

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 April 4, 2007)

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1. Executive Summary

Pursuant to Attachment Z of the Southwest Power Pool Open Access Transmission Tariff (OATT), 1747 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 \$68,269,168. Additionally \$200,000 of assigned E & C cost for 3rd party facility upgrades are assignable to the customer. The total upgrade levelized revenue requirement for all transmission requests is \$160,269,654. This is based on full allocation of levelized revenue requirements for upgrades to customers without consideration of base plan funding. The AFS data tables reflect the allocation of upgrade costs to customers both with and without potential base plan funding based on either the requested reservation period or the deferred reservation period without redispatch if

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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, third-party facilities were identified. Total engineering and construction cost estimates for required third-party facility upgrades are \$200,000.

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

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2. Introduction

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

(http://www.spp.org/Objects/FERC_filings.cfm). The hyperlinks under the heading ER05-109 (Attach Z Filing) open Southwest Power Pool's October 29, 2004 filing containing Attachment Z to the SPP OATT and the Commission's January 21, 2005 Order. In compliance with this Order, the 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 2759MW of long-term transmission service has been restudied in this Aggregate Facility Study (AFS) with over \$335 Million in transmission upgrades being proposed. The results of the AFS are detailed in Tables 1 through 6. A highly tangible benefit of studying transmission requests aggregately under the SPP OATT Attachment Z is the sharing of costs among customers using the same facility. The detailed results show individual upgrade costs by study as well as potential base plan allowances as determined by Attachments J and Z. The following link can be used to access the SPP OATT: (http://www.spp.org/Publications/SPP_Tariff.pdf). In order to understand the extent to which base plan upgrades may be applied to both point-to-point and network transmission services, it is necessary to highlight the definition of Designated Resource.

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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:

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

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

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

Transmission Customers paying for a directly assigned network upgrade shall receive credits for new transmission service using the facility as specified in Attachment Z Section VII.

Facilities identified as limiting the requested Transmission Service have been reviewed to determine the required in-service date of each Network Upgrade. The year that each Network Upgrade is required to accommodate a request is determined by interpolating between the applicable model years given the respective loading data. Both previously assigned facilities and the facilities assigned to this request for Transmission Service were evaluated.

In some instances due to lead times for engineering and construction, Network Upgrades may not be available when required to accommodate a request for Transmission Service. When this occurs, the ATC with available Network Upgrades will be less than the capacity requested during either a portion of or all of the requested reservation period. As a result, the lowest seasonal allocated ATC within the requested reservation period will be offered to the Transmission Customer on an applicable annual basis as listed in Table 1. The ATC may be limited by transmission owner planned projects, expansion plan projects, or customer assigned upgrades.

Some constraints identified in the AFS were not assigned to the Customer as the Transmission Provider determined that upgrades are not required due to various reasons or the Transmission Owner has construction plans pending for these upgrades. These facilities are listed by reservation in Table 3. This table also includes constrained

facilities in the current planning horizon that limit the rollover rights of the Transmission Customer. Table 6 lists possible redispatch pairs to allow start of service prior to completion of assigned network upgrades.

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,

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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 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 unless noted 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. The difference in present worth between the Base Plan and Requested Upgrades is assigned to the transmission requests impacting this upgrade.

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

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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 3rd party facilities for load that sinks outside the SPP footprint with the applicable Transmission Providers.

3. Study Methodology

A. Description

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

SPP AGGREGATE FACILITY STUDY (SPP-2006-AG2-AFS-4) January 29, 2007 (Revised April 4, 2007) Page 10 of 70 110% and 90%. The SPS Tuco 230 kV bus voltage is monitored at 92.5% due to predetermined system stability limitations.

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

A 3 % transfer distribution factor (TDF) cutoff was applied to all SPP control area facilities. For first tier Non – SPP control area facilities, a 3 % TDF cutoff was applied to AECI, AMRN, and ENTR and a 2 % TDF cutoff was applied to MEC, NPPD, and OPPD. For voltage monitoring, a 0.02 per unit change in voltage must occur due to the transfer or modeling upgrades to be considered a valid limit to the transfer.

B. Model Development

SPP used fifteen seasonal models to study the aggregate transfers of 2759 MW over a variety of requested service periods. The SPP MDWG 2006 Series Cases Update 1 2006 Summer Peak (06SP), 2006 Summer Shoulder (06SH), 2006 Fall Peak (06FA), 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.

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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 2759 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 importing from an outside zone and importing 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. 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

SPP AGGREGATE FACILITY STUDY (SPP-2006-AG2-AFS-4) January 29, 2007 (Revised April 4, 2007) Page 12 of 70 overloads caused or impacted by the transfer. Transfer distribution factor cutoffs (SPP and 1st-Tier) and voltage threshold (0.02 change below 0.90 pu) were applied to determine the impacted facilities. The PSS/E options chosen to conduct the analysis can be found in Appendix A.

D. 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 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.

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

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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 with a greater than 3% TDF were determined from the incremental units with the lowest generation shift factors and decremental units with highest generation shift factors. The potential relief pairs **were not** evaluated to determine impacts on limiting facilities in the SPP and 1st-Tier systems. The redispatch requirements would be called upon prior to implementing NERC TLR Level 5a.

4. Study Results

A. Study Analysis Results

Tables 1 through 6 contain the steady-state analysis results of the ASIS. 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

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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.

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. The lesser of the planned maximum net dependable capacity or the requested capacity is multiplied by \$180,000 to determine potential base plan funding allowable. If this additional capacity exceeds the 125% resource to load criteria for a given year, the value of capacity not exceeding 125% of load will set the determinant for base plan funding consideration. For example, a customer submits a request to add a new resource of 50MW in 2010 that meets all other conditions for base plan funding. The Customer's load forecast for 2010 is 500MW with forecasted firm resources of 600MW. The additional 50MW of resources increases the resource to load ratio from 120% to 130%. Therefore the E & C cost for that portion of the 50MW request not exceeding 125% resource to load, or 25MW, would be compared to the E & C cost for the full 50MW to determine a prorata share of the cost that can be covered by base plan funding. Any allocated customer costs in excess of base plan funding will be assigned to the customer.

SPP AGGREGATE FACILITY STUDY (SPP-2006-AG2-AFS-4) January 29, 2007 (Revised April 4, 2007) Page 15 of 70 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

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paid back to the Transmission Owners and the remaining revenue requirements of (140-128) or 12 million will be paid by base plan funding.

Example C:

E & C allocated for upgrades is 25 million with revenue requirements of 50 million and PTP base rate of 101 million. Potential base plan funding is 10 million. Base plan funding is not applicable as the higher "OR" pricing of PTP base rate of 101 million must be paid and the 50 million revenue requirements will be paid from this.

The 125% resource to load determination is performed on a per request basis and is not based on a total of designated resource requests per Customer. A footnote will provide the maximum resource designation allowable for base plan funding consideration per Customer basis per year.

Base plan funding verification requires that each Transmission Customer with potential for base plan funding provide SPP power supply contracts or agreements verifying that the firm capacity of the requested designated resource is committed for a minimum five year duration.

B. Study Definitions

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

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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, October 4th, 2006. 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 October 19th, 2006, 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 \underline{X} Phase shift adjustment
 - _ Flat start
 - _Lock DC taps
 - _ Lock switched shunts

ACCC CASES:

Solutions – AC contingency checking (ACCC)

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

Newton Solution:

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

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

					Permented	Permented	Domunated	Deferred Start Date without interim	Deferred Stop Date without interim	Start Date with interim	Stop Date with interim	7	Mimimum Allocated ATC (MW) within reservation	Season of Minimum Allocated ATC within
Customer	Study Number	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	redispatch	redispatch	redispatch	redispatch	Note	(MW) within reservation period	reservation period
AEPM	AG2-2006-033	1235046	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
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	AG2-2006-097	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
OGE	AG2-2006-035	1087908	OKGE	EES	10	12/1/2006	12/1/2011	11/1/2007	11/1/2012			1,2	0	0
SPSM	AG2-2006-074	1090699	WPEK	KCPL	50	10/1/06	1/1/12	10/1/2007	10/1/2013				0	07SP
SPSM	AG2-2006-124	1090705	WPEK	KCPL	50	10/1/06	1/1/12	10/1/2007	10/1/2013				0	07SP
UCU	AG2-2006-006	1104638	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
					1747									
Note 1 : Disre Fall Peak	gard Redispatch she	own in Table 6 for	limitatio	ons identifie	d earlier than th	e start date with	n redispatch with	the exception of I	imitations identifie	d in the 2006 Fall	Peak, 2007 Spring	Peak,	, 2007 April Minimum, 2007 S	ummer Shoulder, and 2007
	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 p	revious transmissior	requests with a s	source o	f latan II w	ere re-evaluated	in this AFS due	e to determining	an overall solution	for the requested	service.	,		,	

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

Customer	Study Number	Reservation	⁷ Engineering and Construction Cost of Upgrades Allocated to Customer for Revenue Requirements	¹ Le	etter of Credit Amount Required	Pl ar	Potential Base an Engineering nd Construction nding Allowable	NOTE	Additional Engineering and Construction Cost for 3rd Party Upgrades	Re Ass res pot	Total Revenue equirements for signed Upgrades over term of ervation without tential base plan nding allocation	R As r pc	⁹ Total Revenue Requirements for ssigned Upgrades over term of eservation WITH otential base plan unding allocation	Ba	oint-to-Point se Rate over rvation period	R As con base	
AEPM	AG2-2006-033	1235046	-	\$	-	\$	-			\$	-	\$	-	\$	-		9 Charges
AEPM	AG2-2006-034	1087757	¥ -))	•	-	\$	3,000,000			\$	8,631,816		-	\$	-	Sch	9 Charges
EDE	AG2-2005-064	973355		\$	-	\$	3,502,843	8, 6		\$	15,077,273		3,920,092	\$	-	\$	3,920,092
GSEC	AG2-2006-054	1090270	¥ -)	\$	- /	\$	-	10	\$ 200,000	\$	264,077	\$	264,077	\$	-	\$	464,077
INDP	AG1-2006-051	1033791		\$	938,195	\$	-	6		\$	3,340,156		3,340,156	\$	15,840,000	\$	15,840,000
	GEN-2004-008	1115127	-	\$	-	\$	-	6		\$	-	\$	-	\$	-		9 Charges
KCPS	AG1-2006-009	1179751	\$ 4,161,805	\$	3,461,805	\$	4,161,805	6		\$	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	\$-	\$	-									\$	-	Sch	9 Charges
MIDW	AG2-2006-097	1090917	\$-	\$	-	\$	-							\$	-	Sch	9 Charges
MIDW	AG2-2006-097	1090919	\$-	\$	-	\$	-							\$	-	Sch	9 Charges
MIDW	AG2-2006-097	1090920	\$-	\$	-	\$	-							\$	-	Sch	9 Charges
MIDW	AG2-2006-097	1090921	\$-	\$	-	\$	-							\$	-	Sch	9 Charges
MIDW	AG2-2006-106	1090964	\$-	\$	-									\$	-	Sch	9 Charges
MIDW	AG2-2006-106	1090965	\$-	\$	-									\$	-	Sch	9 Charges
OGE	AG2-2006-035	1087908	\$-	\$	-	\$	-			\$	-	\$	-	\$	540,000	\$	540,000
SPSM	AG2-2006-074	1090699	\$ 75,000	\$	75,000	\$	-			\$	382,661	\$	382,661	\$	2,772,000	\$	2,772,000
SPSM	AG2-2006-124	1090705	\$ 75,000	\$	75,000	\$	-			\$	382,661	\$	382,661	\$	2,772,000	\$	2,772,000
UCU	AG2-2006-006	1104638	\$-	\$	-	\$	-	5		\$	-	\$	-			Sch	9 Charges
WRGS	AG2-2006-016	1076158	\$-	\$	-	\$	-			\$	-	\$	-	\$	1,080,000	\$	1,080,000
WRGS	AG2-2006-030	1086655	\$ 54,896,021	\$	27,380,487	\$	54,896,021			\$	121,313,926	\$	-	\$	-	Sch	9 Charges
Totals			\$ 67,966,683			\$	65,577,759		\$ 200,000	\$	160,018,780	\$	8,289,647				

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 II 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: UCU has a maximum of 161MW of resources in 2010 allowable for base funding for year 2010. This is a Network resource on UCU OASIS.

