CITY OF MULVANE 69KV	3.694	-0.00102	-0.23739	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23841	WERE	CITY OF WELLINGTON 69KV	24	-0.00179	-0.23662	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23841	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.97	0.00281	-0.24122	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23841	WERE	EVANS ENERGY CENTER 138KV	25.88745	0.00002	-0.23843	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23841	WERE	WACO 138KV	17.953	-0.003	-0.23541	11
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.23852	WERE	COLBY 115KV	6.280901	-0.03582	-0.2027	13
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23841	WERE	COLBY 115KV	6.280901	-0.03582	-0.20259	13
WERE	PAWNEE 115KV	999	-0.13502	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02327	-0.15829	16
WERE	RICE 115KV	999	-0.13502	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02327	-0.15829	16
WERE	ST JOHN 115KV	7.5	-0.13502	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02327	-0.15829	16
WERE	PAWNEE 115KV	999	-0.13502	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01746	-0.15248	17
WERE	RICE 115KV	999	-0.13502	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01746	-0.15248	17
WERE	ST JOHN 115KV	7.5	-0.13502	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01746	-0.15248	17
WERE	PAWNEE 115KV	999	-0.13502	WERE	LAWRENCE ENERGY CENTER 230KV	130.0238	0.00966	-0.14468	18
WERE	RICE 115KV	999	-0.13502	WERE	LAWRENCE ENERGY CENTER 230KV	130.0238	0.00966	-0.14468	18
WERE	ST JOHN 115KV	7.5	-0.13502	WERE	LAWRENCE ENERGY CENTER 230KV	130.0238	0.00966	-0.14468	18
WERE	PAWNEE 115KV	999	-0.13502	WERE	CHANUTE 69KV	35.344	0.00148	-0.1365	19
WERE	PAWNEE 115KV	999	-0.13502	WERE	CITY OF AUGUSTA 69KV	17.25201	0.00019	-0.13521	19
WERE	PAWNEE 115KV	999	-0.13502	WERE	CITY OF IOLA 69KV	13.978	0.00175	-0.13677	19
WERE	PAWNEE 115KV	999	-0.13502	WERE	CITY OF WELLINGTON 69KV	24	-0.00179	-0.13323	19
WERE	PAWNEE 115KV	999	-0.13502	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.97	0.00281	-0.13783	19
WERE	PAWNEE 115KV	999	-0.13502	WERE	EVANS ENERGY CENTER 138KV	25.88745	0.00002	-0.13504	19
WERE	RICE 115KV	999	-0.13502	WERE	CHANUTE 69KV	35.344	0.00148	-0.1365	19
WERE	RICE 115KV	999	-0.13502	WERE	CITY OF AUGUSTA 69KV	17.25201	0.00019	-0.13521	19
WERE	RICE 115KV	999	-0.13502	WERE	CITY OF IOLA 69KV	13.978	0.00175	-0.13677	19
WERE	RICE 115KV	999	-0.13502	WERE	CITY OF WELLINGTON 69KV	24	-0.00179	-0.13323	19
WERE	RICE 115KV	999	-0.13502	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.97	0.00281	-0.13783	19
WERE	RICE 115KV	999	-0.13502	WERE	EVANS ENERGY CENTER 138KV	25.88745	0.00002	-0.13504	19
WERE	ST JOHN 115KV	7.5	-0.13502	WERE	CHANUTE 69KV	35.344	0.00148	-0.1365	19
WERE	ST JOHN 115KV	7.5	-0.13502	WERE	CITY OF AUGUSTA 69KV	17.25201	0.00019	-0.13521	19
WERE	ST JOHN 115KV	7.5	-0.13502	WERE	CITY OF IOLA 69KV	13.978	0.00175	-0.13677	19
WERE	ST JOHN 115KV	7.5	-0.13502	WERE	CITY OF WELLINGTON 69KV	24	-0.00179	-0.13323	19
WERE	ST JOHN 115KV	7.5	-0.13502	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.97	0.00281	-0.13783	19
WERE	ST JOHN 115KV	7.5	-0.13502	WERE	EVANS ENERGY CENTER 138KV	25.88745	0.00002	-0.13504	19
WERE	GREAT BEND PLANT 69KV	10	-0.10743	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02327	-0.1307	20
WERE	PAWNEE 115KV	999	-0.13502	WERE	WACO 138KV	17.953	-0.003	-0.13202	20
WERE	RICE 115KV	999	-0.13502	WERE	WACO 138KV	17.953	-0.003	-0.13202	20
WERE	ST JOHN 115KV	7.5	-0.13502	WERE	WACO 138KV	17.953	-0.003	-0.13202	20
WERE	GREAT BEND PLANT 69KV	10	-0.10743	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01746	-0.12489	21
WERE	GREAT BEND PLANT 69KV	10	-0.10743	WERE	LAWRENCE ENERGY CENTER 230KV	130.0238	0.00966	-0.11709	22
WERE	GREAT BEND PLANT 69KV	10	-0.10743	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.97	0.00281	-0.11024	23
WERE	GREAT BEND PLANT 69KV	10	-0.10743	WERE	CHANUTE 69KV	35.344	0.00148	-0.10891	24
WERE	GREAT BEND PLANT 69KV	10	-0.10743	WERE	CITY OF AUGUSTA 69KV	17.25201	0.00019	-0.10762	24
WERE	GREAT BEND PLANT 69KV	10	-0.10743	WERE	CITY OF IOLA 69KV	13.978	0.00175	-0.10918	24
WERE	GREAT BEND PLANT 69KV	10	-0.10743	WERE	CITY OF WELLINGTON 69KV	24	-0.00179	-0.10564	24
WERE	GREAT BEND PLANT 69KV	10	-0.10743	WERE	EVANS ENERGY CENTER 138KV	25.88745	0.00002	-0.10745	24
WERE	GREAT BEND PLANT 69KV	10	-0.10743	WERE	WACO 138KV	17.953	-0.003	-0.10443	25
WEPL	A. M. MULLERGREEN GENERATOR 115KV	63	-0.12041	WEPL	GRAY COUNTY WIND FARM 115KV	73	-0.07564	-0.04477	58

Maximum Decrement and Maximum Increment were determined from the Source 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

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

Direction: To->From  
 Line Outage: EAST MCPHERSON - SUMMIT 230KV CKT 1  
 Flowgate: 57368573811568725687312207SH  
 Date Redispatch Needed: 6/1 - 10/1 Until EOC of Upgrade  
 Season Flowgate Identified: 2007 Summer Shoulder

Reservation	Relief Amount	Aggregate Relief Amount
1086655	3.0	5.0
1090817	0.7	5.0
1090964	1.0	5.0
1090965	0.3	5.0

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29562	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01718	-0.3128	16
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29562	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02299	-0.31861	16
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29562	WERE	LAWRENCE ENERGY CENTER 230KV	230.2191	0.00919	-0.30481	16
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29562	WERE	CHANUTE 69KV	46.617	0.00149	-0.29711	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29562	WERE	CITY OF ERIE 69KV	23.258	0.00149	-0.29711	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29562	WERE	CITY OF IOLA 69KV	19.865	0.00174	-0.29736	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29562	WERE	CITY OF MULVANE 69KV	6.189	-0.00086	-0.29476	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29562	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.96	0.00282	-0.29844	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29562	WERE	EVANS ENERGY CENTER 138KV	305	0.00013	-0.29575	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29562	WERE	GILL ENERGY CENTER 138KV	77	-0.00316	-0.29246	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29562	WERE	LAWRENCE ENERGY CENTER 115KV	60	0.0088	-0.30442	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29562	WERE	TECUMSEH ENERGY CENTER 115KV	108	0.00844	-0.30406	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29562	WERE	WACO 138KV	17.947	-0.00282	-0.2928	17
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.23794	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02299	-0.26093	19
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23783	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02299	-0.26082	19
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.23794	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01718	-0.25512	20
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.23794	WERE	LAWRENCE ENERGY CENTER 115KV	60	0.0088	-0.24674	20
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.23794	WERE	LAWRENCE ENERGY CENTER 230KV	230.2191	0.00919	-0.24713	20
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.23794	WERE	TECUMSEH ENERGY CENTER 115KV	108	0.00844	-0.24638	20
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23783	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01718	-0.25501	20
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23783	WERE	LAWRENCE ENERGY CENTER 115KV	60	0.0088	-0.24663	20
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23783	WERE	LAWRENCE ENERGY CENTER 230KV	230.2191	0.00919	-0.24702	20
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23783	WERE	TECUMSEH ENERGY CENTER 115KV	108	0.00844	-0.24627	20
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.23794	WERE	CHANUTE 69KV	46.617	0.00149	-0.23943	21
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.23794	WERE	CITY OF ERIE 69KV	23.258	0.00149	-0.23943	21
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.23794	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.96	0.00282	-0.24076	21
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.23794	WERE	EVANS ENERGY CENTER 138KV	305	0.00013	-0.23807	21
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.23794	WERE	GILL ENERGY CENTER 138KV	77	-0.00316	-0.23478	21
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.23794	WERE	WACO 138KV	17.947	-0.00282	-0.23512	21
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23783	WERE	CHANUTE 69KV	46.617	0.00149	-0.23932	21
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23783	WERE	CITY OF ERIE 69KV	23.258	0.00149	-0.23932	21
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23783	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.96	0.00282	-0.24065	21
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23783	WERE	EVANS ENERGY CENTER 138KV	305	0.00013	-0.23796	21
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23783	WERE	GILL ENERGY CENTER 138KV	77	-0.00316	-0.23467	21
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23783	WERE	WACO 138KV	17.947	-0.00282	-0.23501	21
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29562	WERE	CLAY CENTER JUNCTION 115KV	11.825	-0.09835	-0.19727	25
WERE	PAWNEE 115KV	999	-0.13182	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02299	-0.15481	32
WERE	RICE 115KV	999	-0.13182	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02299	-0.15481	32
WERE	PAWNEE 115KV	999	-0.13182	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01718	-0.149	34
WERE	RICE 115KV	999	-0.13182	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01718	-0.149	34
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29562	WERE	ABLENE ENERGY CENTER 115KV	18.23438	-0.15727	-0.13835	36
WERE	PAWNEE 115KV	999	-0.13182	WERE	LAWRENCE ENERGY CENTER 115KV	60	0.0088	-0.14062	36
WERE	PAWNEE 115KV	999	-0.13182	WERE	LAWRENCE ENERGY CENTER 230KV	230.2191	0.00919	-0.14101	36
WERE	PAWNEE 115KV	999	-0.13182	WERE	TECUMSEH ENERGY CENTER 115KV	108	0.00844	-0.14026	36
WERE	RICE 115KV	999	-0.13182	WERE	LAWRENCE ENERGY CENTER 115KV	60	0.0088	-0.14062	36
WERE	RICE 115KV	999	-0.13182	WERE	LAWRENCE ENERGY CENTER 230KV	230.2191	0.00919	-0.14101	36
WERE	RICE 115KV	999	-0.13182	WERE	TECUMSEH ENERGY CENTER 115KV	108	0.00844	-0.14026	36
WERE	PAWNEE 115KV	999	-0.13182	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.96	0.00282	-0.13464	37
WERE	RICE 115KV	999	-0.13182	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.96	0.00282	-0.13464	37
WERE	PAWNEE 115KV	999	-0.13182	WERE	CITY OF ERIE 69KV	23.258	0.00149	-0.13331	38
WERE	RICE 115KV	999	-0.13182	WERE	EVANS ENERGY CENTER 138KV	305	0.00013	-0.13195	38
WERE	RICE 115KV	999	-0.13182	WERE	CITY OF ERIE 69KV	23.258	0.00149	-0.13331	38
WERE	RICE 115KV	999	-0.13182	WERE	EVANS ENERGY CENTER 138KV	305	0.00013	-0.13195	38
WERE	PAWNEE 115KV	999	-0.13182	WERE	GILL ENERGY CENTER 138KV	77	-0.00316	-0.12866	39
WERE	PAWNEE 115KV	999	-0.13182	WERE	WACO 138KV	17.947	-0.00282	-0.129	39
WERE	RICE 115KV	999	-0.13182	WERE	GILL ENERGY CENTER 138KV	77	-0.00316	-0.12866	39
WERE	RICE 115KV	999	-0.13182	WERE	WACO 138KV	17.947	-0.00282	-0.129	39
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29562	WERE	HUTCHINSON ENERGY CENTER 115KV	80.00001	-0.23794	-0.05768	87

Maximum Decrement and Maximum Increment were determined from the Source 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: 57372573741568725687312206WP  
 Date Redispatch Needed: 12/1/06 - 4/1/07  
 Season Flowgate Identified: 2006 Winter Peak

Reservation	Relief Amount	Aggregate Relief Amount
1090964	6.9	8.9
1090965	2.0	8.9

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52229	WERE	JEFFREY ENERGY CENTER 230KV	470	0.03388	-0.55617	16
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52229	WERE	JEFFREY ENERGY CENTER 345KV	940	0.0352	-0.55749	16
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52229	WERE	LAWRENCE ENERGY CENTER 230KV	130.0238	0.02211	-0.5444	16
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52229	WERE	CHANUTE 69KV	35.344	0.00308	-0.52537	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52229	WERE	CITY OF AUGUSTA 69KV	17.25201	0.00096	-0.52325	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52229	WERE	CITY OF IOLA 69KV	13.978	0.00357	-0.52586	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52229	WERE	CITY OF WELLINGTON 69KV	24	-0.00277	-0.51952	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52229	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.97	0.00573	-0.52802	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52229	WERE	EVANS ENERGY CENTER 138KV	25.88745	0.00069	-0.52298	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52229	WERE	WACO 138KV	17.953	-0.00487	-0.51742	17
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.42301	WERE	JEFFREY ENERGY CENTER 230KV	470	0.03388	-0.45689	19
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.42301	WERE	JEFFREY ENERGY CENTER 345KV	940	0.0352	-0.45821	19
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.42282	WERE	JEFFREY ENERGY CENTER 230KV	470	0.03388	-0.4567	19
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.42282	WERE	JEFFREY ENERGY CENTER 345KV	940	0.0352	-0.45802	19
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.42301	WERE	LAWRENCE ENERGY CENTER 230KV	130.0238	0.02211	-0.44512	20
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.42282	WERE	LAWRENCE ENERGY CENTER 230KV	130.0238	0.02211	-0.44493	20