Note 6: All previous transmission requests with a source of latan II were re-evaluated in this AFS due to attempting to determin an overall solution for the requested service.

Note 7: 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 8: 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.

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

Note 9: 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 10: \$200,000 to install Capacitor at GSEC bus and \$70,000 SPS cost for line tap which require revenue requirements is not a new DR to serve new delivery point.											

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Customer AEPM Study Number AG2-2006-033

								Deferred Stop	Potential Base			
				Requested	Requested	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation			Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
AEPM	1235046	EES	CSWS	225	1/1/2007	1/1/2010	6/1/2008	6/1/2011	\$-	\$	- \$	\$

Reservation	Upgrade Name	COD				Allocated E & C Cost		Total Revenue Requirements
1087745		COD	EUC	Dale	Available	\$ -	\$ -	\$ -
					Total	\$-	ş -	\$-

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

				Earliest	
				Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	Available
1087745	ALUMAX 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 AEPM Study Number AG2-2006-034

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

Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date		Alloca Cost	ited E & C	Total E &		Total R Require	evenue ements
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	S	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.

				Earliest	
				Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	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		
	ALUMAX 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.

				Earliest	
				Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	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		
	BEELINE - 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		

Customer Study Number GSEC

AG2-2006-054

				Requested	Requeste		Requested Stop	Date Without	Date Without	Potential Base Plan Funding	Point-to-Point		d E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date		Date	Redispatch	Redispatch	Allowable	Base Rate	Cost		Requirements
GSEC	1090270	CSWS	CSWS		10 10/1	2006	10/1/2036	7/1/2009	7/1/2039	\$ -	\$ -	\$	270,000	\$ 264,0
										\$ -	\$ -	\$	270,000	\$ 264,0

				Earliest Service Start	Redispatch	Allocate	ed E & C		Total Revenue
Reservation	Upgrade Name	COD	EOC	Date	Available	Cost		Total E & C Cost	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	\$-
					Total	\$	270,000	\$ 270,000	\$ 264,077

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

				Earliest	
				Service Start	Redispatch
		COD	EOC	Date	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.

			Earliest	
			Service Start	Redispatch
Upgrade Name	COD	EOC	Date	Available
ARCADIA - REDBUD 345 KV CKT 1	6/1/2006	6/1/2006		
ARCADIA - REDBUD 345 KV CKT 2	6/1/2006	6/1/2006		
BEELINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009		
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		
	Upgrade Name ARCADIA - REDBUD 345 KV CKT 1 ARCADIA - REDBUD 345 KV CKT 2 BEELINE - EXPLORER GLENPOOL 138KV CKT 1 EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	ARČADIA - REDBUD 345 KV CKT 1 6/1/2006 ARCADIA - REDBUD 345 KV CKT 2 6/1/2006 BEELINE - EXPLORER GLENPOOL 138KV CKT 1 6/1/2009 EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW 6/1/2009	Upgrade Name COD EOC ARCADIA - REDBUD 345 KV CKT 1 6/1/2006 6/1/2006 ARCADIA - REDBUD 345 KV CKT 2 6/1/2006 6/1/2006 BEELINE - EXPLORER GLENPOOL. 6/1/2009 6/1/2009 EVPLORER GLENPOOL. RIVCKT 1 6/1/2009 EVPLORER GLENPOOL. RIVCKT 1 6/1/2009 6/1/2009 6/1/2009 6/1/2009	Upgrade Name COD EOC Date ARCADIA - REDBUD 345 KV CKT 1 6/1/2006 6/1/2006 6/1/2006 ARCADIA - REDBUD 345 KV CKT 2 6/1/2008 6/1/2006 6/1/2006 BEELINE - EXPLORER GLENPOOL 138KV CKT 1 6/1/2009 6/1/2009 6/1/2009 EVPLORER GLENPOOL - TURERSIDE STATION 138KV CKT 1 AEPW 6/1/2009 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.

				Earliest	
				Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	Available
109027	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

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Customer KEPC Study Number AG2-2006-067

				R	lequested	Requested	Requested Stop	Deferred Start Date Without	Deferred Stop Date Without	Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation		POR					Redispatch		Allowable	Base Rate	Cost	Requirements
KEPC		1090416	KCPL	WR	30	6/1/2010	6/1/2030			\$ 17,09	- \$	\$ 17,090	\$ 59,915

				Earliest Service Start	Redispatch	Allocated E	& C		Total Revenue
Reservation	Upgrade Name	COD	EOC	Date	Available	Cost		Total E & C Cost	Requirements
1090416	COFFEYVILLE TAP - DEARING 138KV CKT 1 AEPW Displacement	6/1/2011	6/1/2011			\$ 5	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 (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3 Displacement	6/1/2011	6/1/2011			\$	-	\$ 5,000,000	\$ -
					Total	\$ 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.

				Earliest	
				Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	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 (CRESWL1X) 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.

				Earliest	
				Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	Available
1090416	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		

Customer Study Number MIDW AG2-2006-097

							Deferred Start	Deferred Stop	Potential Base			Т
				Requested	Requested	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Tota
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requ
MIDW	1090917	WR	WR	20	6/1/2008	6/1/2038	7/1/2009	7/1/2039	\$	- \$ -		
MIDW	1090919	WR	WR	5	6/1/2008			7/1/2039	\$	\$-		
MIDW	1090920	WR	WR	40	6/1/2008	6/1/2038	7/1/2009	7/1/2039	\$	\$-		
MIDW	1090921	WR	WR	10	6/1/2008	6/1/2038	7/1/2009	7/1/2039	\$	\$ -		
									\$	\$ -	\$ -	\$

Total Revenue Requirements

Posonyation	Upgrade Name	COD				Allocated E & C Cost		Total Revenue Requirements
		COD	EUC	Date	Available	COSI	TOTALE & C COST	Requirements
1090917								
					Total			
1090919								
					Total			
1090920								
					Total			
1090921								
					Total			

servation	Upgrade Name	COD	FOC	Earliest Service Start Date	Redispatch Available
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1	6/1/2014		Date	Available
1000011	HUNTSVILLE - ST JOHN 115KV CKT 1	6/1/2014			
	Mooreland - Potter 345 kV SPS	6/1/2015			
	Mooreland - Potter 345 kV WFEC	6/1/2015			
	Mooreland 345/138 kV Transformer	6/1/2015			
	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2	6/1/2015			
	Spearville - Mooreland 345 kV SUNC	6/1/2015			
	Spearville - Mooreland 345 kV WFEC	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			
	HUNTSVILLE - ST JOHN 115KV CKT 1	6/1/2014	6/1/2014		
	Mooreland - Potter 345 kV SPS	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			
	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.

				Earliest Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC		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

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Customer Study Number

IVILDVV	AG2-2006-106

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
MIDW	1090964	WR	WR	35	1/1/2007	1/1/2012	6/1/2010	6/1/2015				
MIDW	1090965	WR	WR	10	1/1/2007	1/1/2012	6/1/2010	6/1/2015				
							•	•				

				Earliest			1	1
				Service Start	Redispatch	Allocated E & C	1	Total Revenue
Reservation	Upgrade Name	COD	EOC	Date	Available	Cost	Total E & C Cost	Requirements
1090964								
1090965							1	
		Total	\$-	\$-	\$-			

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

				Earliest Service Start	Dedianatah
Reservation	Upgrade Name	COD	EOC		Redispatch Available
	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	
	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	
	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	1	

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

					Earliest	
					Service Start	Redispatch
	Reservation	Upgrade Name	COD	EOC	Date	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.

				Earliest	
				Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	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

Customer Study Number

IVILDVV	AG2-2006-107	

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

Reservation	Upgrade Name	COD		Allocated E & C Cost	Total Revenue Requirements
1090817					

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

				Earliest	
				Service Start	Redispatch
		COD	EOC		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.

				Earliest	1	
				Service Start	Redispatch	
Reservation	Upgrade Name	COD	EOC	Date	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.

				Earliest Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	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

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Customer Study Number

OGE AG2-2006-035

							Deferred Start		Potential Base			
				Requested	Requested	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
OGE	1087908	OKGE	EES	10	12/1/2006	12/1/2011	11/1/2007	11/1/2012	\$ -	\$ 540,000	\$ -	\$
									\$	- \$ 540,000	\$ -	\$
				Earliest								
				Service Start	Redispatch	Allocated E & C		Total Revenue				
Reservation	Upgrade Name	COD	EOC	Date	Available	Cost	Total E & C Cost	Requirements				
1087908	No					¢	¢	¢				

Total

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

				Earliest	
				Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	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.

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

Study Number Customer

SPSM AG2-2006-074

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	t Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
SPSM	1090699	WPEK	KCPL	50	10/1/06	1/1/12	10/1/2007	1/1/2013	\$-	\$ 2,772,	00 \$ 75,00	\$ 382,662
	•								\$ -	\$ 2,772,	00 \$ 75,00	\$ 382,662

				Earliest					
				Service Start	Redispatch	Allocated	E&C		Total Revenue
Reservation	Upgrade Name	COD	EOC	Date	Available	Cost		Total E & C Cost	Requirements
1090699	MEDICINE LODGE - SUN CITY 115KV CKT 1	6/1/2007	1/1/2008	10/1/2007		\$	75,000	\$ 150,000	
	COLLEGE - CRAIG 161KV CKT 1 EXPEDITE	6/1/2011	6/1/2011			\$	-	\$ 700,000	\$ 258,604
					Total	\$	75,000	\$ 850,000	\$ 382,662

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

				Earliest	
				Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	Available
109069	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 aggreg	ate study.			
				Earliest Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	Available
10906	9 LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		

Study Number AG2-2006-124 Customer

SPSM

				Requested		Requested Stop	Date Without	Date Without	Potential Base Plan Funding		Allocated E & C	Total Revenue
	Reservation		POD	Amount	Start Date	Date			Allowable	Base Rate	Cost	Requirements
PSM	1090705	WPEK	KCPL	50	10/1/06	1/1/12	10/1/2007	1/1/2013	\$-	\$ 2,772,000	\$ 75,000	\$ 382,66
				•				•	\$-	\$ 2,772,000	\$ 75,000	\$ 382,66
Reservation	Upgrade Name	COD	EOC	Earliest Service Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements				
1090705	MEDICINE LODGE - SUN CITY 115KV CKT 1	6/1/2007	1/1/2008	10/1/2007		\$ 75,000	\$ 150,000	\$ 124,058	1			
	COLLEGE - CRAIG 161KV CKT 1 EXPEDITE	6/1/2011	6/1/2011			\$-	\$ 700,000	\$ 258,604				
					Total	\$ 75,000	\$ 850,000	\$ 382,662				
xpansion Plan	n - The requested service is contingent upon completion of the following upgrades. Cost is no	t assignable to the transmis	sion customer					•				
				Earliest								