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

WERE	HUTCHINSON ENERGY CENTER 115KV'	423	-0.42301	WERE	'CHANUTE 69KV'	35.344	0.00308	-0.42609	21
WERE	HUTCHINSON ENERGY CENTER 115KV'	423	-0.42301	WERE	'CITY OF AUGUSTA 69KV'	17.25201	0.00096	-0.42397	21
WERE	HUTCHINSON ENERGY CENTER 115KV'	423	-0.42301	WERE	'CITY OF IOLA 69KV'	13.978	0.00357	-0.42658	21
WERE	HUTCHINSON ENERGY CENTER 115KV'	423	-0.42301	WERE	'CITY OF WELLINGTON 69KV'	24	-0.00277	-0.42024	21
WERE	HUTCHINSON ENERGY CENTER 115KV'	423	-0.42301	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00573	-0.42874	21
WERE	HUTCHINSON ENERGY CENTER 115KV'	423	-0.42301	WERE	'EVANS ENERGY CENTER 138KV'	25.88745	0.00069	-0.4237	21
WERE	HUTCHINSON ENERGY CENTER 115KV'	423	-0.42301	WERE	'WACO 138KV'	17.953	-0.00487	-0.41814	21
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.42282	WERE	'CHANUTE 69KV'	35.344	0.00308	-0.4259	21
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.42282	WERE	'CITY OF AUGUSTA 69KV'	17.25201	0.00096	-0.42378	21
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.42282	WERE	'CITY OF IOLA 69KV'	13.978	0.00357	-0.42639	21
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.42282	WERE	'CITY OF WELLINGTON 69KV'	24	-0.00277	-0.42005	21
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.42282	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00573	-0.42855	21
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.42282	WERE	'EVANS ENERGY CENTER 138KV'	25.88745	0.00069	-0.42351	21
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.42282	WERE	'WACO 138KV'	17.953	-0.00487	-0.41795	21
WERE	PAWNEE 115KV'	999	-0.24493	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03388	-0.27881	32
WERE	PAWNEE 115KV'	999	-0.24493	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.0352	-0.28013	32
WERE	RICE 115KV'	999	-0.24493	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03388	-0.27881	32
WERE	RICE 115KV'	999	-0.24493	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.0352	-0.28013	32
WERE	PAWNEE 115KV'	999	-0.24493	WERE	'LAWRENCE ENERGY CENTER 230KV'	130.0238	0.02211	-0.26704	33
WERE	RICE 115KV'	999	-0.24493	WERE	'LAWRENCE ENERGY CENTER 230KV'	130.0238	0.02211	-0.26704	33
WERE	PAWNEE 115KV'	999	-0.24493	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00573	-0.25066	35
WERE	RICE 115KV'	999	-0.24493	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00573	-0.25066	35
WERE	PAWNEE 115KV'	999	-0.24493	WERE	'CITY OF AUGUSTA 69KV'	17.25201	0.00096	-0.24589	36
WERE	PAWNEE 115KV'	999	-0.24493	WERE	'EVANS ENERGY CENTER 138KV'	25.88745	0.00069	-0.24562	36
WERE	RICE 115KV'	999	-0.24493	WERE	'CITY OF AUGUSTA 69KV'	17.25201	0.00096	-0.24589	36
WERE	RICE 115KV'	999	-0.24493	WERE	'EVANS ENERGY CENTER 138KV'	25.88745	0.00069	-0.24562	36
WERE	PAWNEE 115KV'	999	-0.24493	WERE	'CITY OF WELLINGTON 69KV'	24	-0.00277	-0.24216	37
WERE	PAWNEE 115KV'	999	-0.24493	WERE	'WACO 138KV'	17.953	-0.00487	-0.24006	37
WERE	RICE 115KV'	999	-0.24493	WERE	'CITY OF WELLINGTON 69KV'	24	-0.00277	-0.24216	37
WERE	RICE 115KV'	999	-0.24493	WERE	'WACO 138KV'	17.953	-0.00487	-0.24006	37
WEPL	'A. M. MULLERGRN GENERATOR 115KV'	63	-0.22151	WEPL	'GRAY COUNTY WIND FARM 115KV'	73	-0.14083	-0.08068	110
WERE	KNOLL 3 115 115KV'	75	-0.04003	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.0352	-0.07523	118
WERE	KNOLL 3 115 115KV'	75	-0.04003	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03388	-0.07391	120
WERE	KNOLL 3 115 115KV'	75	-0.04003	WERE	'LAWRENCE ENERGY CENTER 230KV'	130.0238	0.02211	-0.06214	143
WERE	'GILL ENERGY CENTER 138KV'	218	-0.0055	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.0352	-0.0407	218
WERE	'GILL ENERGY CENTER 138KV'	218	-0.0055	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03388	-0.03938	226
WERE	'GILL ENERGY CENTER 69KV'	118	-0.00393	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.0352	-0.03913	227
WERE	'GILL ENERGY CENTER 69KV'	118	-0.00393	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03388	-0.03781	235
WERE	'EVANS ENERGY CENTER 138KV'	767.1125	0.00069	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.0352	-0.03451	257
WERE	'EVANS ENERGY CENTER 138KV'	767.1125	0.00069	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03388	-0.03319	268
WERE	'LATHAM1234.0 345KV'	150	0.00276	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.0352	-0.03244	274
WERE	'LATHAM1234.0 345KV'	150	0.00276	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03388	-0.03112	286

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: 57372573741568725687312207FA  
 Date Redispatch Needed: Starting 2007 10/1 - 12/1 Until EOC of Upgrade  
 Season Flowgate Identified: 2007 Fall Peak

Reservation	Relief Amount	Aggregate Relief Amount
1090817	1.9	5.3
1090964	2.6	5.3
1090965	0.8	5.3

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50621	WERE	'CHANUTE 69KV'	56.296	0.00259	-0.5088	10
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50621	WERE	'CITY OF AUGUSTA 69KV'	19.63601	0.00123	-0.50744	10
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50621	WERE	'CITY OF BURLINGTON 69KV'	4.8	0.00472	-0.51093	10
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50621	WERE	'CITY OF IOLA 69KV'	24.256	0.00297	-0.50918	10
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50621	WERE	'CITY OF MULVANE 69KV'	4.891	-0.00107	-0.50514	10
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50621	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00235	-0.50386	10
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50621	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.00472	-0.51093	10
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50621	WERE	'EVANS ENERGY CENTER 138KV'	187.8892	0.0005	-0.50671	10
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50621	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.02831	-0.53452	10
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50621	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.02952	-0.53573	10
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50621	WERE	'LAWRENCE ENERGY CENTER 230KV'	230.3248	0.01814	-0.52435	10
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50621	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.01953	-0.52574	10
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50621	WERE	'WACO 138KV'	17.946	-0.00425	-0.50196	11
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50621	WERE	'COLBY 115KV'	6.36216	-0.07624	-0.42997	12
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.02831	-0.42917	12
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.02952	-0.43038	12
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40067	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.02831	-0.42898	12
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40067	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.02952	-0.43019	12
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086	WERE	'CHANUTE 69KV'	56.296	0.00259	-0.40345	13
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086	WERE	'CITY OF AUGUSTA 69KV'	19.63601	0.00123	-0.40209	13
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086	WERE	'CITY OF BURLINGTON 69KV'	4.8	0.00472	-0.40558	13
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086	WERE	'CITY OF IOLA 69KV'	24.256	0.00297	-0.40383	13
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086	WERE	'CITY OF MULVANE 69KV'	4.891	-0.00107	-0.39979	13
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00235	-0.39851	13
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.00472	-0.40558	13
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086	WERE	'EVANS ENERGY CENTER 138KV'	187.8892	0.0005	-0.40136	13
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086	WERE	'LAWRENCE ENERGY CENTER 230KV'	230.3248	0.01814	-0.419	13
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.01953	-0.42039	13
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086	WERE	'WACO 138KV'	17.946	-0.00425	-0.39661	13
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40067	WERE	'CHANUTE 69KV'	56.296	0.00259	-0.40326	13
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40067	WERE	'CITY OF AUGUSTA 69KV'	19.63601	0.00123	-0.4019	13
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40067	WERE	'CITY OF BURLINGTON 69KV'	4.8	0.00472	-0.40539	13
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40067	WERE	'CITY OF IOLA 69KV'	24.256	0.00297	-0.40364	13
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40067	WERE	'CITY OF MULVANE 69KV'	4.891	-0.00107	-0.3996	13
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40067	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00235	-0.39832	13
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40067	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.00472	-0.40539	13
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40067	WERE	'EVANS ENERGY CENTER 138KV'	187.8892	0.0005	-0.40117	13
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40067	WERE	'LAWRENCE ENERGY CENTER 230KV'	230.3248	0.01814	-0.41881	13
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40067	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.01953	-0.4202	13
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40067	WERE	'WACO 138KV'	17.946	-0.00425	-0.39642	13
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086	WERE	'COLBY 115KV'	6.36216	-0.07624	-0.32462	16
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40067	WERE	'COLBY 115KV'	6.36216	-0.07624	-0.32443	16
WERE	PAWNEE 115KV'	999	-0.21561	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.02831	-0.24392	22
WERE	PAWNEE 115KV'	999	-0.21561	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.02952	-0.24513	22
WERE	PAWNEE 115KV'	999	-0.21561	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.01953	-0.23514	22

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

WERE	RICE 115KV	999	-0.21561	WERE	JEFFREY ENERGY CENTER 230KV	470	0.02831	-0.24392	22
WERE	RICE 115KV	999	-0.21561	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02952	-0.24513	22
WERE	RICE 115KV	999	-0.21561	WERE	TECUMSEH ENERGY CENTER 115KV	108	0.01953	-0.23514	22
WERE	ST JOHN 115KV	7.5	-0.21561	WERE	JEFFREY ENERGY CENTER 230KV	470	0.02831	-0.24392	22
WERE	ST JOHN 115KV	7.5	-0.21561	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02952	-0.24513	22
WERE	ST JOHN 115KV	7.5	-0.21561	WERE	TECUMSEH ENERGY CENTER 115KV	108	0.01953	-0.23514	22
WERE	PAWNEE 115KV	999	-0.21561	WERE	LAWRENCE ENERGY CENTER 230KV	230.3248	0.01814	-0.23375	23
WERE	RICE 115KV	999	-0.21561	WERE	LAWRENCE ENERGY CENTER 230KV	230.3248	0.01814	-0.23375	23
WERE	PAWNEE 115KV	999	-0.21561	WERE	CHANUTE 69KV	56.296	0.00259	-0.2182	24
WERE	PAWNEE 115KV	999	-0.21561	WERE	CITY OF AUGUSTA 69KV	19.63601	0.00123	-0.21684	24
WERE	PAWNEE 115KV	999	-0.21561	WERE	CITY OF IOLA 69KV	24.256	0.00297	-0.21858	24
WERE	PAWNEE 115KV	999	-0.21561	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.96	0.00472	-0.22033	24
WERE	PAWNEE 115KV	999	-0.21561	WERE	EVANS ENERGY CENTER 138KV	187.8892	0.0005	-0.21611	24
WERE	RICE 115KV	999	-0.21561	WERE	CHANUTE 69KV	56.296	0.00259	-0.2182	24
WERE	RICE 115KV	999	-0.21561	WERE	CITY OF AUGUSTA 69KV	19.63601	0.00123	-0.21684	24
WERE	RICE 115KV	999	-0.21561	WERE	CITY OF IOLA 69KV	24.256	0.00297	-0.21858	24
WERE	RICE 115KV	999	-0.21561	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.96	0.00472	-0.22033	24
WERE	RICE 115KV	999	-0.21561	WERE	EVANS ENERGY CENTER 138KV	187.8892	0.0005	-0.21611	24
WERE	GREAT BEND PLANT 69KV	10	-0.17964	WERE	JEFFREY ENERGY CENTER 230KV	470	0.02831	-0.20795	25
WERE	GREAT BEND PLANT 69KV	10	-0.17964	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02952	-0.20916	25
WERE	PAWNEE 115KV	999	-0.21561	WERE	CITY OF WELLINGTON 69KV	20	-0.00235	-0.21326	25
WERE	PAWNEE 115KV	999	-0.21561	WERE	WACO 138KV	17.946	-0.00425	-0.21136	25
WERE	RICE 115KV	999	-0.21561	WERE	CITY OF WELLINGTON 69KV	20	-0.00235	-0.21326	25
WERE	RICE 115KV	999	-0.21561	WERE	WACO 138KV	17.946	-0.00425	-0.21136	25
WERE	GREAT BEND PLANT 69KV	10	-0.17964	WERE	TECUMSEH ENERGY CENTER 115KV	108	0.01953	-0.19977	26
WERE	GREAT BEND PLANT 69KV	10	-0.17964	WERE	LAWRENCE ENERGY CENTER 230KV	230.3248	0.01814	-0.19778	27
WERE	GREAT BEND PLANT 69KV	10	-0.17964	WERE	CHANUTE 69KV	56.296	0.00259	-0.18223	29
WERE	GREAT BEND PLANT 69KV	10	-0.17964	WERE	CITY OF AUGUSTA 69KV	19.63601	0.00123	-0.18087	29
WERE	GREAT BEND PLANT 69KV	10	-0.17964	WERE	CITY OF IOLA 69KV	24.256	0.00297	-0.18261	29
WERE	GREAT BEND PLANT 69KV	10	-0.17964	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.96	0.00472	-0.18436	29
WERE	GREAT BEND PLANT 69KV	10	-0.17964	WERE	EVANS ENERGY CENTER 138KV	187.8892	0.0005	-0.18014	29
WERE	GREAT BEND PLANT 69KV	10	-0.17964	WERE	CITY OF WELLINGTON 69KV	20	-0.00235	-0.17729	30
WERE	GREAT BEND PLANT 69KV	10	-0.17964	WERE	WACO 138KV	17.946	-0.00425	-0.17539	30
WERE	KNOLL 3 115 115KV	75	-0.09268	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02952	-0.1222	43
WERE	KNOLL 3 115 115KV	75	-0.09268	WERE	JEFFREY ENERGY CENTER 230KV	470	0.02831	-0.12099	44
WERE	KNOLL 3 115 115KV	75	-0.09268	WERE	TECUMSEH ENERGY CENTER 115KV	108	0.01953	-0.11221	47
WERE	KNOLL 3 115 115KV	75	-0.09268	WERE	LAWRENCE ENERGY CENTER 230KV	230.3248	0.01814	-0.11082	48
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50621	WERE	HUTCHINSON ENERGY CENTER 115KV	30	-0.40086	-0.10535	50
WERE	KNOLL 3 115 115KV	75	-0.09268	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.96	0.00472	-0.0974	54
WERE	KNOLL 3 115 115KV	75	-0.09268	WERE	CITY OF AUGUSTA 69KV	19.63601	0.00123	-0.09391	56
WERE	KNOLL 3 115 115KV	75	-0.09268	WERE	EVANS ENERGY CENTER 138KV	187.8892	0.0005	-0.09318	57
WEPL	A. M. MULLERGREEN GENERATOR 115KV	63	-0.17717	WEPL	GRAY COUNTY WIND FARM 115KV	60	-0.11561	-0.06156	86
WERE	GILL ENERGY CENTER 138KV	218	-0.00479	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02952	-0.03431	154
WERE	GILL ENERGY CENTER 138KV	218	-0.00479	WERE	JEFFREY ENERGY CENTER 230KV	470	0.02831	-0.0331	159
WERE	GILL ENERGY CENTER 69KV	118	-0.00342	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02952	-0.03294	160
WERE	GILL ENERGY CENTER 69KV	118	-0.00342	WERE	JEFFREY ENERGY CENTER 230KV	470	0.02831	-0.03173	166