				Earliest	
				Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	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		
		1/1/2001	10/1/2001		

Credits may be	required for the following network upgrades directly assigned to transmission customers in previous aggreg	ate study.			
				Earliest Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	Available
1090705	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		

Customer Study Number UCU AG2-2006-006

Customer			POD		Start Date	Requested Stop Date	Date Without Redispatch	Date Without		 Allocated E & C Cost	Total Revenue Requirements
UCU	1104638	KCPL	MPS	160	6/1/2010	6/1/2030)		\$-		\$ -
									\$ -	\$ -	\$ -
					Redispatch	Allocated E & C		Total Revenue			
		COD	EOC	Date	Available	Cost	Total E & C Cost	Requirements			
1052923	None					\$-	\$ -	\$ -]		

Total

\$

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

				Earliest Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	Available
1052923	MARTIN CITY - TURNER ROAD SUBSTATION 161KV CKT 1	12/1/2006	10/1/2008	4/1/2007	No
	Stranger - Thorton 115 kV	6/1/2010	6/1/2010		
	STRANGER CREEK TRANSFORMER CKT 2	6/1/2011	6/1/2011		

Construction P	Construction Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.									
				Earliest						
				Service Start	Redispatch					
Reservation	Upgrade Name	COD	EOC	Date	Available					
1052923	IATAN - ST JOE 345KV CKT 1	6/1/2011	6/1/2011							

Customer Study Number

WRG5	AG2-2006-016

								Deferred Stop	Potential Base			
		1		Requested	Requested	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
WRGS	1076158	KCPL	AMRN	20	0 6/1/2010	6/1/2015			\$-	\$ 1,080,000	\$ -	\$ -

Reservation	Uoorade Name	COD	EOC		Allocated E & C Cost		Total Revenue Requirements
1076158	None				\$ -	\$-	\$ -
	·			Total	s -	s -	\$ -

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

				Earliest	
				Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	Available
1076158	Stranger - Thorton 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.

				Earliest		
				Service Start	Redispatch	
Reservation	Upgrade Name	COD	EOC	Date	Available	
1076158	IATAN - ST JOE 345KV CKT 1	6/1/2011	6/1/2011			

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Customer Study Number

WRGS	AG2-2000-030

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
WRGS	1086655	OKGE	WR	22	5 10/1/2006	6 10/1/2026	7/1/2009	7/1/2029	\$ 54,896,021	\$ -	\$ 54,896,021	\$ 121,313,926

				Earliest Service Start	Redispatch	Allo	cated E & C			Tota	I Revenue
	Upgrade Name	COD	EOC	Date	Available	Cos	t	Tota	I E & C Cost	Req	uirements
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 (ROSEHL1X) 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
					Total	\$	54,896,021	\$	63,500,000	\$	121,313,926

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

				Earliest	
				Service Start	Redispatch
		COD	EOC	Date	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.

				Earliest	
				Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	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.

				Earliest	
				Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	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

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Customer Study Number

EDE	AG2-2005-064

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer		POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
EDE	973355	KCPL	EDE	10	0 1/1/2010	1/1/2030			\$ 3,502,843	\$-	\$ 4,733,572	\$ 15,077,273
,									\$ 3,502,843	\$ -	\$ 4,733,572	\$ 15,077,273

				Earliest					
				Service Start	Redispatch	Allocat	ed E & C		Total Revenue
Reservation	Upgrade Name	COD	EOC	Date	Available	Cost		Total E & C Cost	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.

				Earliest	
				Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	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

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
INDP	1033791	KCPL	INDN	5	6/1/2010	6/1/2040			\$	\$ 15,840,000	\$ 938,195	\$ 3,340,156
										\$ 15,840,000	\$ 938,195	\$ 3,340,156

				Earliest Service Start	Redispatch	Allocat	ed E & C		Total	Revenue
Reservation	Upgrade Name	COD	EOC	Date	Available	Cost		Total E & C Cost	Requi	irements
	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.

					Earliest	
					Service Start	Redispatch
Reser	vation	Upgrade Name	COD	EOC	Date	Available
	1033791	Stranger - Thorton 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.

				Earliest	1
				Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	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 - Thorton 115 kV replaces 2006-AG1-AFS-4 assignment of STRANGER CREEK - NW LEAVENWORTH 115KV

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Customer Study Number

KCPS	AG1-2006-009

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
		FUR	100	Amount	otart Date	Date	reuispaten	Reuispaten	Allowable	Dage Mate	0031	
KCPS	1179751	KCPL	KCPL	168			reuispaten	Redispatch	\$ 4,161,805		\$ 4,161,805	

				Earliest Service Start	Redispatch	Alloca	ited E & C			Total	Revenue
Reservation	Upgrade Name	COD	EOC	Date	Available	Cost		Total E &	C Cost	Requ	irements
1179751	166TH STREET - JAGGARD JUNCTION 115KV CKT 1	6/1/2009	6/1/2009			\$	786,774	\$ 1	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	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	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.

				Earliest		
				Service Start	Redispatch	
Reservation	Upgrade Name	COD	EOC	Date	Available	
1179751	Stranger - Thorton 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.

				Earliest	
				Service Start	Redispatch
Reservation	Upgrade Name	COD	EOC	Date	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 - Thorton 115 kV replaces 2006-AG1-AFS-4 assignment of STRANGER CREEK - NW LEAVENWORTH 115kV

Customer Study Number KCPS GEN-2004-008

				Requested	Requested	Requested Stop			Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	OR	POD	Amount	Start Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KCPS	1115127 K	CPL	KCPL	332	6/1/2009	6/1/2029			\$-	\$-	\$ -	\$-
									\$-	\$-	\$ -	\$ -
				Corligot								

				Earliest				1
				Service Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	COD	EOC	Date	Available	Cost	Total E & C Cost	Requirements
111512	None							
					Total	\$ -	\$ -	\$ -

				Estimated Date	
- · ·					Estimated
Transmission		0.1.4			Engineering &
Owner AFPW	Upgrade COFFEYVILLE TAP - DEARING 138KV CKT 1 AEPW Displacement	Solution Rebuild 1.09 miles of line using 1590 ACSR	(COD) 6/1/2011	(EOC) 6/1/2011	Construction Cost \$500.000.00
AEPW	COFFEYVILLE TAP - DEARING 138KV CKT 1 AEPW Displacement		6/1/2011	6/1/2011	\$500,000.00
		Using IEEE Guide for Loading of Mineral-Oil Immersed Power Transformers (C57.91-2000) Re-rate			
AEPW	SOUTHWEST SHREVEPORT (SW SHV 1) 345/138/13.8KV TRANSFORMER CKT 1	the autos. Replace .two 138 kV breakers and five 138 kV switches. Reset relays and CTs	6/1/2010	6/1/2010	\$1,500,000.00
		Using IEEE Guide for Loading of Mineral-Oil Immersed Power Transformers (C57.91-2000) Re-rate			
AEPW	SOUTHWEST SHREVEPORT (SW SHV 2) 345/138/13.8KV TRANSFORMER CKT 2	the autos. Replace .two 138 kV breakers and five 138 kV switches. Reset relays and CTs	6/1/2010	6/1/2010	\$1,500,000.00
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
ENIDE	308 110 - OKONOGO JCT 308 107 - KIVEKTON 181KV CKT T	Reconductor Oronogo 59467 to Rivenon 59469 with Bundled 556 ACSR	0/1/2011	0/1/2011	\$ 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
GSEC	GSEC Midway Interconnection #2	Install 7.2 MVAR Capacitor at GSEC Midway 69 kV	6/1/2011	6/1/2011	\$200,000.00
KACP	COLLEGE - CRAIG 161KV CKT 1	Reconductor 4 miles with 1192.5 ACSS, 558 normal/emergency rating and upgrade breaker.	6/1/2016	6/1/2016	\$700,000.00
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	\$70,000.00
WEPL	MEDICINE LODGE - SUN CITY 115KV CKT 1	Replace relaying from Sun City to Medicine Lodge	6/1/2007	1/1/2008	\$150,000.00
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	\$1,000,000.00
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	\$1,900,000.00
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	\$3,000,000.00
WERE	JAGGARD JUNCTION - PENTAGON 115KV CKT 1	Tear down and rebuild Jaggard - Pentagon 115 kV line.	6/1/2009	6/1/2009	\$1,500,000.00
WERE	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3 Displacement	Add third 345-138 kV transformer at Rose Hill	40695	40695	\$ 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
					\$79,420,000.00
Construction F	Pending Projects - The requested service is contingent upon completion of the following upgrades. C	ost is not assignable to the transmission customer.			
				Estimated Date	
				of Upgrade	
Transmission				Completion	
Owner	Upgrade	Solution		(EOC)	
	HEIZER TO KNOLL 230KV	Convert Knoll to Heizer 115 kV line to 230kV (already constructed for 230kV).	6/1/2007		
	IATAN5 161 - PLATTE CITY 161KV CKT 1	Terminal Equipment	6/1/2011	6/1/2011	
	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	
1		Install new 50.55-mile 345 kV line from Reno county to Summit; 31 miles of 115 kV line between			
1		Circle and S Philips would be rebuilt as double circuit with the 345 kV line to minimize ROW impacts;			
	RENO - SUMMIT 345KV	Substation work required at Summit for new 345 kV terminal	1/1/2011	1/1/2011	
	WICHITA - RENO 345KV	Build 345kV from Wichita to Reno Co	12/1/2006		
WFEC	HAMON BUTLER - MOREWOOD 69KV CKT 1	Reconductor 1/0 to 336 ACSR - 15.0 miles	12/1/2006	4/1/2008	

Evenencian Di					
Expansion Pla	an Projects - The requested service is contingent upon completion of the following upgrades. Cost is	not assignable to the transmission customer.			
			Earliest Data	Estimated Date	
Transmission			Upgrade Required	of Upgrade Completion	
Owner	Upgrade	Solution	(COD)	(EOC)	
		Rebuild 1.68 miles of 1024 ACAR with 2156 ACSR, Replace wavetrap & jumpers with 2156 ACSR.			
AEPW	ALUMAX TAP - NORTHWEST TEXARKANA 138KV CKT 1	Replace Switch 2285 @ Alumax Tap.	6/1/2008	6/1/2008	
		Reconductor 666 ACSR (11.6 mies)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			
AEPW	CHAMBER SPRINGS - TONTITOWN 161KV CKT 1	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		
AEPW	LINWOOD - MCWILLIE STREET 138KV CKT 1	Rebuild 2.09 miles of 666 ACSR with 1272 ACSR	6/1/2007		
AEPW AEPW	Siloam Springs - South Fayetteville 161 kV THOMAS TAP - WEATHERFORD 69KV CKT 1	Convert Existing 69 kV Line to 161 kV Operation	6/1/2015		
AEPW	WEATHERFORD SOUTHEAST (WTH_SE) 138/69/13.8KV TRANSFORMER CKT 1	Rebuild 0.9 miles of 4/0 ACSR with 795 ACSR. Replace Weatherford wavetrap. Install new 90 MVA Auto	6/1/2014		
AEPW/WFEC	SNYDER AEPW- SNYDER WFEC INTERCONNECTION	New Tie line between AEPW's Snyder and WFEC's Snyder	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	
		Reconductor 1.6 miles of 69kV Joplin sub 59 to GAT sub 258 with same conductor as 69kV Joplin			
EMDE	Line - SUB 59 - JOPLIN 26TH ST SUB 258 - GATEWAY SOUTH XFR - JOPLIN 59 161 kV - SUB 59 - JOPLIN 26TH ST. 69kV	sub 64 to Joplin sub 145 Install 3-wind transformer from 161 kV Joplin 59 bus to Sub #59 Joplin 26th St.	6/1/2016		
KACP	AVONDALE - GLADSTONE 161KV CKT 1	Replace 800 amp wavetrap at Gladstone with 1200 amp wavetrap	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. Replace Wavetrap at Martin City	6/1/2014 12/1/2006	6/1/2014	
MIPU OKGE	MARTIN CITY - TURNER ROAD SUBSTATION 161KV CKT 1 5 TRIBES - HANCOCK 161KV CKT 1	Replace wavetrap at Martin City Replace 800A Wave Trap, increase Relay CTR to 1200-5A.	6/1/2006		
OKGE	5 TRIBES - PECAN CREEK 161KV CKT 1	replace 636AS33 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 OKGE	CONTINENTAL BLACKS - OSAGE 69KV CKT 1 PECAN CREEK (PECANCK1) 345/161/13.8KV TRANSFORMER CKT 2	Rebuild & Reconductor 0.57 Miles of 477AS33 to 477 ACCC/TW Add a 345/161 kV 369MVA transformer	6/1/2016 6/1/2014	6/1/2016 6/1/2014	
SPS	BC-EARTH INTERCHANGE 115KV	Install 1 - 14.4 MVar capacitor bank	6/1/2014	6/1/2014	
SPS	CURRY COUNTY INTERCHANGE - ROOSEVELT COUNTY INTERCHANGE 115KV CKT 2	Upgrade Roosevelt to Curry 115 kV circuit w/795 ACSR	6/1/2013		
		New 230/115 kV Hart Intg with 115 kV 397 ACSR ckt to Kress Int, 3-brkr 230 kV ring, 150 MVA auto	-		
SPS	Hart Interchange 230/115 kV	115 kV terminal	6/1/2011	6/1/2011	
SPS SPS	Hitchland 345 and 115 kV Interchange KRESS INTERCHANGE 115/69KV TRANSFORMERS	Three breaker 345 kV bus, 345/115 kV transformer, five 115 kV breakers. Upgrade both existing transformer	6/1/2010 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		
SPS	MUSTANG STATION 230/115KV TRANSFORMER CKT 1	Install 252 MVA Transformer	4/1/2007		
SPS	Potter - Roosevelt 345KV	New 345 kV circuit from Potter - Roosevelt 2-795 ACSR & 345/230 kV 560 MVA transformer	6/1/2013		
SPS SPS	POTTER COUNTY INTERCHANGE (POTTR CO) 345/230/13.2KV TRANSFORMER CKT 2 Pringle - Etter 115 kV	New 345/230 kV 560 MVA transformer Build New 115 kV line from Pringle to Etter	6/1/2015 6/1/2010	6/1/2015 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		
SPS SPS	Stateline Project	Tap Elk City - Grapevine. New line from Stateline Tap to Graves Co. New 115/69xfmr at Graves Co.	6/1/2014		
SPS	Tex-Hitchland-Sherman Tap 115 kV ckt TUCO INTERCHANGE 115/69KV TRANSFORMER	Route Sherman Tap to Texas Co in/out of New Hitchland Interchange Move Load to 115 kV at TUCO	6/1/2010 6/1/2008		
SPS	TUCO INTERCHANGE 345/115KV TRANSFORMER CKT 1	Install 345/115 kV Transformer at Tuco	6/1/2000		
SUNC	Spearville - Mooreland 345 kV SUNC	New 345 kV line from Spearville to Kansas/Oklahoma Stateline	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		
WEPL	GREENSBURG - JUDSON LARGE 115KV CKT 1	Replace relaying	4/1/2007 6/1/2007		
WERE	CHAPMAN - CLAY CENTER JUNCTION 115KV CKT 1 CIRCLEVILLE - HOYT HTI SWITCHING JUNCTION 115KV CKT 1	Reset terminal equipment Rebuild 16.66 mile Circleville-Hoyt HTI Junction 115 kV line.	12/1/2006		
WERE	COFFEYVILLE SUB - CRA 69KV CKT 1	Rebuild Coffeyville - CRA 69 kV line.	6/1/2011		
WERE	COFFEYVILLE SUB - DEARING 69KV CKT 1	Rebuild Dearing - Coffeyville 69 kV line.	6/1/2011		
WERE	COUNTY LINE - HOOK JCT 115KV CKT 1	Rebuild 2.52 mile line with 1192.5 kcmil ACSR	6/1/2011		
WERE	COUNTY LINE - TECUMSEH HILL 115KV CKT 1 CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER	Tear down and rebuild 5.32 mile Tecumseh Hill-County Line 115 kV line. Replace transformers	6/1/2011 6/1/2012		
WERE	DEARING (DEARIN1X) 138/69/13.2KV TRANSFORMER CKT 1	2nd Dearing 138-69 kV Transformer	12/1/2012		
		Build Evans - Grant 138 kV line, Convert Grant - Chisolm 69 kV line to 138 kV, Install New Grant			
WERE	Evans - Grant - Chisolm Rebuild and Conversion Project	138/69 kV XFMR. And Rebuild Grant - Grant Jct. 69 kV line.	6/1/2008		
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 Replace bus, jumpers and disconnect switches at MacArthur 69 kV substation to increase line	6/1/2012	6/1/2012	
		capacity to conductor rating	6/1/2007	7/1/2007	
WERE	GILL ENERGI CENTER EAST - MACARTHUR 09KV CKT T#1				
WERE	GILL ENERGY CENTER EAST - MACARTHUR 69KV CKT 1 #1 HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1	Replace wave traps on TEC-County Line 115 kV line.	6/1/2011		
WERE	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2	Replace wave traps on TEC-County Line 115 kV line. Rebuild 1.52 mile line with 1192.5 kcmil ACSR	6/1/2011 6/1/2011	6/1/2011	
WERE WERE WERE	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2 NEOSHO - NORTHEAST PARSONS 138KV CKT 1	Replace wave traps on TEC-County Line 115 kV line. Rebuild 1.52 mile line with 1192.5 kcmil ACSR Replace bus and Jumpers at NE Parsons 138 kV substation	6/1/2011 6/1/2011 6/1/2013	6/1/2011 6/1/2013	
WERE WERE WERE	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2 NEOSHO - NORTHEAST PARSONS 138KV CKT 1 Stranger - Thoton 115 kV	Replace wave traps on TEC-County Line 115 kV line. Rebuild 1.52 mile line with 1125 Kcmil ACSR Replace bus and Jumpers at INE Parsons 138 kV substation Build Stranger - Thorton 115kV	6/1/2011 6/1/2011 6/1/2013 6/1/2009	6/1/2011 6/1/2013 6/1/2009	
WERE WERE WERE WERE WERE	HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2 NEOSHO - NORTHEAST PARSONS 138KV CKT 1 Stranger - Thorton 115 kV STRANGER CEREK TRANSFORMER CKT 2	Replace wave traps on TEC-County Line 115 kV line. Rebuild 1.52 mile ine with 1125 Kcmil ACSR Replace bus and Jumpers at NE Parsons 138 kV substation Build Stranger - Thorton 115kV Install second Stranger Creek 345-115 transformer	6/1/2011 6/1/2011 6/1/2013	6/1/2011 6/1/2013 6/1/2009 6/1/2011	
WERE WERE WERE WERE WERE WERE WFEC	HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2 NEOSHO - NORTHEAST PARSONS 138KV CKT 1 Stranger - Thorton 115 kV STRANGER CREEK TRANSFORMER CKT 2 TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1 ALTUS JGT TAP - RUSSELL JSKV CKT 1	Replace wave traps on TEC-County Line 115 kV line. Rebuild 1.52 mile ine with 1122 Kcmil ACSR Replace bus and Jumpers at NE Parsons 138 kV substation Build Stranger - Thorton 115kV Install second Stranger Creek 345-115 transformer Uprate 0.24 mile TEC-Tecumseh Hill 115 kV line to 100 degree operation. Change CT Ratio	6/1/2011 6/1/2013 6/1/2013 6/1/2009 6/1/2011 6/1/2010 6/1/2014	6/1/2011 6/1/2013 6/1/2009 6/1/2011 6/1/2010 6/1/2014	
WERE WERE WERE WERE WERE WERE WFEC WFEC	HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2 NEOSHO - NORTHEAST PARSONS 138KV CKT 1 Stranger - Thorton 115 kV STRANGER CREEK TRANSFORMER CKT 2 TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1 ALTUS JGT TAP - RUSSELL 138KV CKT 1 Mooreland - Potter 345 KV MFEC	Replace wave traps on TEC-County Line 115 kV line. Replace wave traps on TEC-County Line 115 kV line. Replace bus and Jumpers at NE Parsons 138 kV substation Build Stranger - Thorton 115 kV Install second Stranger Creek 345-115 transformer Uprate 0.24 mile TEC-Tecumseh Hill 115 kV line to 100 degree operation. Change CT Ratio 365 kV line Terminal	6/1/2011 6/1/2011 6/1/2013 6/1/2009 6/1/2010 6/1/2010 6/1/2014 6/1/2015	6/1/2011 6/1/2013 6/1/2009 6/1/2011 6/1/2010 6/1/2014 6/1/2015	
WERE WERE WERE WERE WERE WERE WFEC WFEC WFEC	HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2 NEOSHO - NORTHEAST PARSONS 138KV CKT 1 Stranger - Thorton 115 KV STRANGER CREEK TRANSFORMER CKT 2 TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1 ALTUS JGT TAP - RUSSELL 138KV CKT 1 Mooreland - Potter 345 KV WFEC Mooreland - Potter 345 KV WFEC	Replace wave traps on TEC-County Line 115 kV line. Rebuild 1.52 mile line with 1122 Kcmil ACSR Replace bus and Jumpers at NE Parsons 138 kV substation Build Stranger - Thorton 115kV Install second Stranger Creek 345-115 transformer Uprate 0.24 mile TEC-Tecumseh Hill 115 kV line to 100 degree operation. Change CT Ratio 345 kV line Terminal Ave Mioneland 345/138 kV Transformer	6/1/2011 6/1/2013 6/1/2013 6/1/2009 6/1/2011 6/1/2010 6/1/2014 6/1/2015 6/1/2015	6/1/2011 6/1/2013 6/1/2009 6/1/2011 6/1/2010 6/1/2010 6/1/2015 6/1/2015	
WERE WERE WERE WERE WERE WERE WFEC WFEC WFEC	HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2 NEOSHO - NORTHEAST PARSONS 138KV CKT 1 Stranger - Thorton 115 kV STRANGER CREEK TRANSFORMER CKT 2 TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1 ALTUS JGT TAP - RUSSELL 138KV CKT 1 Mooreland - Potter 345 KV MFEC	Replace wave traps on TEC-County Line 115 kV line. Replace wave traps on TEC-County Line 115 kV line. Replace bus and Jumpers at NE Parsons 138 kV substation Build Stranger - Thorton 115 kV Install second Stranger Creek 345-115 transformer Uprate 0.24 mile TEC-Tecumseh Hill 115 kV line to 100 degree operation. Change CT Ratio 365 kV line Terminal	6/1/2011 6/1/2011 6/1/2013 6/1/2009 6/1/2010 6/1/2010 6/1/2014 6/1/2015	6/1/2011 6/1/2013 6/1/2009 6/1/2011 6/1/2010 6/1/2010 6/1/2015 6/1/2015	
WERE WERE WERE WERE WERE WFEC WFEC WFEC WFEC	HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2 NEOSHO - NORTHEAST PARSONS 138KV CKT 1 Stranger - Thorton 115 KV STRANGER CREEK TRANSFORMER CKT 2 TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1 ALTUS JGT TAP - RUSSELL 138KV CKT 1 Mooreland - Potter 345 KV WFEC Mooreland - Potter 345 KV WFEC	Replace wave traps on TEC-County Line 115 kV line. Rebuild 1.52 mile line with 1122 Kcmil ACSR Replace bus and Jumpers at NE Parsons 138 kV substation Build Stranger - Thorton 115kV Install second Stranger Creek 345-115 transformer Uprate 0.24 mile TEC-Tecumseh Hill 115 kV line to 100 degree operation. Change CT Ratio 345 kV line Terminal Ave Mioneland 345/138 kV Transformer	6/1/2011 6/1/2013 6/1/2013 6/1/2009 6/1/2011 6/1/2010 6/1/2014 6/1/2015 6/1/2015	6/1/2011 6/1/2013 6/1/2009 6/1/2011 6/1/2010 6/1/2010 6/1/2015 6/1/2015	
WERE WERE WERE WERE WERE WFEC WFEC WFEC WFEC	HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2 NEOSHO - NORTHEAST PARSONS 138KV CKT 1 Stranger - Thorton 115 KV STRANGER CREEK TRANSFORMER CKT 2 TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1 ALTUS JGT TAP - RUSSELL 138KV CKT 1 Mooreland 4-Potter 345 KV WFEC Spearville - Mooreland 345 KV WFEC	Replace wave traps on TEC-County Line 115 kV line. Rebuild 1.52 mile line with 1122 Kcmil ACSR Replace bus and Jumpers at NE Parsons 138 kV substation Build Stranger - Thorton 115kV Install second Stranger Creek 345-115 transformer Uprate 0.24 mile TEC-Tecumseh Hill 115 kV line to 100 degree operation. Change CT Ratio 345 kV line Terminal Ave Mioneland 345/138 kV Transformer	6/1/2011 6/1/2011 6/1/2013 6/1/2019 6/1/2010 6/1/2010 6/1/2015 6/1/2015	6/1/2011 6/1/2013 6/1/2009 6/1/2011 6/1/2010 6/1/2015 6/1/2015 6/1/2015	
WERE WERE WERE WERE WERE WFEC WFEC WFEC WFEC	HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2 NEOSHO - NORTHEAST PARSONS 138KV CKT 1 Stranger - Thorton 115 KV STRANGER CREEK TRANSFORMER CKT 2 TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1 ALTUS JGT TAP - RUSSELL 138KV CKT 1 Mooreland 4-Potter 345 KV WFEC Spearville - Mooreland 345 KV WFEC	Replace wave traps on TEC-County Line 115 kV line. Rebuild 1.52 mile line with 1122 Kcmil ACSR Replace bus and Jumpers at NE Parsons 138 kV substation Build Stranger - Thorton 115kV Install second Stranger Creek 345-115 transformer Uprate 0.24 mile TEC-Tecumseh Hill 115 kV line to 100 degree operation. Change CT Ratio 345 kV line Terminal Ave Mioneland 345/138 kV Transformer	6/1/2011 6/1/2011 6/1/2013 6/1/2019 6/1/2010 6/1/2015 6/1/2015 6/1/2015 6/1/2015	6/1/2011 6/1/2013 6/1/2009 6/1/2010 6/1/2014 6/1/2015 6/1/2015 6/1/2015 Estimated Date	