Maximum Decrement and Maximum Increment were determined from the Source 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: 57372573741568725687312207SH  
 Date Redispatch Needed: 6/1 - 10/1 Until EOC of Upgrade  
 Season Flowgate Identified: 2007 Summer Shoulder

Reservation	Relief Amount	Aggregate Relief Amount
1090817	2.9	8.1
1090964	4.0	8.1
1090965	1.2	8.1

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52215	WERE	ABLENE ENERGY CENTER 115KV	18.23438	0.12191	-0.64406	13
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52215	WERE	CLAY CENTER JUNCTION 115KV	11.825	0.09097	-0.61312	13
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52215	WERE	CHANUTE 69KV	46.617	0.0031	-0.52525	15
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52215	WERE	CITY OF ERIE 69KV	23.258	0.0031	-0.52525	15
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52215	WERE	CITY OF IOLA 69KV	19.865	0.00354	-0.52569	15
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52215	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.96	0.00569	-0.52784	15
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52215	WERE	EVANS ENERGY CENTER 138KV	305	0.00086	-0.52301	15
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52215	WERE	JEFFREY ENERGY CENTER 230KV	470	0.033	-0.55515	15
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52215	WERE	JEFFREY ENERGY CENTER 345KV	940	0.03435	-0.5565	15
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52215	WERE	LAWRENCE ENERGY CENTER 115KV	60	0.02019	-0.54234	15
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52215	WERE	LAWRENCE ENERGY CENTER 230KV	230.2191	0.02119	-0.54334	15
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52215	WERE	TECUMSEH ENERGY CENTER 115KV	108	0.0228	-0.54495	15
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.42248	WERE	ABLENE ENERGY CENTER 115KV	18.23438	0.12191	-0.54439	15
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.42229	WERE	ABLENE ENERGY CENTER 115KV	18.23438	0.12191	-0.5442	15
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52215	WERE	CITY OF MULVANE 69KV	6.189	-0.00096	-0.52119	16
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52215	WERE	CITY OF WELLINGTON 69KV	31.07001	-0.00251	-0.51964	16
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52215	WERE	GILL ENERGY CENTER 138KV	77	-0.00519	-0.51696	16
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.52215	WERE	WACO 138KV	17.947	-0.00458	-0.51757	16
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.42248	WERE	CLAY CENTER JUNCTION 115KV	11.825	0.09097	-0.51345	16
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.42229	WERE	CLAY CENTER JUNCTION 115KV	11.825	0.09097	-0.51326	16
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.42248	WERE	JEFFREY ENERGY CENTER 230KV	470	0.033	-0.45548	18
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.42248	WERE	JEFFREY ENERGY CENTER 345KV	940	0.03435	-0.45683	18
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.42248	WERE	LAWRENCE ENERGY CENTER 115KV	60	0.02019	-0.44267	18
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.42248	WERE	LAWRENCE ENERGY CENTER 230KV	230.2191	0.02119	-0.44367	18
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.42248	WERE	TECUMSEH ENERGY CENTER 115KV	108	0.0228	-0.44528	18
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.42229	WERE	JEFFREY ENERGY CENTER 230KV	470	0.033	-0.45299	18
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.42229	WERE	JEFFREY ENERGY CENTER 345KV	940	0.03435	-0.45664	18
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.42229	WERE	LAWRENCE ENERGY CENTER 115KV	60	0.02019	-0.44248	18
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.42229	WERE	LAWRENCE ENERGY CENTER 230KV	230.2191	0.02119	-0.44348	18
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.42229	WERE	TECUMSEH ENERGY CENTER 115KV	108	0.0228	-0.44509	18
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.42248	WERE	CHANUTE 69KV	46.617	0.0031	-0.42558	19
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.42248	WERE	CITY OF ERIE 69KV	23.258	0.0031	-0.42558	19
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.42248	WERE	CITY OF IOLA 69KV	19.865	0.00354	-0.42602	19
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.42248	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.96	0.00569	-0.42817	19
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.42248	WERE	EVANS ENERGY CENTER 138KV	305	0.00086	-0.42334	19
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.42248	WERE	GILL ENERGY CENTER 138KV	77	-0.00519	-0.41729	19
WERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.42248	WERE	WACO 138KV	17.947	-0.00458	-0.4179	19
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.42229	WERE	CHANUTE 69KV	46.617	0.0031	-0.42539	19
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.42229	WERE	CITY OF ERIE 69KV	23.258	0.0031	-0.42539	19
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.42229	WERE	CITY OF IOLA 69KV	19.865	0.00354	-0.42583	19
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.42229	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.96	0.00569	-0.42798	19

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

WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.42229	WERE	EVANS ENERGY CENTER 138KV'	305	0.00086	-0.42315	19
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.42229	WERE	GILL ENERGY CENTER 138KV'	77	-0.00519	-0.41711	19
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.42229	WERE	WACO 138KV'	17.947	-0.00458	-0.41771	19
WERE	PAWNEE 115KV'	999	-0.24056	WERE	ABLILENE ENERGY CENTER 115KV'	18.23438	0.12191	-0.36247	22
WERE	RICE 115KV'	999	-0.24056	WERE	ABLILENE ENERGY CENTER 115KV'	18.23438	0.12191	-0.36247	22
WERE	ST JOHN 115KV'	7.5	-0.24056	WERE	ABLILENE ENERGY CENTER 115KV'	18.23438	0.12191	-0.36247	22
WERE	PAWNEE 115KV'	999	-0.24056	WERE	CLAY CENTER JUNCTION 115KV'	11.825	0.09097	-0.33153	24
WERE	RICE 115KV'	999	-0.24056	WERE	CLAY CENTER JUNCTION 115KV'	11.825	0.09097	-0.33153	24
WERE	GREAT BEND PLANT 69KV'	10	-0.20969	WERE	CLAY CENTER JUNCTION 115KV'	11.825	0.09097	-0.30066	27
WERE	PAWNEE 115KV'	999	-0.24056	WERE	JEFFREY ENERGY CENTER 345KV'	940	0.03435	-0.27491	29
WERE	RICE 115KV'	999	-0.24056	WERE	JEFFREY ENERGY CENTER 345KV'	940	0.03435	-0.27491	29
WERE	PAWNEE 115KV'	999	-0.24056	WERE	JEFFREY ENERGY CENTER 230KV'	470	0.033	-0.27356	30
WERE	RICE 115KV'	999	-0.24056	WERE	JEFFREY ENERGY CENTER 230KV'	470	0.033	-0.27356	30
WERE	PAWNEE 115KV'	999	-0.24056	WERE	LAWRENCE ENERGY CENTER 115KV'	60	0.02019	-0.26075	31
WERE	PAWNEE 115KV'	999	-0.24056	WERE	LAWRENCE ENERGY CENTER 230KV'	230.2191	0.02119	-0.26175	31
WERE	PAWNEE 115KV'	999	-0.24056	WERE	TECUMSEH ENERGY CENTER 115KV'	108	0.0228	-0.26336	31
WERE	RICE 115KV'	999	-0.24056	WERE	LAWRENCE ENERGY CENTER 115KV'	60	0.02019	-0.26075	31
WERE	RICE 115KV'	999	-0.24056	WERE	LAWRENCE ENERGY CENTER 230KV'	230.2191	0.02119	-0.26175	31
WERE	RICE 115KV'	999	-0.24056	WERE	TECUMSEH ENERGY CENTER 115KV'	108	0.0228	-0.26336	31
WERE	PAWNEE 115KV'	999	-0.24056	WERE	CITY OF ERIE 69KV'	23.258	0.0031	-0.24366	33
WERE	PAWNEE 115KV'	999	-0.24056	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.00569	-0.24625	33
WERE	RICE 115KV'	999	-0.24056	WERE	CITY OF ERIE 69KV'	23.258	0.0031	-0.24366	33
WERE	RICE 115KV'	999	-0.24056	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.00569	-0.24625	33
WERE	PAWNEE 115KV'	999	-0.24056	WERE	EVANS ENERGY CENTER 138KV'	305	0.00086	-0.24142	34
WERE	PAWNEE 115KV'	999	-0.24056	WERE	GILL ENERGY CENTER 138KV'	77	-0.00519	-0.23537	34
WERE	PAWNEE 115KV'	999	-0.24056	WERE	WACO 138KV'	17.947	-0.00458	-0.23598	34
WERE	RICE 115KV'	999	-0.24056	WERE	EVANS ENERGY CENTER 138KV'	305	0.00086	-0.24142	34
WERE	RICE 115KV'	999	-0.24056	WERE	GILL ENERGY CENTER 138KV'	77	-0.00519	-0.23537	34
WERE	RICE 115KV'	999	-0.24056	WERE	WACO 138KV'	17.947	-0.00458	-0.23598	34
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.52215	WERE	HUTCHINSON ENERGY CENTER 115KV'	80.00001	-0.42248	-0.09967	81
WERE	KNOLL 3 115 115KV'	75	-0.04377	WERE	JEFFREY ENERGY CENTER 345KV'	940	0.03435	-0.07812	104
WERE	KNOLL 3 115 115KV'	75	-0.04377	WERE	JEFFREY ENERGY CENTER 230KV'	470	0.033	-0.07677	105
WERE	KNOLL 3 115 115KV'	75	-0.04377	WERE	TECUMSEH ENERGY CENTER 115KV'	108	0.0228	-0.06657	122
WERE	KNOLL 3 115 115KV'	75	-0.04377	WERE	LAWRENCE ENERGY CENTER 230KV'	230.2191	0.02119	-0.06496	125
WERE	KNOLL 3 115 115KV'	75	-0.04377	WERE	LAWRENCE ENERGY CENTER 115KV'	60	0.02019	-0.06396	126
WERE	KNOLL 3 115 115KV'	75	-0.04377	WERE	EVANS ENERGY CENTER 138KV'	305	0.00086	-0.04463	181
WERE	GILL ENERGY CENTER 138KV'	118	-0.00519	WERE	JEFFREY ENERGY CENTER 345KV'	940	0.03435	-0.03954	205
WERE	KNOLL 3 115 115KV'	75	-0.04377	WERE	GILL ENERGY CENTER 138KV'	77	-0.00519	-0.03858	210
WERE	GILL ENERGY CENTER 138KV'	118	-0.00519	WERE	JEFFREY ENERGY CENTER 230KV'	470	0.033	-0.03819	212
WERE	GILL ENERGY CENTER 69KV'	118	-0.00364	WERE	JEFFREY ENERGY CENTER 345KV'	940	0.03435	-0.03799	213
WERE	GILL ENERGY CENTER 69KV'	118	-0.00364	WERE	JEFFREY ENERGY CENTER 230KV'	470	0.033	-0.03664	221
WERE	EVANS ENERGY CENTER 138KV'	488	0.00086	WERE	JEFFREY ENERGY CENTER 345KV'	940	0.03435	-0.03349	242
WERE	EVANS ENERGY CENTER 138KV'	488	0.00086	WERE	JEFFREY ENERGY CENTER 230KV'	470	0.033	-0.03214	252
WERE	LATHAM1234.0 345KV'	150	0.00285	WERE	JEFFREY ENERGY CENTER 345KV'	940	0.03435	-0.0315	257
WERE	LATHAM1234.0 345KV'	150	0.00285	WERE	JEFFREY ENERGY CENTER 230KV'	470	0.033	-0.03015	268

Maximum Decrement and Maximum Increment were determine from the Source 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: 57372573741568725687312207WP  
 Date Redispatch Needed: 12/1/07 - 4/1/08  
 Season Flowgate Identified: 2007 Winter Peak

Reservation	Relief Amount	Aggregate Relief Amount
1090817	5.0	14.1
1090964	7.0	14.1
1090965	2.0	14.1