WERE WERE WERE WERE WERE WFEC WFEC WFEC WFEC Previously As:	HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2 NEOSHO - NORTHEAST PARSONS 138KV CKT 1 Stranger - Thorton 115 KV STRANGER CREEK TRANSFORMER CKT 2 TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1 ALTUS JGT TAP - RUSSELL 138KV CKT 1 Mooreland 345128 kV Transformer Spearville - Mooreland 345 kV WFEC	Replace wave traps on TEC-County Line 115 kV line. Rebuild 1.52 mile line with 1122 Kcmil ACSR Replace bus and Jumpers at NE Parsons 138 kV substation Build Stranger - Thorton 115kV Install second Stranger Creek 345-115 transformer Uprate 0.24 mile TEC-Tecumseh Hill 115 kV line to 100 degree operation. Change CT Ratio 345 kV line Terminal Ave Mioneland 345/138 kV Transformer	6/1/2011 6/1/2013 6/1/2013 6/1/2019 6/1/2014 6/1/2015 6/1/2015 6/1/2015 6/1/2015 Earliest Data Upgrade	6/1/2011 6/1/2013 6/1/2019 6/1/2019 6/1/2010 6/1/2015 6/1/2015 6/1/2015 Estimated Date of Upgrade	
WERE WERE WERE WERE WFEC WFEC WFEC WFEC Previously As:	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2 NEOSHO - NORTHEAST PARSONS 138KV CKT 1 Stranger - Thorton 115 kV STRANGER CREEK TRANSFORMER CKT 2 TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1 ALTUS JCT TAP. RUSSELL 138KV CKT 1 Mooreland 345 IV WFEC Mooreland 345 IV WFEC Spearville - Mooreland 345 kV WFEC signed Aggregate Study Upgrades requiring credits to Previous Aggregate Study Customers	Replace wave traps on TEC-County Line 115 kV line. Rebuild 1.52 mile line with 1122 Kcmil ACSR Replace bus and Jumpers at NE Parsons 138 kV substation Build Stranger - Thorton 115kV Install second Stranger Creek 345-115 transformer Uprate 0.24 mile TEC-Tecumseh Hill 115 kV line to 100 degree operation. Change CT Ratio 345 kV line Terminal Ave Mioneland 345/138 kV Transformer	6/1/2011 6/1/2011 6/1/2013 6/1/2019 6/1/2010 6/1/2015 6/1/2015 6/1/2015 6/1/2015	6/1/2011 6/1/2013 6/1/2009 6/1/2010 6/1/2014 6/1/2015 6/1/2015 6/1/2015 Estimated Date	
WERE WERE WERE WERE WFEC WFEC WFEC WFEC Previously As: Transmission Owner AEPW	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2 NEOSHO - NORTHEAST PARSONS 138KV CKT 1 Stranger - Thorton 115 KV STRANGER CREEK TRANSFORMER CKT 2 TECUMSEH ENERGY CONTER - TECUMSEH HILL 115KV CKT 1 ALTUS JCT TAP. RUSSELL 13KV CKT 1 Mooreland 345/138 kV Transformer Spearville - Mooreland 345 kV WFEC signed Aggregate Study Upgrades requiring credits to Previous Aggregate Study Customers Upgrade EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	Replace wave traps on TEC-County Line 115 kV line. Rebuild 1.52 mile line with 1122 Kcmil ACSR Replace bus and Jumpers at NE Parsons 138 kV substation Bidl Stranger - Thorton 115kV Install second Stranger Creek 345-115 transformer Uprate 0.24 mile TEC-Tecumseh Hill 115 kV line to 100 degree operation. Change CT Ratio 345 kV line Terminal New Mooreland 345/138 kV Transformer New Mooreland 345/138 kV Transformer New Mooreland 345/138 kV Transformer New 345 kV line from Kansas/Oklahoma Stateline to Mooreland Solution Reconductor 1.9 miles with ACCC. Replace wave trap jumpers at Riverside.	6/1/2011 6/1/2013 6/1/2009 6/1/2014 6/1/2014 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2019 Earliest Data Upgrade Required (COD) 6/1/2009	6/1/2011 6/1/2013 6/1/2009 6/1/2014 6/1/2014 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2016 6/1/2016 6/1/2009	
WERE WERE WERE WERE WFEC WFEC WFEC Previously As: Transmission Owner AEPW KACP	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2 NEOSHO - NORTHEAST PARSONS 138KV CKT 1 STRANGER CHECUMSEH HENRERY CENTER 115KV CKT 1 STRANGER CHERK TRANSFORMER CKT 2 TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1 ALTUS JCT TAP- RUSSELL 138KV CKT 1 Mooreland - Potter 345 kV WFEC Separville - Mooreland 345 kV WFEC Separville - Mooreland 345 kV WFEC Upgrade EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW LCCYONE - WEST GARDNER 345KV CKT 1	Replace wave traps on TEC-County Line 115 kV line. Rebuild 1:S. Time line with 1125 Kcmil ACSR Replace bus and Jumpers at INE Parsons 138 kV substation Build Stranger - Thorton 115kV Install second Stranger Creek 345-115 kransformer Uprate 0.24 mile TEC-Tecumseh Hill 115 kV line to 100 degree operation. Change CT Ratio 345 kV line Terminal New Mooreland 345/138 kV Transformer New 345 kV line from Kansas/Oktahoma Stateline to Mooreland Solution Reconductor 1.9 miles with ACCC. Replace wave traj jumpers at Riverside. KCPL Sponsored Project to Reconductor Line to be In-Service by 6/1/2006	6/1/2011 6/1/2013 6/1/2013 6/1/2019 6/1/2010 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2016 6/1/2009 6/1/2009 6/1/2009	6/1/2011 6/1/2013 6/1/2019 6/1/2011 6/1/2011 6/1/2015 6/1/2015 6/1/2015 5/1/2015 5/1/2015 6/1/2015 6/1/2016 6/1/2009 6/1/2009	
WERE WERE WERE WERE WERE WFEC WFEC WFEC WFEC WFEC WFEC WFEC WFE	HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2 NEOSHO - NORTHEAST PARSONS 138KV CKT 1 Stranger - Thorton 115 KV STRANGER CREEK TRANSFORMER CKT 2 TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1 ALTUS JGT TAP - RUSSELL 138KV CKT 1 Mooreland 345128 kV Transformer Spearville - Mooreland 345 kV WFEC Upgrade EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW LACYORE - WEST GARDNER 345KV CKT 1	Replace wave traps on TEC-County Line 115 kV line. Rebuild 1.52 mile line with 122 Kcmil ACSR Replace bus and Jumpers at NE Parsons 138 kV substation Build Stranger - Thorton 115kV Install second Stranger Creek 345-115 transformer Uprate 0.24 mile TEC-Tecumseh Hill 115 kV line to 100 degree operation. Change CT Ratio 345 kV line Terminal New Mooreland 345/138 kV Transformer New Mooreland 345/138 kV Transformer New Mooreland 345/138 kV Transformer New 345 kV line from Kansas/Oklahoma Stateline to Mooreland Solution Reconductor 1.9 miles with ACCC. Replace wave trap jumpers at Riverside. KCPL, Sponsored Project to Uprate Terminal Equipment	6/1/2011 6/1/2011 6/1/2013 6/1/2013 6/1/2014 6/1/2014 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2005 6/1/2006 6/1/2006	6/1/2011 6/1/2013 6/1/2009 6/1/2011 6/1/2010 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2009 6/1/2009 6/1/2009	
WERE WERE WERE WERE WERE WERE WFEC WFEC WFEC WFEC WFEC WFEC WFEC WFE	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2 NEOSHO - NORTHEAST PARSONS 138KV CKT 1 STRANGER CHECUMSEH ENERGY CENTER 115KV CKT 1 STRANGER CHECKT 2 TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1 ALTUS JCT TAP- RUSSELL 138KV CKT 1 Mooreland 345/138 kV Transformer Spearville - Mooreland 345 kV WFEC Spearville - Mooreland 345 kV WFEC Upgrade EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 ARCADIA - REDBUD 345 KV CKT 1 ARCADIA - REDBUD 345 KV CKT 2	Replace wave traps on TEC-County Line 115 kV line. Rebuild 1.52 mile line with 1125 Kcmil ACSR Replace bus and Jumpers at INE Parsons 138 kV substation Build Stranger - Thorton 115kV Install second Stranger Creek 345-115 km line to 100 degree operation. Change CT Ratio 345 kV line Terminal New Mooreland 345/138 kV Transformer New Mooreland 345/138 kV Transformer New 345 kV line from Kansas/Oktahoma Stateline to Mooreland Solution Reconductor 1.9 miles with ACCC. Replace wave trap jumpers at Riverside. KCPL Sponsored Project to Liprate Terninal Equipment Sponsored Project to Liprate Terninal Equipment	6/1/2011 6/1/2011 6/1/2013 6/1/2013 6/1/2011 6/1/2011 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2005 6/1/2006 6/1/2006	6/1/2011 6/1/2013 6/1/2019 6/1/2011 6/1/2010 6/1/2014 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2016 6/1/2006 6/1/2006 6/1/2006 6/1/2006	
WERE WERE WERE WERE WFEC WFEC WFEC WFEC Previously As:	HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2 NEOSHO - NORTHEAST PARSONS 138KV CKT 1 Stranger - Thorton 115 KV STRANGER CREEK TRANSFORMER CKT 2 TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1 ALTUS JGT TAP - RUSSELL 138KV CKT 1 Mooreland 345138 kV TRANSFORMER CKT 2 Mooreland 345138 kV TRANSFORMER CM Spearville - Mooreland 345 kV WFEC Upgrade EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW LACYGNE - WEST GARDNER 345KV CKT 1 ARCADIA - REDBUD 345 KV CKT 1 ARCADIA - REDBUD 345 KV CKT 1 ARCADIA - REDBUD 345 KV CKT 1	Replace wave traps on TEC-County Line 115 kV line. Rebuild 1.52 mile line with 1122 Kcmil ACSR Replace bus and Jumpers at NE Parsons 138 kV substation Build Stranger - Thorton 115kV Install second Stranger Creek 345-115 transformer Uprate 0.24 mile TEC-Tecumseh Hill 115 kV line to 100 degree operation. Change CT Ratio 345 kV line Terminal New Mooreland 345/138 kV Transformer New 345 kV line from Kansas/Oklahoma Stateline to Mooreland KCPL, Sponsored Project to Reconductor Line to be In-Service by 6/1/2006 Sponsored Project to Uprate Ternial Equipment	6/1/2011 6/1/2011 6/1/2013 6/1/2013 6/1/2014 6/1/2014 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2005 6/1/2006 6/1/2006 6/1/2006 6/1/2006	6/1/2011 6/1/2013 6/1/2019 6/1/2011 6/1/2011 6/1/2014 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2019 6/1/2009 6/1/2009 6/1/2009 6/1/2009	
WERE WERE WERE WERE WERE WERE WFEC WFEC WFEC Previously As: Transmission Owner AEPW KACP OKGE OKGE OKGE	HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JCT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2 NEOSHO - NORTHEAST PARSONS 138KV CKT 1 Stranger - Thorton 115 KV STRANGER CREEK TRANSFORMER CKT 2 TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1 ALTUS JCT TAP - RUSSELL 138KV CKT 1 Mooreland 345138 kV Transformer Spearville - Mooreland 345 kV WFEC Upgrade EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW LACYGNE - WEST GARDNER 345KV CKT 1 ARCADIA - REDBUD 345 KV CKT 1 ARCADIA - REDBUD 345 KV CKT 1 EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	Replace wave traps on TEC-County Line 115 kV line. Rebuild 15: 2019 in line with 1125 K kmil ACSR Replace bus and Jumpers at NE Parsons 138 kV substation Build Stranger - Thorton 115kV Install second Stranger Creek 345-115 kV line to 100 degree operation. Change CT Ratio 345 kV line Terminal New Mooreland 345/138 kV Transformer New 345 kV line from Kansas/Oklahoma Stateline to Mooreland Solution Reconductor 1.9 miles with ACCC. Replace wave trap jumpers at Riverside. KCPL, Sponsored Project to Uprate Terninal Equipment Sponsored Project to Uprate Terninal Equipment Reconductor 1.82 miles line with Drake ACCC/TW. OGE would rebuid. 18 mi	6/1/2011 6/1/2011 6/1/2013 6/1/2013 6/1/2014 6/1/2014 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2016 6/1/2006 6/1/2006 6/1/2009 6/1/2009 6/1/2009	6/1/2011 6/1/2013 6/1/2019 6/1/2011 6/1/2011 6/1/2014 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2009 6/1/2009 6/1/2009 6/1/2009	
WERE WERE WERE WERE WERE WERE WFEC WFEC WFEC WFEC WFEC AFRW KACP OKGE OKGE OKGE	HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #1 HOOK JGT - TECUMSEH ENERGY CENTER 115KV CKT 1 #2 NEOSHO - NORTHEAST PARSONS 138KV CKT 1 Stranger - Thorton 115 KV STRANGER CREEK TRANSFORMER CKT 2 TECUMSEH ENERGY CENTER - TECUMSEH HILL 115KV CKT 1 ALTUS JGT TAP - RUSSELL 138KV CKT 1 Mooreland 345138 kV TRANSFORMER CKT 2 Mooreland 345138 kV TRANSFORMER CM Spearville - Mooreland 345 kV WFEC Upgrade EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW LACYGNE - WEST GARDNER 345KV CKT 1 ARCADIA - REDBUD 345 KV CKT 1 ARCADIA - REDBUD 345 KV CKT 1 ARCADIA - REDBUD 345 KV CKT 1	Replace wave traps on TEC-County Line 115 kV line. Rebuild 1.52 mile line with 1125 Kcmil ACSR Replace bus and Jumpers at INE Parsons 138 kV substation Build Stranger - Thorton 115kV Install second Stranger Creek 345-115 transformer Upgrate 0.24 mile TEC-Tecurseh Hill 115 kV line to 100 degree operation. Change CT Ratio 345 kV line Terminal New Mooreland 345/138 kV Transformer New 345 kV line from Kansas/Oklahoma Stateline to Mooreland Solution Reconductor 1.9 miles with ACCC. Replace wave trap jumpers at Riverside. KCPL Sponsored Project to Reconductor Line to be In-Service by 6/1/2006 Sponsored Project to Uprate Terninal Equipment Sponsored Project to Uprate Terninal Equipment Reconductor 1.28 miles ine with Drake ACCCTW. Reconductor 1.28 miles flow with Drake ACCCTW.	6/1/2011 6/1/2011 6/1/2013 6/1/2013 6/1/2014 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2005 6/1/2006 6/1/2006 6/1/2006 6/1/2009	6/1/2011 6/1/2013 6/1/2019 6/1/2011 6/1/2011 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2015 6/1/2005 6/1/2009 6/1/2009 6/1/2009 6/1/2009 6/1/2009 6/1/2009 6/1/2009 6/1/2009 6/1/2009 6/1/2009 6/1/2009 6/1/2009	

Table 5 - Third Party Facility Constraints

Transmission Owner	Upgrade	Solution	Minimum ATC per Upgrade (MW)	Season of Minimum Allocated ATC			Estimated Engineering & Construction Cost
		Install 7.2 MVAR					
GSEC		Capacitor at GSEC Midway 69 kV			6/1/2011	6/1/2011	\$200,000.00

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⊥imiting Facility: Direction:	KELLY - SOUTH SENECA 115KV CKT 1 From->To								
ine Outage:	CONCORDIA - EAST MANHATTAN 230KV CK	Г1							
lowgate:	57217573371587585686112207SH								
Date Redispatch Needed:	6/1 - 10/1 Until EOC of Upgrade								
Season Flowgate Identified:	2007 Summer Shoulder	Aggregate Relief	1						
Reservation	Relief Amount	Amount							
109081			1						
109096									
109096	5 0	4 3.1			1		1		A
		Maximum		Sink Control		Maximum			Aggregate Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	SOUTH SENECA 115KV	16.7			TECUMSEH ENERGY CENTER 115KV	108		-0.88358	/ unoune (unit)
WERE	'SOUTH SENECA 115KV'	16.7	-0.87935		'CHANUTE 69KV'	46.617			
WERE	'SOUTH SENECA 115KV'	16.7	-0.87935	WERE	'CITY OF BURLINGTON 69KV'	4.8	-0.00067	-0.87868	
WERE	'SOUTH SENECA 115KV'	16.7			'CITY OF ERIE 69KV'	23.258		-0.87876	
WERE	'SOUTH SENECA 115KV'	16.7			'CITY OF FREDONIA 69KV'	2.496		-0.87868	
WERE	'SOUTH SENECA 115KV'	16.7	-0.87935		'CITY OF GIRARD 69KV'	2.989		-0.87878	
WERE	'SOUTH SENECA 115KV'	16.7	-0.87935		CITY OF IOLA 69KV	19.865		-0.87883	
WERE	'SOUTH SENECA 115KV'	16.7	-0.87935	WERE	CITY OF MULVANE 69KV	6.189		-0.87752	
WERE	'SOUTH SENECA 115KV' 'SOUTH SENECA 115KV'	16.7	-0.87935 -0.87935		CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV'	31.07001		-0.8773 -0.87868	
WERE	SOUTH SENECA 115KV	16.7	-0.87935		'EVANS ENERGY CENTER 138KV'	305		-0.87868	
WERE	SOUTH SENECA 115KV	16.7			GILL ENERGY CENTER 138KV	305		-0.87754	
WERE	SOUTH SENECA 115KV	16.7	-0.87935		JEFFREY ENERGY CENTER 230KV	470		-0.87766	
WERE	SOUTH SENECA 115KV	16.7			JEFFREY ENERGY CENTER 345KV	940		-0.87742	
WERE	SOUTH SENECA 115KV	16.7			LAWRENCE ENERGY CENTER 115KV	60			
WERE	SOUTH SENECA 115KV	16.7	-0.87935		'LAWRENCE ENERGY CENTER 230KV'	230.2191		-0.88067	
WERE	SOUTH SENECA 115KV	16.7			WACO 138KV	17.947		-0.87682	
WEPL	'RUSSELL 115KV'	27.9			'GRAY COUNTY WIND FARM 115KV'	73		-0.11397	2
WEPL	'RUSSELL 115KV'	27.9			JUDSON LARGE 115KV	99.9321		-0.114	
WERE	'KNOLL 3 115 115KV'	75	-0.06968	WERE	'TECUMSEH ENERGY CENTER 115KV'	108		-0.07391	4
WERE	'KNOLL 3 115 115KV'	75			'LAWRENCE ENERGY CENTER 115KV'	60		-0.07147	
WERE	'KNOLL 3 115 115KV'	75			'LAWRENCE ENERGY CENTER 230KV'	230.2191		-0.071	
WERE	'KNOLL 3 115 115KV'	75	-0.06968	WERE	'CITY OF ERIE 69KV'	23.258	-0.00059	-0.06909	4
WERE	'KNOLL 3 115 115KV'	75			'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96		-0.06901	4
WERE	'KNOLL 3 115 115KV'	75			'EVANS ENERGY CENTER 138KV'	305		-0.06787	
WERE	'KNOLL 3 115 115KV'	75			'JEFFREY ENERGY CENTER 230KV'	470		-0.06799	
WERE	'KNOLL 3 115 115KV'	75			'GILL ENERGY CENTER 138KV'	77		-0.06706	
WERE	'KNOLL 3 115 115KV'	75			'JEFFREY ENERGY CENTER 345KV'	940		-0.06775	
WERE	'KNOLL 3 115 115KV'	75			'WACO 138KV'	17.947		-0.06715	
WERE	'PAWNEE 115KV'	999			TECUMSEH ENERGY CENTER 115KV	108		-0.04258	
WERE	'RICE 115KV'	999			TECUMSEH ENERGY CENTER 115KV	108		-0.04258	
WERE WERE	'PAWNEE 115KV' 'RICE 115KV'	999			LAWRENCE ENERGY CENTER 115KV	60			
WERE	PAWNEE 115KV	999	-0.03835	WERE	'LAWRENCE ENERGY CENTER 115KV' 'LAWRENCE ENERGY CENTER 230KV'	230.2191		-0.04014	7
WERE	'RICE 115KV'	999			LAWRENCE ENERGY CENTER 230KV	230.2191		-0.03967	7
WERE	PAWNEE 115KV	999		WERE	'EVANS ENERGY CENTER 138KV'	230.2191		-0.03967	
WERE	PAWNEE 115KV	999		WERE	JEFFREY ENERGY CENTER 230KV	470		-0.03666	
WERE	'RICE 115KV'	999			'EVANS ENERGY CENTER 138KV'	305		-0.03654	
WERE	'RICE 115KV'	999			JEFFREY ENERGY CENTER 230KV	470		-0.03666	
WERE	'PAWNEE 115KV'	999			JEFFREY ENERGY CENTER 345KV	940		-0.03642	
WERE	'RICE 115KV'	999			JEFFREY ENERGY CENTER 345KV	940			
WERE	'PAWNEE 115KV'	999	-0.03835		'GILL ENERGY CENTER 138KV'	77	-0.00262	-0.03573	8
WERE	'RICE 115KV'	999	-0.03835	WERE	'GILL ENERGY CENTER 138KV'	77	-0.00262	-0.03573	8
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303			'TECUMSEH ENERGY CENTER 115KV'	108		-0.03003	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'TECUMSEH ENERGY CENTER 115KV'	108	0.00423	-0.03004	10
	aximum Increment were determine from the Souce								-