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50615	WERE	JEFFREY ENERGY CENTER 230KV'	470	0.02836	-0.53451	26
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50615	WERE	JEFFREY ENERGY CENTER 345KV'	940	0.02957	-0.53572	26
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50615	WERE	LAWRENCE ENERGY CENTER 230KV'	169.36	0.01819	-0.52434	27
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50615	WERE	CHANUTE 69KV'	34.818	0.00263	-0.50878	28
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50615	WERE	CITY OF AUGUSTA 69KV'	14.628	0.00127	-0.50742	28
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50615	WERE	CITY OF IOLA 69KV'	14.565	0.00301	-0.50916	28
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50615	WERE	CITY OF WELLINGTON 69KV'	20	-0.00231	-0.50384	28
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50615	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV'	19.95	0.00476	-0.51091	28
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50615	WERE	EVANS ENERGY CENTER 138KV'	55	0.00054	-0.50669	28
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.50615	WERE	WACO 138KV'	17.93	-0.00421	-0.50194	28
WERE	HUTCHINSON ENERGY CENTER 115KV'	423	-0.40081	WERE	JEFFREY ENERGY CENTER 230KV'	470	0.02836	-0.42917	33
WERE	HUTCHINSON ENERGY CENTER 115KV'	423	-0.40081	WERE	JEFFREY ENERGY CENTER 345KV'	940	0.02957	-0.43038	33
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40061	WERE	JEFFREY ENERGY CENTER 230KV'	470	0.02836	-0.42897	33
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40061	WERE	JEFFREY ENERGY CENTER 345KV'	940	0.02957	-0.43018	33
WERE	HUTCHINSON ENERGY CENTER 115KV'	423	-0.40081	WERE	LAWRENCE ENERGY CENTER 230KV'	169.36	0.01819	-0.419	34
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40061	WERE	LAWRENCE ENERGY CENTER 230KV'	169.36	0.01819	-0.4188	34
WERE	HUTCHINSON ENERGY CENTER 115KV'	423	-0.40081	WERE	CITY OF AUGUSTA 69KV'	14.628	0.00127	-0.40208	35
WERE	HUTCHINSON ENERGY CENTER 115KV'	423	-0.40081	WERE	CITY OF WELLINGTON 69KV'	20	-0.00231	-0.3985	35
WERE	HUTCHINSON ENERGY CENTER 115KV'	423	-0.40081	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV'	19.95	0.00476	-0.40557	35
WERE	HUTCHINSON ENERGY CENTER 115KV'	423	-0.40081	WERE	EVANS ENERGY CENTER 138KV'	55	0.00054	-0.40135	35
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40061	WERE	CITY OF AUGUSTA 69KV'	14.628	0.00127	-0.40188	35
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40061	WERE	CITY OF WELLINGTON 69KV'	20	-0.00231	-0.3983	35
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40061	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV'	19.95	0.00476	-0.40537	35
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40061	WERE	EVANS ENERGY CENTER 138KV'	55	0.00054	-0.40115	35
WERE	HUTCHINSON ENERGY CENTER 115KV'	423	-0.40081	WERE	WACO 138KV'	17.93	-0.00421	-0.3966	36
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.40061	WERE	WACO 138KV'	17.93	-0.00421	-0.3964	36
WERE	PAWNEE 115KV'	999	-0.21556	WERE	JEFFREY ENERGY CENTER 345KV'	940	0.02957	-0.24513	57
WERE	RICE 115KV'	999	-0.21556	WERE	JEFFREY ENERGY CENTER 345KV'	940	0.02957	-0.24513	57
WERE	PAWNEE 115KV'	999	-0.21556	WERE	JEFFREY ENERGY CENTER 230KV'	470	0.02836	-0.24392	58
WERE	RICE 115KV'	999	-0.21556	WERE	JEFFREY ENERGY CENTER 230KV'	470	0.02836	-0.24392	58
WERE	PAWNEE 115KV'	999	-0.21556	WERE	LAWRENCE ENERGY CENTER 230KV'	169.36	0.01819	-0.23375	60
WERE	RICE 115KV'	999	-0.21556	WERE	LAWRENCE ENERGY CENTER 230KV'	169.36	0.01819	-0.23375	60
WERE	PAWNEE 115KV'	999	-0.21556	WERE	EVANS ENERGY CENTER 138KV'	55	0.00054	-0.2161	65
WERE	RICE 115KV'	999	-0.21556	WERE	EVANS ENERGY CENTER 138KV'	55	0.00054	-0.2161	65
WERE	KNOLL 3 115 115KV'	75	-0.09262	WERE	JEFFREY ENERGY CENTER 345KV'	940	0.02957	-0.12219	115
WERE	KNOLL 3 115 115KV'	75	-0.09262	WERE	JEFFREY ENERGY CENTER 230KV'	470	0.02836	-0.12098	116
WERE	KNOLL 3 115 115KV'	75	-0.09262	WERE	LAWRENCE ENERGY CENTER 230KV'	169.36	0.01819	-0.11081	127
WERE	KNOLL 3 115 115KV'	75	-0.09262	WERE	EVANS ENERGY CENTER 138KV'	55	0.00054	-0.09316	151
WERE	GILL ENERGY CENTER 138KV'	218	-0.00475	WERE	JEFFREY ENERGY CENTER 345KV'	940	0.02957	-0.03432	410
WERE	GILL ENERGY CENTER 138KV'	218	-0.00475	WERE	JEFFREY ENERGY CENTER 230KV'	470	0.02836	-0.03311	425

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

Factor = Source GSF - Sink GSF



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

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  
 Season Flowgate Identified: 2008 Winter Peak

Reservation	Relief Amount	Aggregate Relief Amount
1090817	0.8	4.4
1090829	0.6	4.4
1090917	0.4	4.4
1090919	0.1	4.4
1090920	0.6	4.4
1090921	0.2	4.4
1090964	1.1	4.4
1090965	0.4	4.4
1091057	0.4	4.4

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615	WERE	CLAY CENTER JUNCTION 115KV	6.7	0.08529	-0.59144	8
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615	WERE	JEFFREY ENERGY CENTER 230KV	470	0.02825	-0.5344	8
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02949	-0.53564	8
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615	WERE	LAWRENCE ENERGY CENTER 230KV	193.727	0.01813	-0.52428	8
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615	WERE	TECUMSEH ENERGY CENTER 115KV	48	0.01951	-0.52566	8
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615	WERE	CHANUTE 69KV	34.903	0.00262	-0.50877	9
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615	WERE	CITY OF AUGUSTA 69KV	15.285	0.0012	-0.50735	9
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615	WERE	CITY OF BURLINGTON 69KV	4.8	0.00467	-0.51082	9
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615	WERE	CITY OF IOLA 69KV	19.902	0.00302	-0.50917	9
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615	WERE	CITY OF MULVANE 69KV	3.921	-0.0011	-0.50505	9
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615	WERE	CITY OF WELLINGTON 69KV	20	-0.00237	-0.50378	9
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.61	0.00467	-0.51082	9
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615	WERE	EVANS ENERGY CENTER 138KV	110	0.00047	-0.50662	9
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615	WERE	WACO 138KV	17.414	-0.00428	-0.50187	9
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.4008	WERE	CLAY CENTER JUNCTION 115KV	6.7	0.08529	-0.48609	9
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.40041	WERE	CLAY CENTER JUNCTION 115KV	6.7	0.08529	-0.4857	9
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615	WERE	COLBY 115KV	5.652049	-0.07459	-0.43156	10
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615	WERE	KNOLL 3 115 115KV	75	-0.0925	-0.41365	11
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.4008	WERE	JEFFREY ENERGY CENTER 230KV	470	0.02825	-0.42905	10
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.4008	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02949	-0.43029	10
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.4008	WERE	LAWRENCE ENERGY CENTER 230KV	193.727	0.01813	-0.41893	11
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.4008	WERE	TECUMSEH ENERGY CENTER 115KV	48	0.01951	-0.42031	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.40041	WERE	JEFFREY ENERGY CENTER 230KV	470	0.02825	-0.42866	10
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.40041	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02949	-0.4299	10
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.40041	WERE	LAWRENCE ENERGY CENTER 230KV	193.727	0.01813	-0.41854	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.40041	WERE	TECUMSEH ENERGY CENTER 115KV	48	0.01951	-0.41992	11
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.4008	WERE	CHANUTE 69KV	34.903	0.00262	-0.40342	11
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.4008	WERE	CITY OF AUGUSTA 69KV	15.285	0.0012	-0.402	11
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.4008	WERE	CITY OF BURLINGTON 69KV	4.8	0.00467	-0.40547	11
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.4008	WERE	CITY OF IOLA 69KV	19.902	0.00302	-0.40382	11
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.4008	WERE	CITY OF MULVANE 69KV	3.921	-0.0011	-0.3997	11
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.4008	WERE	CITY OF WELLINGTON 69KV	20	-0.00237	-0.39843	11
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.4008	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.61	0.00467	-0.40547	11
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.4008	WERE	EVANS ENERGY CENTER 138KV	110	0.00047	-0.40127	11
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.4008	WERE	WACO 138KV	17.414	-0.00428	-0.39652	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.40041	WERE	CHANUTE 69KV	34.903	0.00262	-0.40303	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.40041	WERE	CITY OF AUGUSTA 69KV	15.285	0.0012	-0.40161	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.40041	WERE	CITY OF BURLINGTON 69KV	4.8	0.00467	-0.40508	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.40041	WERE	CITY OF IOLA 69KV	19.902	0.00302	-0.40343	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.40041	WERE	CITY OF MULVANE 69KV	3.921	-0.0011	-0.39931	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.40041	WERE	CITY OF WELLINGTON 69KV	20	-0.00237	-0.39804	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.40041	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.61	0.00467	-0.40508	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.40041	WERE	EVANS ENERGY CENTER 138KV	110	0.00047	-0.40088	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.40041	WERE	WACO 138KV	17.414	-0.00428	-0.39613	11
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.4008	WERE	COLBY 115KV	5.652049	-0.07459	-0.32621	14
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.40041	WERE	COLBY 115KV	5.652049	-0.07459	-0.32582	14
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.4008	WERE	KNOLL 3 115 115KV	75	-0.0925	-0.3083	14
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.40041	WERE	KNOLL 3 115 115KV	75	-0.0925	-0.30791	14
WERE	PAWNEE 115KV	999	-0.2156	WERE	CLAY CENTER JUNCTION 115KV	6.7	0.08529	-0.30089	15
WERE	RICE 115KV	999	-0.2156	WERE	CLAY CENTER JUNCTION 115KV	6.7	0.08529	-0.30089	15
WERE	ST JOHN 115KV	7.5	-0.2156	WERE	CLAY CENTER JUNCTION 115KV	6.7	0.08529	-0.30089	15
WERE	GREAT BEND PLANT 69KV	10	-0.17956	WERE	CLAY CENTER JUNCTION 115KV	6.7	0.08529	-0.26485	17
WERE	PAWNEE 115KV	999	-0.2156	WERE	JEFFREY ENERGY CENTER 230KV	470	0.02825	-0.24385	18
WERE	PAWNEE 115KV	999	-0.2156	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02949	-0.24509	18
WERE	RICE 115KV	999	-0.2156	WERE	JEFFREY ENERGY CENTER 230KV	470	0.02825	-0.24385	18
WERE	RICE 115KV	999	-0.2156	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02949	-0.24509	18
WERE	ST JOHN 115KV	7.5	-0.2156	WERE	JEFFREY ENERGY CENTER 230KV	470	0.02825	-0.24385	18
WERE	ST JOHN 115KV	7.5	-0.2156	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02949	-0.24509	18
WERE	PAWNEE 115KV	999	-0.2156	WERE	LAWRENCE ENERGY CENTER 230KV	193.727	0.01813	-0.23373	19
WERE	PAWNEE 115KV	999	-0.2156	WERE	TECUMSEH ENERGY CENTER 115KV	48	0.01951	-0.23511	19
WERE	RICE 115KV	999	-0.2156	WERE	LAWRENCE ENERGY CENTER 230KV	193.727	0.01813	-0.23373	19
WERE	RICE 115KV	999	-0.2156	WERE	TECUMSEH ENERGY CENTER 115KV	48	0.01951	-0.23511	19
WERE	ST JOHN 115KV	7.5	-0.2156	WERE	LAWRENCE ENERGY CENTER 230KV	193.727	0.01813	-0.23373	19
WERE	ST JOHN 115KV	7.5	-0.2156	WERE	TECUMSEH ENERGY CENTER 115KV	48	0.01951	-0.23511	19
WERE	PAWNEE 115KV	999	-0.2156	WERE	CHANUTE 69KV	34.903	0.00262	-0.21822	20
WERE	PAWNEE 115KV	999	-0.2156	WERE	CITY OF AUGUSTA 69KV	15.285	0.0012	-0.2168	21
WERE	PAWNEE 115KV	999	-0.2156	WERE	CITY OF IOLA 69KV	19.902	0.00302	-0.21862	20
WERE	PAWNEE 115KV	999	-0.2156	WERE	CITY OF WELLINGTON 69KV	20	-0.00237	-0.21323	21
WERE	PAWNEE 115KV	999	-0.2156	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.61	0.00467	-0.22027	20
WERE	PAWNEE 115KV	999	-0.2156	WERE	EVANS ENERGY CENTER 138KV	110	0.00047	-0.21607	21
WERE	PAWNEE 115KV	999	-0.2156	WERE	WACO 138KV	17.414	-0.00428	-0.21132	21
WERE	PAWNEE 115KV	999	-0.2156	WERE	CHANUTE 69KV	34.903	0.00262	-0.21822	20
WERE	RICE 115KV	999	-0.2156	WERE	CITY OF AUGUSTA 69KV	15.285	0.0012	-0.2168	21
WERE	RICE 115KV	999	-0.2156	WERE	CITY OF IOLA 69KV	19.902	0.00302	-0.21862	20
WERE	RICE 115KV	999	-0.2156	WERE	CITY OF WELLINGTON 69KV	20	-0.00237	-0.21323	21
WERE	RICE 115KV	999	-0.2156	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.61	0.00467	-0.22027	20
WERE	RICE 115KV	999	-0.2156	WERE	EVANS ENERGY CENTER 138KV	110	0.00047	-0.21607	21
WERE	RICE 115KV	999	-0.2156	WERE	WACO 138KV	17.414	-0.00428	-0.21132	21
WERE	ST JOHN 115KV	7.5	-0.2156	WERE	CHANUTE 69KV	34.903	0.00262	-0.21822	20
WERE	ST JOHN 115KV	7.5	-0.2156	WERE	CITY OF AUGUSTA 69KV	15.285	0.0012	-0.2168	21
WERE	ST JOHN 115KV	7.5	-0.2156	WERE	CITY OF IOLA 69KV	19.902	0.00302	-0.21862	20
WERE	ST JOHN 115KV	7.5	-0.2156	WERE	CITY OF WELLINGTON 69KV	20	-0.00237	-0.21323	21
WERE	ST JOHN 115KV	7.5	-0.2156	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.61	0.00467	-0.22027	20