Upgrade: Limiting Facility:	CHAPMAN - CLAY CENTER JUNCTION 115KV KELLY - SOUTH SENECA 115KV CKT 1	CKT 1 & CLAY CE	NTER - GRE	ENLEAF 115	5KV CKT 1				
Direction:	From->To								
Line Outage:	CONCORDIA (CONCORD6) 230/115/13.8KV TR	ANSFORMER CKI	1						
Flowgate:	57217573371CONCNCORD66312207SH								
Date Redispatch Needed:	6/1 - 10/1 Until EOC of Upgrade								
Season Flowgate Identified:	2007 Summer Shoulder								
Reservation	Relief Amount	Aggregate Relief Amount							
1090817	1.1	3.1							
1090964									
1090965	0.4	3.1							
		Maximum		Sink Control		Maximum			Aggregate Redispatch
Source Control Area	Source		GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	SOUTH SENECA 115KV	16.7	-0.87935		TECUMSEH ENERGY CENTER 115KV	108	0.00423	-0.88358	3
WERE	SOUTH SENECA 115KV	16.7	-0.87935		'CHANUTE 69KV'	46.617		-0.87876	4
WERE	SOUTH SENECA 115KV	16.7	-0.87935		'CITY OF BURLINGTON 69KV'	4.8		-0.87868	4
WERE	SOUTH SENECA 115KV	16.7	-0.87935		CITY OF ERIE 69KV	23.258		-0.87876	4
WERE	SOUTH SENECA 115KV	16.7	-0.87935		CITY OF FREDONIA 69KV	2,496	-0.00067	-0.87868	4
WERE	'SOUTH SENECA 115KV'	16.7	-0.87935		'CITY OF GIRARD 69KV'	2,989		-0.87878	4
WERE	SOUTH SENECA 115KV	16.7	-0.87935		CITY OF IOLA 69KV	19.865	-0.00052	-0.87883	4
WERE	SOUTH SENECA 115KV	16.7	-0.87935		CITY OF MULVANE 69KV	6,189		-0.87752	4
WERE	SOUTH SENECA 115KV	16.7	-0.87935		'CITY OF WELLINGTON 69KV'	31.07001	-0.00205	-0.8773	4
WERE	SOUTH SENECA 115KV	16.7	-0.87935		COFFEY COUNTY NO. 2 SHARPE 69KV	19.96		-0.87868	4
WERE	SOUTH SENECA 115KV	16.7	-0.87935		'EVANS ENERGY CENTER 138KV'	305	-0.00181	-0.87754	4
WERE	SOUTH SENECA 115KV	16.7	-0.87935		'GILL ENERGY CENTER 138KV'	77		-0.87673	
WERE	'SOUTH SENECA 115KV'	16.7	-0.87935		'JEFFREY ENERGY CENTER 230KV'	470	-0.00169	-0.87766	4
WERE	'SOUTH SENECA 115KV'	16.7	-0.87935	WERE	'JEFFREY ENERGY CENTER 345KV'	940	-0.00193	-0.87742	4
WERE	'SOUTH SENECA 115KV'	16.7	-0.87935	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.00179	-0.88114	4
WERE	'SOUTH SENECA 115KV'	16.7	-0.87935	WERE	'LAWRENCE ENERGY CENTER 230KV'	230.2191	0.00132	-0.88067	4
WERE	'SOUTH SENECA 115KV'	16.7	-0.87935	WERE	'WACO 138KV'	17.947	-0.00253	-0.87682	4
WEPL	'RUSSELL 115KV'	27.9	-0.14239	WEPL	'GRAY COUNTY WIND FARM 115KV'	73	-0.02842	-0.11397	27
WEPL	'RUSSELL 115KV'	27.9	-0.14239		'JUDSON LARGE 115KV'	99.9321	-0.02839	-0.114	27
WERE	'KNOLL 3 115 115KV'	75	-0.06968		'TECUMSEH ENERGY CENTER 115KV'	108	0.00423	-0.07391	42
WERE	'KNOLL 3 115 115KV'	75	-0.06968		'LAWRENCE ENERGY CENTER 115KV'	60	0.00179	-0.07147	43
WERE	'KNOLL 3 115 115KV'	75	-0.06968		'LAWRENCE ENERGY CENTER 230KV'	230.2191		-0.071	43
WERE	'KNOLL 3 115 115KV'	75	-0.06968		'CITY OF ERIE 69KV'	23.258	-0.00059	-0.06909	45
WERE	'KNOLL 3 115 115KV'	75	-0.06968		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96		-0.06901	45
WERE	'KNOLL 3 115 115KV'	75	-0.06968		'EVANS ENERGY CENTER 138KV'	305	-0.00181	-0.06787	45
WERE	'KNOLL 3 115 115KV'	75	-0.06968		'JEFFREY ENERGY CENTER 230KV'	470		-0.06799	45
WERE	'KNOLL 3 115 115KV'	75	-0.06968		'GILL ENERGY CENTER 138KV'	77	-0.00262	-0.06706	46
WERE	'KNOLL 3 115 115KV'	75	-0.06968		'JEFFREY ENERGY CENTER 345KV'	940		-0.06775	
WERE	'KNOLL 3 115 115KV'	75	-0.06968		'WACO 138KV'	17.947		-0.06715	
WERE	'PAWNEE 115KV'	999	-0.03835		'TECUMSEH ENERGY CENTER 115KV'	108		-0.04258	72
WERE	'RICE 115KV'	999	-0.03835		'TECUMSEH ENERGY CENTER 115KV'	108	0.00423	-0.04258	72
WERE	'PAWNEE 115KV'	999	-0.03835		'LAWRENCE ENERGY CENTER 115KV'	60		-0.04014	77
WERE	'RICE 115KV'	999	-0.03835		'LAWRENCE ENERGY CENTER 115KV'	60		-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		'TECUMSEH ENERGY CENTER 115KV'	108	0.00423	-0.03004	103
Maximum Decrement and Ma	ximum Increment were determine from the Souce a	and Sink Operating	Points in the	e study mod	lels where limiting facility was identified.				

Maximum Decrement and Maximum Increme Factor = Source GSF - Sink GSF Redispatch Amount = Relief Amount / Factor