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

WERE	'ST JOHN 115KV'	7.5	-0.2156	WERE	'EVANS ENERGY CENTER 138KV'	110	0.00047	-0.21607	21
WERE	'ST JOHN 115KV'	7.5	-0.2156	WERE	'WACO 138KV'	17.414	-0.00428	-0.21132	21
WERE	'GREAT BEND PLANT 69KV'	10	-0.17956	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.02825	-0.20781	21
WERE	'GREAT BEND PLANT 69KV'	10	-0.17956	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.02949	-0.20905	21
WERE	'GREAT BEND PLANT 69KV'	10	-0.17956	WERE	'LAWRENCE ENERGY CENTER 230KV'	193,727	0.01813	-0.19769	23
WERE	'GREAT BEND PLANT 69KV'	10	-0.17956	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.01951	-0.19907	22
WERE	'GREAT BEND PLANT 69KV'	10	-0.17956	WERE	'CHANUTE 69KV'	34,903	0.00262	-0.18218	24
WERE	'GREAT BEND PLANT 69KV'	10	-0.17956	WERE	'CITY OF AUGUSTA 69KV'	15,285	0.0012	-0.18076	25
WERE	'GREAT BEND PLANT 69KV'	10	-0.17956	WERE	'CITY OF IOLA 69KV'	19,902	0.00302	-0.18258	24
WERE	'GREAT BEND PLANT 69KV'	10	-0.17956	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.61	0.00467	-0.18423	24
WERE	'GREAT BEND PLANT 69KV'	10	-0.17956	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00237	-0.17719	25
WERE	'GREAT BEND PLANT 69KV'	10	-0.17956	WERE	'EVANS ENERGY CENTER 138KV'	110	0.00047	-0.18003	25
WERE	'GREAT BEND PLANT 69KV'	10	-0.17956	WERE	'WACO 138KV'	17,414	-0.00428	-0.17528	25
WERE	'PAWNEE 115KV'	999	-0.2156	WERE	'KNOLL 3 115 115KV'	75	-0.0925	-0.1231	36
WERE	'RICE 115KV'	999	-0.2156	WERE	'KNOLL 3 115 115KV'	75	-0.0925	-0.1231	36

Maximum Decrement and Maximum Increment were determined from the Source 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 JUNCTION (SOUTH) - WEST MCPHERSON 115KV CKT 1  
 Direction: From->To  
 Line Outage: EAST MCPHERSON - SUMMIT 230KV CKT 1  
 Flowgate: 57374574381568725687312206WP  
 Date Redispatch Needed: 12/1/06 - 4/1/07  
 Season Flowgate Identified: 2006 Winter Peak

Reservation	Relief Amount	Aggregate Relief Amount
1090964	3.2	4.1
1090965	0.9	4.1

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24288	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01575	-0.25863	16
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24288	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01637	-0.25925	16
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24288	WERE	'LAWRENCE ENERGY CENTER 230KV'	130,0238	0.01028	-0.25316	16
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24288	WERE	'CHANUTE 69KV'	35,344	0.00143	-0.24431	17
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24288	WERE	'CITY OF AUGUSTA 69KV'	17,25201	0.00045	-0.24333	17
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24288	WERE	'CITY OF IOLA 69KV'	13,978	0.00166	-0.24454	17
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24288	WERE	'CITY OF WELLINGTON 69KV'	24	-0.00129	-0.24159	17
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24288	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00266	-0.24554	17
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24288	WERE	'EVANS ENERGY CENTER 138KV'	25,88745	0.00032	-0.2432	17
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24288	WERE	'WACO 138KV'	17,953	-0.00227	-0.24061	17
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.19671	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01575	-0.21246	19
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.19671	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01637	-0.21308	19
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.19662	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01575	-0.21237	19
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.19662	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01637	-0.21299	19
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.19671	WERE	'LAWRENCE ENERGY CENTER 230KV'	130,0238	0.01028	-0.20699	20
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.19662	WERE	'LAWRENCE ENERGY CENTER 230KV'	130,0238	0.01028	-0.20699	20
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.19671	WERE	'CHANUTE 69KV'	35,344	0.00143	-0.19814	21
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.19671	WERE	'CITY OF AUGUSTA 69KV'	17,25201	0.00045	-0.19716	21
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.19671	WERE	'CITY OF IOLA 69KV'	13,978	0.00166	-0.19837	21
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.19671	WERE	'CITY OF WELLINGTON 69KV'	24	-0.00129	-0.19542	21
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.19671	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00266	-0.19937	21
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.19671	WERE	'EVANS ENERGY CENTER 138KV'	25,88745	0.00032	-0.19703	21
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.19671	WERE	'WACO 138KV'	17,953	-0.00227	-0.19444	21
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.19662	WERE	'CHANUTE 69KV'	35,344	0.00143	-0.19805	21
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.19662	WERE	'CITY OF AUGUSTA 69KV'	17,25201	0.00045	-0.19707	21
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.19662	WERE	'CITY OF IOLA 69KV'	13,978	0.00166	-0.19828	21
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.19662	WERE	'CITY OF WELLINGTON 69KV'	24	-0.00129	-0.19533	21
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.19662	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00266	-0.19928	21
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.19662	WERE	'EVANS ENERGY CENTER 138KV'	25,88745	0.00032	-0.19694	21
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.19662	WERE	'WACO 138KV'	17,953	-0.00227	-0.19435	21
WERE	'PAWNEE 115KV'	999	-0.1139	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01575	-0.12965	32
WERE	'PAWNEE 115KV'	999	-0.1139	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01637	-0.13027	32
WERE	'RICE 115KV'	999	-0.1139	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01575	-0.12965	32
WERE	'RICE 115KV'	999	-0.1139	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01637	-0.13027	32
WERE	'PAWNEE 115KV'	999	-0.1139	WERE	'LAWRENCE ENERGY CENTER 230KV'	130,0238	0.01028	-0.12418	33
WERE	'RICE 115KV'	999	-0.1139	WERE	'LAWRENCE ENERGY CENTER 230KV'	130,0238	0.01028	-0.12418	33
WERE	'PAWNEE 115KV'	999	-0.1139	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00266	-0.11656	35
WERE	'RICE 115KV'	999	-0.1139	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00266	-0.11656	35
WERE	'PAWNEE 115KV'	999	-0.1139	WERE	'CITY OF AUGUSTA 69KV'	17,25201	0.00045	-0.11435	36
WERE	'PAWNEE 115KV'	999	-0.1139	WERE	'EVANS ENERGY CENTER 138KV'	25,88745	0.00032	-0.11422	36
WERE	'RICE 115KV'	999	-0.1139	WERE	'CITY OF AUGUSTA 69KV'	17,25201	0.00045	-0.11435	36
WERE	'RICE 115KV'	999	-0.1139	WERE	'EVANS ENERGY CENTER 138KV'	25,88745	0.00032	-0.11422	36
WERE	'PAWNEE 115KV'	999	-0.1139	WERE	'CITY OF WELLINGTON 69KV'	24	-0.00129	-0.11261	37
WERE	'PAWNEE 115KV'	999	-0.1139	WERE	'WACO 138KV'	17,953	-0.00227	-0.11163	37
WERE	'RICE 115KV'	999	-0.1139	WERE	'CITY OF WELLINGTON 69KV'	24	-0.00129	-0.11261	37
WERE	'RICE 115KV'	999	-0.1139	WERE	'WACO 138KV'	17,953	-0.00227	-0.11163	37
WEPL	'A. M. MULLERGRN GENERATOR 115KV'	63	-0.10301	WEPL	'GRAY COUNTY WIND FARM 115KV'	73	-0.06549	-0.03752	110
WERE	'KNOLL 3 115 115KV'	75	-0.01862	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01637	-0.03499	118
WERE	'KNOLL 3 115 115KV'	75	-0.01862	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01575	-0.03437	120

Maximum Decrement and Maximum Increment were determined from the Source 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 JUNCTION (SOUTH) - WEST MCPHERSON 115KV CKT 1  
 Direction: From->To  
 Line Outage: EAST MCPHERSON - SUMMIT 230KV CKT 1  
 Flowgate: 57374574381568725687312207FA  
 Date Redispatch Needed: Starting 2007 10/1 - 12/1 Until EOC of Upgrade  
 Season Flowgate Identified: 2007 Fall Peak

Reservation	Relief Amount	Aggregate Relief Amount
1090817	2.2	6.1
1090964	3.1	6.1
1090965	0.9	6.1

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2354	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01317	-0.24857	25
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2354	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01373	-0.24913	25
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2354	WERE	'LAWRENCE ENERGY CENTER 230KV'	230,3248	0.00844	-0.24384	25
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2354	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00908	-0.24448	25

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

WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.2354	WERE	'CHANUTE 69KV'	56.296	0.0012	-0.2366	26
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.2354	WERE	'CITY OF AUGUSTA 69KV'	19.63601	0.00057	-0.23597	26
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.2354	WERE	'CITY OF IOLA 69KV'	24.256	0.00138	-0.23678	26
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.2354	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00109	-0.23431	26
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.2354	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.0022	-0.2376	26
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.2354	WERE	'EVANS ENERGY CENTER 138KV'	187.8892	0.00023	-0.23563	26
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.2354	WERE	'WACO 138KV'	17.946	-0.00198	-0.23342	26
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.18641	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01317	-0.19958	31
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.18641	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01373	-0.20014	31
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.18641	WERE	'LAWRENCE ENERGY CENTER 230KV'	230.3248	0.00844	-0.19485	31
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.18641	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00908	-0.19549	31
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.18632	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01317	-0.19949	31
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.18632	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01373	-0.20005	31
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.18632	WERE	'LAWRENCE ENERGY CENTER 230KV'	230.3248	0.00844	-0.19476	31
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.18632	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00908	-0.1954	31
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.18641	WERE	'CITY OF AUGUSTA 69KV'	19.63601	0.00057	-0.18698	33
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.18641	WERE	'CITY OF IOLA 69KV'	24.256	0.00138	-0.18779	33
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.18641	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00109	-0.18532	33
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.18641	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.0022	-0.18861	33
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.18641	WERE	'EVANS ENERGY CENTER 138KV'	187.8892	0.00023	-0.18664	33
WERE	HUTCHINSON ENERGY CENTER 115KV'	343	-0.18641	WERE	'WACO 138KV'	17.946	-0.00198	-0.18443	33
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.18632	WERE	'CITY OF AUGUSTA 69KV'	19.63601	0.00057	-0.18689	33
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.18632	WERE	'CITY OF IOLA 69KV'	24.256	0.00138	-0.1877	33
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.18632	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00109	-0.18523	33
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.18632	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.0022	-0.18852	33
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.18632	WERE	'EVANS ENERGY CENTER 138KV'	187.8892	0.00023	-0.18655	33
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.18632	WERE	'WACO 138KV'	17.946	-0.00198	-0.18434	33
WERE	PAWNEE 115KV'	999	-0.10027	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01317	-0.11344	54
WERE	PAWNEE 115KV'	999	-0.10027	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01373	-0.114	54
WERE	RICE 115KV'	999	-0.10027	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01317	-0.11344	54
WERE	RICE 115KV'	999	-0.10027	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01373	-0.114	54
WERE	PAWNEE 115KV'	999	-0.10027	WERE	'LAWRENCE ENERGY CENTER 230KV'	230.3248	0.00844	-0.10871	56
WERE	PAWNEE 115KV'	999	-0.10027	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00908	-0.10935	56
WERE	RICE 115KV'	999	-0.10027	WERE	'LAWRENCE ENERGY CENTER 230KV'	230.3248	0.00844	-0.10871	56
WERE	RICE 115KV'	999	-0.10027	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00908	-0.10935	56
WERE	PAWNEE 115KV'	999	-0.10027	WERE	'EVANS ENERGY CENTER 138KV'	187.8892	0.00023	-0.1005	61
WERE	RICE 115KV'	999	-0.10027	WERE	'EVANS ENERGY CENTER 138KV'	187.8892	0.00023	-0.1005	61
WERE	KNOLL 3 115 115KV'	75	-0.0431	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01373	-0.05683	108
WERE	KNOLL 3 115 115KV'	75	-0.0431	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01317	-0.05627	109
WERE	KNOLL 3 115 115KV'	75	-0.0431	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00908	-0.05218	118
WERE	KNOLL 3 115 115KV'	75	-0.0431	WERE	'LAWRENCE ENERGY CENTER 230KV'	230.3248	0.00844	-0.05154	119
WERE	KNOLL 3 115 115KV'	75	-0.0431	WERE	'EVANS ENERGY CENTER 138KV'	187.8892	0.00023	-0.04333	142

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 JUNCTION (SOUTH) - WEST MCPHERSON 115KV CKT 1  
 Direction: From->To  
 Line Outage: EAST MCPHERSON - SUMMIT 230KV CKT 1  
 Flowgate: 57374574381568725687312207SH  
 Date Redispatch Needed: 6/1 - 10/1 Until EOC of Upgrade  
 Season Flowgate Identified: 2007 Summer Shoulder

Reservation	Relief Amount	Aggregate Relief Amount
1090817	2.8	7.7
1090964	3.9	7.7
1090965	1.1	7.7

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.24281	WERE	'ABLENE ENERGY CENTER 115KV'	18.23438	0.05669	-0.2995	26
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.24281	WERE	'CLAY CENTER JUNCTION 115KV'	11.825	0.0423	-0.28511	27
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.24281	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01534	-0.25815	30
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.24281	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01597	-0.25878	30
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.24281	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.00939	-0.2522	31
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.24281	WERE	'LAWRENCE ENERGY CENTER 230KV'	230.2191	0.00986	-0.25267	31
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.24281	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.0106	-0.25341	31
WERE	HUTCHINSON ENERGY CENTER 115KV'	303	-0.19647	WERE	'ABLENE ENERGY CENTER 115KV'	18.23438	0.05669	-0.25316	31
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.19638	WERE	'ABLENE ENERGY CENTER 115KV'	18.23438	0.05669	-0.25307	31
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.24281	WERE	'CHANUTE 69KV'	46.617	0.00144	-0.24425	32
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.24281	WERE	'CITY OF ERIE 69KV'	23.258	0.00144	-0.24425	32
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.24281	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.00264	-0.24545	32
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.24281	WERE	'EVANS ENERGY CENTER 138KV'	305	0.0004	-0.24321	32
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.24281	WERE	'GILL ENERGY CENTER 138KV'	77	-0.00241	-0.2404	32
WERE	BPU - CITY OF MCPHERSON 115KV'	259	-0.24281	WERE	'WACO 138KV'	17.947	-0.00213	-0.24068	32
WERE	HUTCHINSON ENERGY CENTER 115KV'	303	-0.19647	WERE	'CLAY CENTER JUNCTION 115KV'	11.825	0.0423	-0.23877	32
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.19638	WERE	'CLAY CENTER JUNCTION 115KV'	11.825	0.0423	-0.23868	32
WERE	HUTCHINSON ENERGY CENTER 115KV'	303	-0.19647	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01597	-0.21244	36
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.19638	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01597	-0.21235	36
WERE	HUTCHINSON ENERGY CENTER 115KV'	303	-0.19647	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01534	-0.21181	37
WERE	HUTCHINSON ENERGY CENTER 115KV'	303	-0.19647	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.0106	-0.20707	37
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.19638	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01534	-0.21172	37
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.19638	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.0106	-0.20698	37
WERE	HUTCHINSON ENERGY CENTER 115KV'	303	-0.19647	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.00939	-0.20586	38
WERE	HUTCHINSON ENERGY CENTER 115KV'	303	-0.19647	WERE	'LAWRENCE ENERGY CENTER 230KV'	230.2191	0.00986	-0.20633	38
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.19638	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.00939	-0.20577	38
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.19638	WERE	'LAWRENCE ENERGY CENTER 230KV'	230.2191	0.00986	-0.20624	38
WERE	HUTCHINSON ENERGY CENTER 115KV'	303	-0.19647	WERE	'CITY OF ERIE 69KV'	23.258	0.00144	-0.19791	39
WERE	HUTCHINSON ENERGY CENTER 115KV'	303	-0.19647	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.00264	-0.19911	39
WERE	HUTCHINSON ENERGY CENTER 115KV'	303	-0.19647	WERE	'EVANS ENERGY CENTER 138KV'	305	0.0004	-0.19687	39
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.19638	WERE	'CITY OF ERIE 69KV'	23.258	0.00144	-0.19782	39
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.19638	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.00264	-0.19902	39
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.19638	WERE	'EVANS ENERGY CENTER 138KV'	305	0.0004	-0.19678	39
WERE	HUTCHINSON ENERGY CENTER 115KV'	303	-0.19647	WERE	'GILL ENERGY CENTER 138KV'	77	-0.00241	-0.19406	40
WERE	HUTCHINSON ENERGY CENTER 115KV'	303	-0.19647	WERE	'WACO 138KV'	17.947	-0.00213	-0.19434	40
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.19638	WERE	'GILL ENERGY CENTER 138KV'	77	-0.00241	-0.19397	40
WERE	HUTCHINSON ENERGY CENTER 69KV'	67	-0.19638	WERE	'WACO 138KV'	17.947	-0.00213	-0.19425	40
WERE	PAWNEE 115KV'	999	-0.11187	WERE	'ABLENE ENERGY CENTER 115KV'	18.23438	0.05669	-0.16856	46
WERE	RICE 115KV'	999	-0.11187	WERE	'ABLENE ENERGY CENTER 115KV'	18.23438	0.05669	-0.16856	46
WERE	PAWNEE 115KV'	999	-0.11187	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01534	-0.12721	61
WERE	PAWNEE 115KV'	999	-0.11187	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01597	-0.12784	61
WERE	RICE 115KV'	999	-0.11187	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01534	-0.12721	61
WERE	RICE 115KV'	999	-0.11187	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01597	-0.12784	61
WERE	PAWNEE 115KV'	999	-0.11187	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.0106	-0.12247	63
WERE	RICE 115KV'	999	-0.11187	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.0106	-0.12247	63

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

WERE	'PAWNEE 115KV'	999	-0.11187	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.00939	-0.12126	64
WERE	'PAWNEE 115KV'	999	-0.11187	WERE	'LAWRENCE ENERGY CENTER 230KV'	230.2191	0.00986	-0.12173	64
WERE	'RICE 115KV'	999	-0.11187	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.00939	-0.12126	64
WERE	'RICE 115KV'	999	-0.11187	WERE	'LAWRENCE ENERGY CENTER 230KV'	230.2191	0.00986	-0.12173	64
WERE	'PAWNEE 115KV'	999	-0.11187	WERE	'CITY OF ERIE 69KV'	23.258	0.00144	-0.11331	68
WERE	'RICE 115KV'	999	-0.11187	WERE	'CITY OF ERIE 69KV'	23.258	0.00144	-0.11331	68
WERE	'PAWNEE 115KV'	999	-0.11187	WERE	'EVANS ENERGY CENTER 138KV'	305	0.0004	-0.11227	69
WERE	'RICE 115KV'	999	-0.11187	WERE	'EVANS ENERGY CENTER 138KV'	305	0.0004	-0.11227	69
WERE	'PAWNEE 115KV'	999	-0.11187	WERE	'GILL ENERGY CENTER 138KV'	77	-0.00241	-0.10946	71
WERE	'RICE 115KV'	999	-0.11187	WERE	'GILL ENERGY CENTER 138KV'	77	-0.00241	-0.10946	71
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24281	WERE	'HUTCHINSON ENERGY CENTER 115KV'	80.00001	-0.19647	-0.04634	167
WERE	'KNOLL 3 115 115KV'	75	-0.02035	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01597	-0.03632	213
WERE	'KNOLL 3 115 115KV'	75	-0.02035	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01534	-0.03659	217
WERE	'KNOLL 3 115 115KV'	75	-0.02035	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.0106	-0.03095	250

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 JUNCTION (SOUTH) - WEST MCPHERSON 115KV CKT 1  
 Direction: From->To  
 Line Outage: EAST MCPHERSON - SUMMIT 230KV CKT 1  
 Flowgate: 57374574381568725687312207WP  
 Date Redispatch Needed: 12/1/07 - 4/1/08  
 Season Flowgate Identified: 2007 Winter Peak

Reservation	Relief Amount	Aggregate Relief Amount
1090817	2.3	6.5
1090964	3.3	6.5
1090965	0.9	6.5

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01319	-0.24857	26
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01375	-0.24913	26
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538	WERE	'LAWRENCE ENERGY CENTER 230KV'	169.36	0.00846	-0.24384	27
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538	WERE	'CHANUTE 69KV'	34.818	0.00122	-0.2366	28
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538	WERE	'CITY OF AUGUSTA 69KV'	14.628	0.00059	-0.23597	28
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538	WERE	'CITY OF IOLA 69KV'	14.565	0.0014	-0.23678	28
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00108	-0.2343	28
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.95	0.00222	-0.2376	28
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538	WERE	'EVANS ENERGY CENTER 138KV'	55	0.00025	-0.23563	28
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538	WERE	'WACO 138KV'	17.93	-0.00196	-0.23342	28
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.18639	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01319	-0.19958	33
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.18639	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01375	-0.20014	33
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.1863	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01319	-0.19949	33
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.1863	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01375	-0.20005	33
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.18639	WERE	'LAWRENCE ENERGY CENTER 230KV'	169.36	0.00846	-0.19485	34
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.1863	WERE	'LAWRENCE ENERGY CENTER 230KV'	169.36	0.00846	-0.19476	34
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.18639	WERE	'CITY OF AUGUSTA 69KV'	14.628	0.00059	-0.18698	35
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.18639	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00108	-0.18531	35
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.18639	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.95	0.00222	-0.18861	35
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.18639	WERE	'EVANS ENERGY CENTER 138KV'	55	0.00025	-0.18664	35
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.1863	WERE	'CITY OF AUGUSTA 69KV'	14.628	0.00059	-0.18689	35
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.1863	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00108	-0.18522	35
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.1863	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.95	0.00222	-0.18852	35
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.1863	WERE	'EVANS ENERGY CENTER 138KV'	55	0.00025	-0.18655	35
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.18639	WERE	'WACO 138KV'	17.93	-0.00196	-0.18443	36
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.1863	WERE	'WACO 138KV'	17.93	-0.00196	-0.18434	36
WERE	'PAWNEE 115KV'	999	-0.10024	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01375	-0.11399	57
WERE	'RICE 115KV'	999	-0.10024	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01375	-0.11399	57
WERE	'PAWNEE 115KV'	999	-0.10024	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01319	-0.11343	58
WERE	'RICE 115KV'	999	-0.10024	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01319	-0.11343	58
WERE	'PAWNEE 115KV'	999	-0.10024	WERE	'LAWRENCE ENERGY CENTER 230KV'	169.36	0.00846	-0.1087	60
WERE	'RICE 115KV'	999	-0.10024	WERE	'LAWRENCE ENERGY CENTER 230KV'	169.36	0.00846	-0.1087	60
WERE	'PAWNEE 115KV'	999	-0.10024	WERE	'EVANS ENERGY CENTER 138KV'	55	0.00025	-0.10049	65
WERE	'RICE 115KV'	999	-0.10024	WERE	'EVANS ENERGY CENTER 138KV'	55	0.00025	-0.10049	65
WERE	'KNOLL 3 115 115KV'	75	-0.04307	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01375	-0.05682	115
WERE	'KNOLL 3 115 115KV'	75	-0.04307	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01319	-0.05626	116
WERE	'KNOLL 3 115 115KV'	75	-0.04307	WERE	'LAWRENCE ENERGY CENTER 230KV'	169.36	0.00846	-0.05153	127
WERE	'KNOLL 3 115 115KV'	75	-0.04307	WERE	'EVANS ENERGY CENTER 138KV'	55	0.00025	-0.04332	151

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 JUNCTION (SOUTH) - WEST MCPHERSON 115KV CKT 1  
 Direction: From->To  
 Line Outage: EAST MCPHERSON - SUMMIT 230KV CKT 1  
 Flowgate: 57374574381568725687314207G  
 Date Redispatch Needed: Starting 2007 4/1 - 6/1 Until EOC of Upgrade  
 Season Flowgate Identified: 2007 Spring Peak

Reservation	Relief Amount	Aggregate Relief Amount
1090964	1.9	2.4
1090965	0.5	2.4

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2428	WERE	'ABILENE ENERGY CENTER 115KV'	40	0.05672	-0.29952	8
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2428	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01537	-0.25817	9
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2428	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.016	-0.2588	9
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2428	WERE	'TECUMSEH ENERGY CENTER 115KV'	68.00001	0.01063	-0.25343	9
WERE	'HUTCHINSON ENERGY CENTER 115KV'	300.5205	-0.19645	WERE	'ABILENE ENERGY CENTER 115KV'	40	0.05672	-0.25317	9
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.19636	WERE	'ABILENE ENERGY CENTER 115KV'	40	0.05672	-0.25308	9
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2428	WERE	'CHANUTE 69KV'	40.39	0.00148	-0.24428	10
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2428	WERE	'CITY OF AUGUSTA 69KV'	20.02	0.0008	-0.2436	10
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2428	WERE	'CITY OF BURLINGTON 69KV'	4.8	0.00267	-0.24547	10
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2428	WERE	'CITY OF IOLA 69KV'	17.08	0.00168	-0.24448	10
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2428	WERE	'CITY OF MULVANE 69KV'	4.922	-0.00042	-0.24238	10
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2428	WERE	'CITY OF WELLINGTON 69KV'	20.503	-0.00115	-0.24165	10
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2428	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	40.039	0.00267	-0.24547	10
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2428	WERE	'EVANS ENERGY CENTER 138KV'	305	0.00042	-0.24322	10
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2428	WERE	'GILL ENERGY CENTER 138KV'	155	-0.00239	-0.24041	10
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2428	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.00942	-0.25222	10

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

WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.2428	WERE	LAWRENCE ENERGY CENTER 230KV	227.1991	0.00988	-0.25268	10
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.2428	WERE	WACO 138KV	18	-0.00211	-0.24069	10
WERE	HUTCHINSON ENERGY CENTER 115KV	300.5205	-0.19645	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01537	-0.21182	11
WERE	HUTCHINSON ENERGY CENTER 115KV	300.5205	-0.19645	WERE	JEFFREY ENERGY CENTER 345KV	940	0.016	-0.21245	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.19636	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01537	-0.21173	11
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.19636	WERE	JEFFREY ENERGY CENTER 345KV	940	0.016	-0.21236	11
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.2428	WERE	COLBY 115KV	6.130238	-0.03655	-0.20625	12
WERE	HUTCHINSON ENERGY CENTER 115KV	300.5205	-0.19645	WERE	CHANUTE 69KV	40.39	0.00148	-0.19793	12
WERE	HUTCHINSON ENERGY CENTER 115KV	300.5205	-0.19645	WERE	CITY OF AUGUSTA 69KV	20.02	0.0008	-0.19725	12
WERE	HUTCHINSON ENERGY CENTER 115KV	300.5205	-0.19645	WERE	CITY OF BURLINGTON 69KV	4.8	0.00267	-0.19912	12
WERE	HUTCHINSON ENERGY CENTER 115KV	300.5205	-0.19645	WERE	CITY OF IOLA 69KV	17.08	0.00168	-0.19813	12
WERE	HUTCHINSON ENERGY CENTER 115KV	300.5205	-0.19645	WERE	CITY OF MULVANE 69KV	4.922	-0.00042	-0.19603	12
WERE	HUTCHINSON ENERGY CENTER 115KV	300.5205	-0.19645	WERE	CITY OF WELLINGTON 69KV	40.503	-0.00115	-0.1953	12
WERE	HUTCHINSON ENERGY CENTER 115KV	300.5205	-0.19645	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	20.09	0.00267	-0.19912	12
WERE	HUTCHINSON ENERGY CENTER 115KV	300.5205	-0.19645	WERE	EVANS ENERGY CENTER 138KV	305	0.00042	-0.19687	12
WERE	HUTCHINSON ENERGY CENTER 115KV	300.5205	-0.19645	WERE	GILL ENERGY CENTER 138KV	155	-0.00239	-0.19406	12
WERE	HUTCHINSON ENERGY CENTER 115KV	300.5205	-0.19645	WERE	LAWRENCE ENERGY CENTER 115KV	60	0.00942	-0.20587	12
WERE	HUTCHINSON ENERGY CENTER 115KV	300.5205	-0.19645	WERE	LAWRENCE ENERGY CENTER 230KV	227.1991	0.00988	-0.20633	12
WERE	HUTCHINSON ENERGY CENTER 115KV	300.5205	-0.19645	WERE	TECUMSEH ENERGY CENTER 115KV	68.00001	0.01063	-0.20708	12
WERE	HUTCHINSON ENERGY CENTER 115KV	300.5205	-0.19645	WERE	WACO 138KV	18	-0.00211	-0.19434	12
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.19636	WERE	CHANUTE 69KV	40.39	0.00148	-0.19784	12
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.19636	WERE	CITY OF AUGUSTA 69KV	20.02	0.0008	-0.19716	12
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.19636	WERE	CITY OF BURLINGTON 69KV	4.8	0.00267	-0.19903	12
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.19636	WERE	CITY OF IOLA 69KV	17.08	0.00168	-0.19804	12
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.19636	WERE	CITY OF MULVANE 69KV	4.922	-0.00042	-0.19594	12
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.19636	WERE	CITY OF WELLINGTON 69KV	40.503	-0.00115	-0.19521	12
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.19636	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	20.09	0.00267	-0.19903	12
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.19636	WERE	EVANS ENERGY CENTER 138KV	305	0.00042	-0.19678	12
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.19636	WERE	GILL ENERGY CENTER 138KV	155	-0.00239	-0.19397	12
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.19636	WERE	LAWRENCE ENERGY CENTER 115KV	60	0.00942	-0.20578	12
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.19636	WERE	LAWRENCE ENERGY CENTER 230KV	227.1991	0.00988	-0.20624	12
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.19636	WERE	TECUMSEH ENERGY CENTER 115KV	68.00001	0.01063	-0.20699	12
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.19636	WERE	WACO 138KV	18	-0.00211	-0.19425	12
WERE	PAWNEE 115KV	999	-0.11186	WERE	ABLENE ENERGY CENTER 115KV	40	0.05672	-0.16858	14
WERE	RICE 115KV	999	-0.11186	WERE	ABLENE ENERGY CENTER 115KV	40	0.05672	-0.16858	14
WERE	ST JOHN 115KV	7.5	-0.11186	WERE	ABLENE ENERGY CENTER 115KV	40	0.05672	-0.16858	14
WERE	HUTCHINSON ENERGY CENTER 115KV	300.5205	-0.19645	WERE	COLBY 115KV	6.130238	-0.03655	-0.1599	15
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.19636	WERE	COLBY 115KV	6.130238	-0.03655	-0.15981	15
WERE	GREAT BEND PLANT 69KV	10	-0.0975	WERE	ABLENE ENERGY CENTER 115KV	40	0.05672	-0.15422	16
WERE	PAWNEE 115KV	999	-0.11186	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01537	-0.12723	19
WERE	PAWNEE 115KV	999	-0.11186	WERE	JEFFREY ENERGY CENTER 345KV	940	0.016	-0.12786	19
WERE	RICE 115KV	999	-0.11186	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01537	-0.12723	19
WERE	RICE 115KV	999	-0.11186	WERE	JEFFREY ENERGY CENTER 345KV	940	0.016	-0.12786	19
WERE	ST JOHN 115KV	7.5	-0.11186	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01537	-0.12723	19
WERE	ST JOHN 115KV	7.5	-0.11186	WERE	JEFFREY ENERGY CENTER 345KV	940	0.016	-0.12786	19
WERE	PAWNEE 115KV	999	-0.11186	WERE	LAWRENCE ENERGY CENTER 115KV	60	0.00942	-0.12128	20
WERE	PAWNEE 115KV	999	-0.11186	WERE	LAWRENCE ENERGY CENTER 230KV	227.1991	0.00988	-0.12174	20
WERE	PAWNEE 115KV	999	-0.11186	WERE	TECUMSEH ENERGY CENTER 115KV	68.00001	0.01063	-0.12249	20
WERE	RICE 115KV	999	-0.11186	WERE	LAWRENCE ENERGY CENTER 115KV	60	0.00942	-0.12128	20
WERE	RICE 115KV	999	-0.11186	WERE	LAWRENCE ENERGY CENTER 230KV	227.1991	0.00988	-0.12174	20
WERE	RICE 115KV	999	-0.11186	WERE	TECUMSEH ENERGY CENTER 115KV	68.00001	0.01063	-0.12249	20
WERE	ST JOHN 115KV	7.5	-0.11186	WERE	LAWRENCE ENERGY CENTER 115KV	60	0.00942	-0.12128	20
WERE	ST JOHN 115KV	7.5	-0.11186	WERE	LAWRENCE ENERGY CENTER 230KV	227.1991	0.00988	-0.12174	20
WERE	ST JOHN 115KV	7.5	-0.11186	WERE	TECUMSEH ENERGY CENTER 115KV	68.00001	0.01063	-0.12249	20
WERE	GREAT BEND PLANT 69KV	10	-0.0975	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01537	-0.11287	21
WERE	GREAT BEND PLANT 69KV	10	-0.0975	WERE	JEFFREY ENERGY CENTER 345KV	940	0.016	-0.1135	21
WERE	PAWNEE 115KV	999	-0.11186	WERE	CHANUTE 69KV	40.39	0.00148	-0.11334	21
WERE	PAWNEE 115KV	999	-0.11186	WERE	CITY OF AUGUSTA 69KV	20.02	0.0008	-0.11266	21
WERE	PAWNEE 115KV	999	-0.11186	WERE	CITY OF IOLA 69KV	17.08	0.00168	-0.11354	21
WERE	PAWNEE 115KV	999	-0.11186	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	20.09	0.00267	-0.11453	21
WERE	PAWNEE 115KV	999	-0.11186	WERE	EVANS ENERGY CENTER 138KV	305	0.00042	-0.11228	21
WERE	RICE 115KV	999	-0.11186	WERE	CHANUTE 69KV	40.39	0.00148	-0.11334	21
WERE	RICE 115KV	999	-0.11186	WERE	CITY OF AUGUSTA 69KV	20.02	0.0008	-0.11266	21
WERE	RICE 115KV	999	-0.11186	WERE	CITY OF IOLA 69KV	17.08	0.00168	-0.11354	21
WERE	RICE 115KV	999	-0.11186	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	20.09	0.00267	-0.11453	21
WERE	RICE 115KV	999	-0.11186	WERE	EVANS ENERGY CENTER 138KV	305	0.00042	-0.11228	21
WERE	ST JOHN 115KV	7.5	-0.11186	WERE	CHANUTE 69KV	40.39	0.00148	-0.11334	21
WERE	ST JOHN 115KV	7.5	-0.11186	WERE	CITY OF AUGUSTA 69KV	20.02	0.0008	-0.11266	21
WERE	ST JOHN 115KV	7.5	-0.11186	WERE	CITY OF IOLA 69KV	17.08	0.00168	-0.11354	21
WERE	ST JOHN 115KV	7.5	-0.11186	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	20.09	0.00267	-0.11453	21
WERE	ST JOHN 115KV	7.5	-0.11186	WERE	EVANS ENERGY CENTER 138KV	305	0.00042	-0.11228	21
WERE	GREAT BEND PLANT 69KV	10	-0.0975	WERE	LAWRENCE ENERGY CENTER 115KV	60	0.00942	-0.10692	22
WERE	GREAT BEND PLANT 69KV	10	-0.0975	WERE	LAWRENCE ENERGY CENTER 230KV	227.1991	0.00988	-0.10738	22
WERE	GREAT BEND PLANT 69KV	10	-0.0975	WERE	TECUMSEH ENERGY CENTER 115KV	68.00001	0.01063	-0.10813	22
WERE	PAWNEE 115KV	999	-0.11186	WERE	GILL ENERGY CENTER 138KV	155	-0.00239	-0.10947	22
WERE	PAWNEE 115KV	999	-0.11186	WERE	WACO 138KV	18	-0.00211	-0.10975	22
WERE	RICE 115KV	999	-0.11186	WERE	GILL ENERGY CENTER 138KV	155	-0.00239	-0.10947	22
WERE	RICE 115KV	999	-0.11186	WERE	WACO 138KV	18	-0.00211	-0.10975	22
WERE	ST JOHN 115KV	7.5	-0.11186	WERE	CITY OF WELLINGTON 69KV	40.503	-0.00115	-0.11071	22
WERE	ST JOHN 115KV	7.5	-0.11186	WERE	GILL ENERGY CENTER 138KV	155	-0.00239	-0.10947	22
WERE	ST JOHN 115KV	7.5	-0.11186	WERE	WACO 138KV	18	-0.00211	-0.10975	22
WERE	GREAT BEND PLANT 69KV	10	-0.0975	WERE	CHANUTE 69KV	40.39	0.00148	-0.09898	24
WERE	GREAT BEND PLANT 69KV	10	-0.0975	WERE	CITY OF AUGUSTA 69KV	20.02	0.0008	-0.0983	24
WERE	GREAT BEND PLANT 69KV	10	-0.0975	WERE	CITY OF IOLA 69KV	17.08	0.00168	-0.09918	24

Maximum Decrement and Maximum Increment were determined from the Source 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 JUNCTION (SOUTH) - WEST MCPHERSON 115KV CKT 1  
 Direction: From->To  
 Line Outage: EAST MCPHERSON - SUMMIT 230KV CKT 1  
 Flowgate: 57374574381568725687314208WP  
 Date Redispatch Needed: Starting 2008 12/1 - 4/1 Until EOC  
 Season Flowgate Identified: 2008 Winter Peak

Reservation	Relief Amount	Aggregate Relief Amount
1090817	1.6	8.0
1090829	0.9	8.0
1090917	0.6	8.0
1090919	0.2	8.0
1090920	1.2	8.0
1090921	0.3	8.0
1090964	2.1	8.0
1090965	0.6	8.0
1091057	0.6	8.0

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

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.23538	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01314	-0.24852	32
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.23538	WERE	JEFFREY ENERGY CENTER 345KV	940	0.01371	-0.24909	32
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.23538	WERE	LAWRENCE ENERGY CENTER 230KV	193,727	0.00843	-0.24381	33
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.23538	WERE	TECUMSEH ENERGY CENTER 115KV	48	0.00907	-0.24445	33
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.23538	WERE	CHANUTE 69KV	34,903	0.00122	-0.2366	34
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.23538	WERE	CITY OF AUGUSTA 69KV	15,285	0.00056	-0.23594	34
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.23538	WERE	CITY OF IOLA 69KV	19,902	0.00141	-0.23679	34
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.23538	WERE	CITY OF WELLINGTON 69KV	20	-0.0011	-0.23428	34
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.23538	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19,611	0.00217	-0.23755	34
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.23538	WERE	EVANS ENERGY CENTER 138KV	110	0.00022	-0.2356	34
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.23538	WERE	WACO 138KV	17,414	-0.00199	-0.23339	34
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.18638	WERE	JEFFREY ENERGY CENTER 345KV	940	0.01371	-0.20009	40
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.18638	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01314	-0.19952	40
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.18638	WERE	LAWRENCE ENERGY CENTER 230KV	193,727	0.00843	-0.19481	41
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.18638	WERE	TECUMSEH ENERGY CENTER 115KV	48	0.00907	-0.19545	41
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.1862	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01314	-0.19934	40
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.1862	WERE	JEFFREY ENERGY CENTER 345KV	940	0.01371	-0.19991	40
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.1862	WERE	TECUMSEH ENERGY CENTER 230KV	193,727	0.00843	-0.19463	41
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.1862	WERE	TECUMSEH ENERGY CENTER 115KV	48	0.00907	-0.19527	41
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.23538	WERE	KNOLL 3 115 115KV	75	-0.04301	-0.19237	42
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.18638	WERE	CITY OF AUGUSTA 69KV	15,285	0.00056	-0.18694	43
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.18638	WERE	CITY OF WELLINGTON 69KV	20	-0.0011	-0.18528	43
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.18638	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19,611	0.00217	-0.18855	43
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.18638	WERE	EVANS ENERGY CENTER 138KV	110	0.00022	-0.1866	43
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.1862	WERE	CITY OF AUGUSTA 69KV	15,285	0.00056	-0.18676	43
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.1862	WERE	CITY OF WELLINGTON 69KV	20	-0.0011	-0.1851	43
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.1862	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19,611	0.00217	-0.18837	43
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.1862	WERE	EVANS ENERGY CENTER 138KV	110	0.00022	-0.18642	43
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.18638	WERE	WACO 138KV	17,414	-0.00199	-0.18439	43
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.1862	WERE	WACO 138KV	17,414	-0.00199	-0.18421	44
WERE	HUTCHINSON ENERGY CENTER 115KV	383	-0.18638	WERE	KNOLL 3 115 115KV	75	-0.04301	-0.14337	56
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.1862	WERE	KNOLL 3 115 115KV	75	-0.04301	-0.14319	56
WERE	PAWNEE 115KV	999	-0.10026	WERE	JEFFREY ENERGY CENTER 345KV	940	0.01371	-0.11397	70
WERE	RICE 115KV	999	-0.10026	WERE	JEFFREY ENERGY CENTER 345KV	940	0.01371	-0.11397	70
WERE	PAWNEE 115KV	999	-0.10026	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01314	-0.1134	71
WERE	RICE 115KV	999	-0.10026	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01314	-0.1134	71
WERE	PAWNEE 115KV	999	-0.10026	WERE	LAWRENCE ENERGY CENTER 230KV	193,727	0.00843	-0.10869	74
WERE	PAWNEE 115KV	999	-0.10026	WERE	TECUMSEH ENERGY CENTER 115KV	48	0.00907	-0.10933	73
WERE	RICE 115KV	999	-0.10026	WERE	LAWRENCE ENERGY CENTER 230KV	193,727	0.00843	-0.10869	74
WERE	RICE 115KV	999	-0.10026	WERE	TECUMSEH ENERGY CENTER 115KV	48	0.00907	-0.10933	73
WERE	PAWNEE 115KV	999	-0.10026	WERE	EVANS ENERGY CENTER 138KV	110	0.00022	-0.10048	80
WERE	RICE 115KV	999	-0.10026	WERE	EVANS ENERGY CENTER 138KV	110	0.00022	-0.10048	80
WERE	PAWNEE 115KV	999	-0.10026	WERE	KNOLL 3 115 115KV	75	-0.04301	-0.05725	140
WERE	RICE 115KV	999	-0.10026	WERE	KNOLL 3 115 115KV	75	-0.04301	-0.05725	140

Maximum Decrement and Maximum Increment were determined from the Source 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 JUNCTION (SOUTH) - WEST MCPHERSON 115KV CKT 2  
 Direction: From->To  
 Line Outage: EAST MCPHERSON - SUMMIT 230KV CKT 1  
 Flowgate: 57374574382568725687312206WP  
 Date Redispatch Needed: 12/1/06 - 4/1/07  
 Season Flowgate Identified: 2006 Winter Peak

Reservation	Relief Amount	Aggregate Relief Amount
1090964	3.7	4.8
1090965	1.1	4.8

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.27941	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01812	-0.29753	16
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.27941	WERE	JEFFREY ENERGY CENTER 345KV	940	0.01883	-0.29824	16
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.27941	WERE	LAWRENCE ENERGY CENTER 230KV	130,0238	0.01183	-0.29124	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.27941	WERE	CHANUTE 69KV	35,344	0.00165	-0.28106	16
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.27941	WERE	CITY OF AUGUSTA 69KV	17,25201	0.00051	-0.27992	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.27941	WERE	CITY OF IOLA 69KV	13,978	0.00191	-0.28132	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.27941	WERE	CITY OF WELLINGTON 69KV	24	-0.00148	-0.27793	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.27941	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19,977	0.00306	-0.28247	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.27941	WERE	EVANS ENERGY CENTER 138KV	25,88745	0.00037	-0.27978	17
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.27941	WERE	WACO 138KV	17,953	-0.00261	-0.2768	17
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.2263	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01812	-0.24442	19
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.2263	WERE	JEFFREY ENERGY CENTER 345KV	940	0.01883	-0.24513	19
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.2262	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01812	-0.24432	19
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.2262	WERE	JEFFREY ENERGY CENTER 345KV	940	0.01883	-0.24503	19
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.2263	WERE	LAWRENCE ENERGY CENTER 230KV	130,0238	0.01183	-0.23813	20
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.2262	WERE	LAWRENCE ENERGY CENTER 230KV	130,0238	0.01183	-0.23803	20
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.2263	WERE	CHANUTE 69KV	35,344	0.00165	-0.22795	21
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.2263	WERE	CITY OF AUGUSTA 69KV	17,25201	0.00051	-0.22681	21
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.2263	WERE	CITY OF IOLA 69KV	13,978	0.00191	-0.22821	21
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.2263	WERE	CITY OF WELLINGTON 69KV	24	-0.00148	-0.22482	21
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.2263	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19,977	0.00306	-0.22936	21
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.2263	WERE	EVANS ENERGY CENTER 138KV	25,88745	0.00037	-0.22667	21
WERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.2263	WERE	WACO 138KV	17,953	-0.00261	-0.22369	21
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.2262	WERE	CHANUTE 69KV	35,344	0.00165	-0.22785	21
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.2262	WERE	CITY OF AUGUSTA 69KV	17,25201	0.00051	-0.22671	21
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.2262	WERE	CITY OF IOLA 69KV	13,978	0.00191	-0.22811	21
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.2262	WERE	CITY OF WELLINGTON 69KV	24	-0.00148	-0.22472	21
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.2262	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19,977	0.00306	-0.22926	21
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.2262	WERE	EVANS ENERGY CENTER 138KV	25,88745	0.00037	-0.22657	21
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.2262	WERE	WACO 138KV	17,953	-0.00261	-0.22359	21
WERE	PAWNEE 115KV	999	-0.13103	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01812	-0.14915	32
WERE	PAWNEE 115KV	999	-0.13103	WERE	JEFFREY ENERGY CENTER 345KV	940	0.01883	-0.14986	32
WERE	RICE 115KV	999	-0.13103	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01812	-0.14915	32
WERE	RICE 115KV	999	-0.13103	WERE	JEFFREY ENERGY CENTER 345KV	940	0.01883	-0.14986	32
WERE	PAWNEE 115KV	999	-0.13103	WERE	LAWRENCE ENERGY CENTER 230KV	130,0238	0.01183	-0.14286	33
WERE	RICE 115KV	999	-0.13103	WERE	LAWRENCE ENERGY CENTER 230KV	130,0238	0.01183	-0.14286	33
WERE	PAWNEE 115KV	999	-0.13103	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19,977	0.00306	-0.13409	35
WERE	RICE 115KV	999	-0.13103	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19,977	0.00306	-0.13409	35
WERE	PAWNEE 115KV	999	-0.13103	WERE	CITY OF AUGUSTA 69KV	17,25201	0.00051	-0.13154	36
WERE	PAWNEE 115KV	999	-0.13103	WERE	EVANS ENERGY CENTER 138KV	25,88745	0.00037	-0.1314	36
WERE	RICE 115KV	999	-0.13103	WERE	CITY OF AUGUSTA 69KV	17,25201	0.00051	-0.13154	36

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

WERE	'RICE 115KV'	999	-0.13103	WERE	'EVANS ENERGY CENTER 138KV'	25.88745	0.00037	-0.1314	36
WERE	'PAWNEE 115KV'	999	-0.13103	WERE	'CITY OF WELLINGTON 69KV'	24	-0.00148	-0.12955	37
WERE	'PAWNEE 115KV'	999	-0.13103	WERE	'WACO 138KV'	17.953	-0.00261	-0.12842	37
WERE	'RICE 115KV'	999	-0.13103	WERE	'CITY OF WELLINGTON 69KV'	24	-0.00148	-0.12955	37
WERE	'RICE 115KV'	999	-0.13103	WERE	'WACO 138KV'	17.953	-0.00261	-0.12842	37
WEPL	'A. M. MULLERGREEN GENERATOR 115KV'	63	-0.1185	WEPL	'GRAY COUNTY WIND FARM 115KV'	73	-0.07534	-0.04316	110
WERE	'KNOLL 3 115 115KV'	75	-0.02141	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01883	-0.04024	118
WERE	'KNOLL 3 115 115KV'	75	-0.02141	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01812	-0.03953	120
WERE	'KNOLL 3 115 115KV'	75	-0.02141	WERE	'LAWRENCE ENERGY CENTER 230KV'	130.0238	0.01183	-0.03324	143

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 JUNCTION (SOUTH) - WEST MCPHERSON 115KV CKT 2  
 Direction: From->To  
 Line Outage: EAST MCPHERSON - SUMMIT 230KV CKT 1  
 Flowgate: 57374574382568725687312207WP  
 Date Redispatch Needed: 12/1/07 - 4/1/08  
 Season Flowgate Identified: 2007 Winter Peak

Reservation	Relief Amount	Aggregate Relief Amount
1090817	1.3	3.6
1090964	1.7	3.6
1090965	0.5	3.6

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078	WERE	'CLAY CENTER JUNCTION 115KV'	6.7	0.04568	-0.31646	11
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01517	-0.28595	12
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01582	-0.2866	12
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078	WERE	'CHANUTE 69KV'	34.818	0.00141	-0.27219	13
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078	WERE	'CITY OF AUGUSTA 69KV'	14.628	0.00068	-0.27146	13
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078	WERE	'CITY OF BURLINGTON 69KV'	4.8	0.00255	-0.27333	13
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078	WERE	'CITY OF IOLA 69KV'	14.565	0.00161	-0.27239	13
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00124	-0.26954	13
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.95	0.00255	-0.27333	13
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078	WERE	'EVANS ENERGY CENTER 138KV'	55	0.00029	-0.27107	13
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078	WERE	'LAWRENCE ENERGY CENTER 230KV'	169.36	0.00973	-0.28051	13
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078	WERE	'WACO 138KV'	17.93	-0.00225	-0.26853	13
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.21442	WERE	'CLAY CENTER JUNCTION 115KV'	6.7	0.04568	-0.2601	14
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.21432	WERE	'CLAY CENTER JUNCTION 115KV'	6.7	0.04568	-0.26	14
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078	WERE	'COLBY 115KV'	6.247878	-0.04074	-0.23004	15
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.21442	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01517	-0.22959	15
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.21442	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01582	-0.23024	15
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.21432	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01517	-0.22949	15
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.21432	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01582	-0.23014	15
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.21442	WERE	'CHANUTE 69KV'	34.818	0.00141	-0.21583	16
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.21442	WERE	'CITY OF IOLA 69KV'	14.565	0.00161	-0.21603	16
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.21442	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.95	0.00255	-0.21697	16
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.21442	WERE	'LAWRENCE ENERGY CENTER 230KV'	169.36	0.00973	-0.22415	16
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.21432	WERE	'CHANUTE 69KV'	34.818	0.00141	-0.21573	16
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.21432	WERE	'CITY OF IOLA 69KV'	14.565	0.00161	-0.21593	16
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.21432	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.95	0.00255	-0.21687	16
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.21432	WERE	'LAWRENCE ENERGY CENTER 230KV'	169.36	0.00973	-0.22405	16
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.21442	WERE	'CITY OF AUGUSTA 69KV'	14.628	0.00068	-0.2151	17
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.21442	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00124	-0.21318	17
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.21442	WERE	'EVANS ENERGY CENTER 138KV'	55	0.00029	-0.21471	17
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.21442	WERE	'WACO 138KV'	17.93	-0.00225	-0.21217	17
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.21432	WERE	'CITY OF AUGUSTA 69KV'	14.628	0.00068	-0.215	17
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.21432	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00124	-0.21308	17
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.21432	WERE	'EVANS ENERGY CENTER 138KV'	55	0.00029	-0.21461	17
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.21432	WERE	'WACO 138KV'	17.93	-0.00225	-0.21207	17
WERE	'PAWNEE 115KV'	999	-0.11532	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01517	-0.13049	27
WERE	'PAWNEE 115KV'	999	-0.11532	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01582	-0.13114	27
WERE	'RICE 115KV'	999	-0.11532	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01517	-0.13049	27
WERE	'RICE 115KV'	999	-0.11532	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01582	-0.13114	27
WERE	'PAWNEE 115KV'	999	-0.11532	WERE	'LAWRENCE ENERGY CENTER 230KV'	169.36	0.00973	-0.12505	28
WERE	'RICE 115KV'	999	-0.11532	WERE	'LAWRENCE ENERGY CENTER 230KV'	169.36	0.00973	-0.12505	28
WERE	'PAWNEE 115KV'	999	-0.11532	WERE	'CHANUTE 69KV'	34.818	0.00141	-0.11673	30
WERE	'PAWNEE 115KV'	999	-0.11532	WERE	'CITY OF IOLA 69KV'	14.565	0.00161	-0.11693	30
WERE	'PAWNEE 115KV'	999	-0.11532	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.95	0.00255	-0.11787	30
WERE	'RICE 115KV'	999	-0.11532	WERE	'CHANUTE 69KV'	34.818	0.00141	-0.11673	30
WERE	'RICE 115KV'	999	-0.11532	WERE	'CITY OF IOLA 69KV'	14.565	0.00161	-0.11693	30
WERE	'RICE 115KV'	999	-0.11532	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.95	0.00255	-0.11787	30
WERE	'PAWNEE 115KV'	999	-0.11532	WERE	'CITY OF AUGUSTA 69KV'	14.628	0.00068	-0.116	31
WERE	'PAWNEE 115KV'	999	-0.11532	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00124	-0.11408	31
WERE	'PAWNEE 115KV'	999	-0.11532	WERE	'EVANS ENERGY CENTER 138KV'	55	0.00029	-0.11561	31
WERE	'PAWNEE 115KV'	999	-0.11532	WERE	'WACO 138KV'	17.93	-0.00225	-0.11307	31
WERE	'RICE 115KV'	999	-0.11532	WERE	'CITY OF AUGUSTA 69KV'	14.628	0.00068	-0.116	31
WERE	'RICE 115KV'	999	-0.11532	WERE	'CITY OF WELLINGTON 69KV'	20	-0.00124	-0.11408	31
WERE	'RICE 115KV'	999	-0.11532	WERE	'EVANS ENERGY CENTER 138KV'	55	0.00029	-0.11561	31
WERE	'RICE 115KV'	999	-0.11532	WERE	'WACO 138KV'	17.93	-0.00225	-0.11307	31
WERE	'KNOLL 3 115 115KV'	75	-0.04955	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01582	-0.06537	54
WERE	'KNOLL 3 115 115KV'	75	-0.04955	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01517	-0.06472	55
WERE	'KNOLL 3 115 115KV'	75	-0.04955	WERE	'LAWRENCE ENERGY CENTER 230KV'	169.36	0.00973	-0.05928	60
WERE	'KNOLL 3 115 115KV'	75	-0.04955	WERE	'EVANS ENERGY CENTER 138KV'	55	0.00029	-0.04984	71
WEPL	'A. M. MULLERGREEN GENERATOR 115KV'	63	-0.09475	WEPL	'GRAY COUNTY WIND FARM 115KV'	60	-0.06181	-0.03294	108

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: YOAKUM COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1 Displacement  
 Limiting Facility: YOAKUM COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1  
 Direction: To->From  
 Line Outage: MUSTANG STATION 230/115KV TRANSFORMER CKT 1  
 Flowgate: 51890518911519695196611107SP  
 Date Redispatch Needed: 6/1/07 - 10/1/07  
 Season Flowgate Identified: 2007 Summer Peak

Reservation	Relief Amount	Aggregate Relief Amount
1090487	22.8	22.8

Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggregate Redispatch Amount (MW)
---------------------	--------	-----------------------	-----	-------------------	------	-----------------------	-----	--------	----------------------------------

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

SPS	MADDOX 115KV	75	-0.06195	SPS	MUSTG5 118.0 230KV	360	0.15538	-0.21733	105
SPS	CUNNINGHAM 115KV	50.00977	-0.06007	SPS	MUSTG5 118.0 230KV	360	0.15538	-0.21545	106

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



**Table 7** Deferred Expansion Plan Projects

Transmission Owner	Upgrade	Solution	Deferred Group	Assigned Upgrade E & C	Date Upgrade needed per AG study.	Date Upgrade Needed per Expansion Plan	Expansion Plan E & C Cost
OKGE	CONTINENTAL BLACKS - OSAGE 69KV CKT 1 Deferred	Rebuild & Reconductor 0.57 Miles of 477AS33 to 477 ACCC/TW	1	\$ -	6/1/2016	6/1/2016	\$ 200,000
OKGE	Sooner to Rose Hill 345 kV OKGE	New 345 kV line from Sooner to Oklahoma/Kansas	1	\$ 27,500,000	6/1/2016		
WERE	Sooner to Rose Hill 345 kV WERE	New 345 kV line from Oklahoma/Kansas Stateline to Rose Hill	1	\$ 27,500,000	6/1/2016		
Note: Within a deferral group, the expansion plan upgrade(s) that were deferred as a result of a requested upgrade are so noted.							