Jpgrade: _imiting Facility:	CIRCLEVILLE - HOYT HTI SWITCHING JUNCTIO CIRCLEVILLE - HOYT HTI SWITCHING JUNCTIO								
Direction:	To->From								
ine Outage: lowgate:	CONCORDIA - EAST MANHATTAN 230KV CKT 57152571651587585686114406WP	1							
ate Redispatch Needed:	12/1/06 - 4/1/07								
eason Flowgate Identified	d: 2006 Winter Peak	Aggregate Relief	1						
eservation	Relief Amount	Amount							
10909		0.3							
10000	0.1								Aggregate
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Redispatch Amount (M
VERE	HOLTON 115KV	19.8			CHANUTE 69KV	35.344	0.00472		Amount (IV
VERE	'HOLTON 115KV'	19.8			CITY OF AUGUSTA 69KV	17.25201	-0.00279		
VERE	'HOLTON 115KV' 'HOLTON 115KV'	19.8 19.8			CITY OF BURLINGTON 69KV'	4.8	0.00844 0.00472	-0.68753	
VERE	'HOLTON 115KV'	19.8	-0.67909	WERE	CITY OF FREDONIA 69KV	1.298	0.00377	-0.68286	
VERE VERE	'HOLTON 115KV' 'HOLTON 115KV'	19.8 19.8			CITY OF GIRARD 69KV' CITY OF IOLA 69KV'	1.493	0.00585	-0.68494	
VERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CITY OF MULVANE 69KV'	3.694	0.00398	-0.68307	
VERE	'HOLTON 115KV' 'HOLTON 115KV'	19.8 19.8			CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV'	24	0.00392	-0.68301	
VERE	HOLTON 115KV	19.8			COLBY 115KV	6.639483	-0.01029	-0.6688	
VERE	HOLTON 115KV	19.8			'EVANS ENERGY CENTER 138KV'	118.696	0.00599		
/ERE /ERE	'HOLTON 115KV' 'HOLTON 115KV'	19.8 19.8			'HUTCHINSON ENERGY CENTER 115KV' 'JEFFREY ENERGY CENTER 230KV'	40 470	0.01275	-0.69184 -0.7136	
VERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03481	-0.7139	
VERE	'HOLTON 115KV' 'HOLTON 115KV'	19.8 19.8	-0.67909		'LAWRENCE ENERGY CENTER 115KV' 'LAWRENCE ENERGY CENTER 230KV'	60 225.5185	0.0283	-0.70739	+
/ERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.72266	
VERE	'HOLTON 115KV' 'BROWN COUNTY 115KV'	19.8 5.5			'WACO 138KV' 'CHANUTE 69KV'	17.953 35.344	0.00468	-0.68377	
/ERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CITY OF AUGUSTA 69KV'	17.25201	-0.00279	-0.32359	
VERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CITY OF BURLINGTON 69KV'	4.8	0.00844	-0.33482	
/ERE /ERE	BROWN COUNTY 115KV BROWN COUNTY 115KV	5.5 5.5	-0.32638	WERE	CITY OF ERIE 69KV' CITY OF FREDONIA 69KV'	1.998	0.00472	-0.3311	
/ERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'CITY OF GIRARD 69KV'	1.493	0.00585	-0.33223	
VERE	BROWN COUNTY 115KV BROWN COUNTY 115KV	5.5 5.5			CITY OF IOLA 69KV' CITY OF MULVANE 69KV'	13.978 3.694	0.00547	-0.33185 -0.33036	+
/ERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	CITY OF WELLINGTON 69KV	24	0.00392	-0.3303	
/ERE /ERE	BROWN COUNTY 115KV BROWN COUNTY 115KV	5.5 5.5			'COFFEY COUNTY NO. 2 SHARPE 69KV' 'COLBY 115KV'	19.97 6.639483	0.00844		
/ERE	BROWN COUNTY 115KV	5.5			'EVANS ENERGY CENTER 138KV'	118.696	0.00599		
/ERE	BROWN COUNTY 115KV	5.5	-0.32638		'HUTCHINSON ENERGY CENTER 115KV'	40	0.01275		
/ERE /ERE	'BROWN COUNTY 115KV' 'BROWN COUNTY 115KV'	5.5 5.5			JEFFREY ENERGY CENTER 230KV JEFFREY ENERGY CENTER 345KV	470	0.03451 0.03481	-0.36089 -0.36119	
VERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.0283	-0.35468	
/ERE /ERE	BROWN COUNTY 115KV BROWN COUNTY 115KV	5.5 5.5			'LAWRENCE ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 115KV'	225.5185	0.02863	-0.35501	
VERE	'BROWN COUNTY 115KV'	5.5	-0.32638	WERE	'WACO 138KV'	17.953	0.00468	-0.33106	
VEPL VEPL	CLIFTON 115KV CLIFTON 115KV	70			'GRAY COUNTY WIND FARM 115KV' 'JUDSON LARGE 115KV'	36 42.10201	-0.00502	-0.18318 -0.18319	
VEPL	'GREENLEAF 115KV'	14.2			'GRAY COUNTY WIND FARM 115KV'	42.10201	-0.00502	-0.20932	
VEPL	'GREENLEAF 115KV'	14.2			'JUDSON LARGE 115KV'	42.10201	-0.00501	-0.20933	
VERE	'SOUTH SENECA 115KV' 'SOUTH SENECA 115KV'	16.7 16.7	-0.30778 -0.30778		CHANUTE 69KV' CITY OF AUGUSTA 69KV'	35.344	0.00472		
VERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CITY OF BURLINGTON 69KV'	4.8	0.00844	-0.31622	
VERE	'SOUTH SENECA 115KV' 'SOUTH SENECA 115KV'	16.7 16.7			CITY OF ERIE 69KV' CITY OF FREDONIA 69KV'	1.998	0.00472	-0.3125	
/ERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'CITY OF GIRARD 69KV'	1.493	0.00585	-0.31363	
/ERE /ERE	'SOUTH SENECA 115KV' 'SOUTH SENECA 115KV'	16.7 16.7	-0.30778 -0.30778		CITY OF IOLA 69KV' CITY OF MULVANE 69KV'	13.978	0.00547	-0.31325	
/ERE	'SOUTH SENECA 115KV'	16.7	-0.30778		CITY OF WELLINGTON 69KV	24	0.00398		
/ERE	SOUTH SENECA 115KV	16.7			COFFEY COUNTY NO. 2 SHARPE 69KV	19.97	0.00844		
/ERE /ERE	'SOUTH SENECA 115KV' 'SOUTH SENECA 115KV'	16.7 16.7			'COLBY 115KV' 'EVANS ENERGY CENTER 138KV'	6.639483 118.696	-0.01029 0.00599		
/ERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'HUTCHINSON ENERGY CENTER 115KV'	40	0.01275	-0.32053	
/ERE /ERE	'SOUTH SENECA 115KV' 'SOUTH SENECA 115KV'	16.7 16.7	-0.30778 -0.30778		JEFFREY ENERGY CENTER 230KV JEFFREY ENERGY CENTER 345KV	470	0.03451 0.03481	-0.34229 -0.34259	<u> </u>
/ERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.0283	-0.33608	
/ERE /ERE	'SOUTH SENECA 115KV' 'SOUTH SENECA 115KV'	16.7 16.7	-0.30778 -0.30778		'LAWRENCE ENERGY CENTER 230KV' 'TECUMSEH ENERGY CENTER 115KV'	225.5185 48	0.02863	-0.33641 -0.35135	+
/ERE	'SOUTH SENECA 115KV'	16.7	-0.30778	WERE	'WACO 138KV'	17.953	0.00468	-0.31246	
/EPL /FPL	BELOIT 115KV BELOIT 115KV	16.6 16.6			'GRAY COUNTY WIND FARM 115KV' 'JUDSON LARGE 115KV'	36 42.10201	-0.00502 -0.00501	-0.12313 -0.12314	
/EPL	SMITH CENTER 115KV	6.15			GRAY COUNTY WIND FARM 115KV	42.10201	-0.00501		
/EPL	SMITH CENTER 115KV	6.15	-0.09275		JUDSON LARGE 115KV	42.10201	-0.00501	-0.08774	1
/ERE /ERE	'ATWOOD 115KV' 'CITY OF AUGUSTA 69KV'	4 10.08799	-0.00279	WERE	TECUMSEH ENERGY CENTER 115KV TECUMSEH ENERGY CENTER 115KV	48	0.04357	-0.04636	
/ERE	'COLBY 115KV'	6.360517	-0.01029	WERE	TECUMSEH ENERGY CENTER 115KV	48	0.04357	-0.05386	
/ERE /ERE	'GETTY 69KV' 'GREAT BEND PLANT 69KV'	35			TECUMSEH ENERGY CENTER 115KV TECUMSEH ENERGY CENTER 115KV	48	0.04357	-0.0512	
/ERE	'KNOLL 3 115 115KV'	75	-0.00767	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.05124	
/ERE /ERE	'ATWOOD 115KV' 'ATWOOD 115KV'	4			'JEFFREY ENERGY CENTER 230KV' 'JEFFREY ENERGY CENTER 345KV'	470	0.03451 0.03481		
/ERE	'CITY OF FREDONIA 69KV'	8.996	0.00377	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.0398	
/ERE /ERE	CITY OF MULVANE 69KV' CITY OF NEODESHA 69KV'	12.096 4.5			TECUMSEH ENERGY CENTER 115KV TECUMSEH ENERGY CENTER 115KV	48	0.04357 0.04357		
/ERE	CITY OF NEODESHA 69KV	4.5			TECUMSEH ENERGY CENTER 115KV	48	0.04357		
/ERE	'CITY OF WINFIELD 69KV'	40	0.00302	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.04055	
/ERE /ERE	COLBY 115KV COLBY 115KV	6.360517 6.360517			JEFFREY ENERGY CENTER 230KV JEFFREY ENERGY CENTER 345KV	470 940	0.03451 0.03481		
/ERE	'GETTY 69KV'	35	-0.00763	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03451	-0.04214	
/ERE /ERE	'GETTY 69KV' 'KNOLL 3 115 115KV'	35			JEFFREY ENERGY CENTER 345KV JEFFREY ENERGY CENTER 230KV	940	0.03481 0.03451		
VERE	'KNOLL 3 115 115KV'	75			JEFFREY ENERGY CENTER 345KV	940	0.03431		

VERE	'LYONS 115KV'	999	0.00428	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03929	6
VERE	'OXFORD 138KV'	3	0.00366	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03991	6
VERE	'PAWNEE 115KV'	999	-0.00053	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.0441	6
VERE	'RICE 115KV'	999	-0.00053	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.0441	6
VERE	'ST JOHN 115KV'	7.5	-0.00053	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.0441	6
VERE	'ATWOOD 115KV'	4	-0.01002	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.0283	-0.03832	7
VERE	'ATWOOD 115KV'	4	-0.01002	WERE	'LAWRENCE ENERGY CENTER 230KV'	225.5185	0.02863	-0.03865	7
VERE	'CHANUTE 69KV'	52.456	0.00472	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03885	7
VERE	CITY OF AUGUSTA 69KV	10.08799	-0.00279	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03451	-0.0373	7
VERE	CITY OF AUGUSTA 69KV	10.08799	-0.00279	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03481	-0.0376	7
VERE	'CITY OF BURLINGTON 69KV'	7.7	0.00844	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03513	7
VERE	'CITY OF ERIE 69KV'	24.532	0.00472	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03885	7
VERE	'CITY OF GIRARD 69KV'	9.207	0.00585	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.03772	7
VERE	CITY OF IOLA 69KV	23.65	0.00547	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.0381	7
VERE	COLBY 115KV	6.360517	-0.01029	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.0283	-0.03859	7
VERE	'COLBY 115KV'	6.360517			'LAWRENCE ENERGY CENTER 230KV'	225.5185	0.02863	-0.03892	7
Aaximum Decreme	nt and Maximum Increment were determine from the So	uce and Sink Operating	Points in th	e study mo	dels where limiting facility was identified.				
actor = Source GS	F - Sink GSF								
Redispatch Amount	= Relief Amount / Factor								

Upgrade:	CIRCLEVILLE - HOYT HTI SWITCHING JUNCTI	ON 115KV CKT 1							
Limiting Facility:	CIRCLEVILLE - HOYT HTI SWITCHING JUNCTI								
Direction: Line Outage:	To->From CONCORDIA (CONCORD6) 230/115/13.8KV TR	ANSFORMER CK	Г 1						
Flowgate:	57152571651CONCNCORD66314406WP	ANSI ORMER OR							
Date Redispatch Needed:	12/1/06 - 4/1/07								
Season Flowgate Identified:	2006 Winter Peak	Aggregate Relief	1						
Reservation	Relief Amount	Amount							
1090964	0.2		1						
1090965	0.1	0.2					r		Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	'HOLTON 115KV'	19.8	-0.67909 -0.67909	WERE	CHANUTE 69KV	35.344		-0.68381	0
WERE	'HOLTON 115KV' 'HOLTON 115KV'	19.8 19.8	-0.67909		'CITY OF AUGUSTA 69KV' 'CITY OF BURLINGTON 69KV'	17.25201		-0.6763 -0.68753	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	'CITY OF ERIE 69KV'	1.998		-0.68381	0
WERE	'HOLTON 115KV'	19.8	-0.67909	WERE	CITY OF FREDONIA 69KV	1.298		-0.68286	0
WERE	'HOLTON 115KV' 'HOLTON 115KV'	19.8 19.8	-0.67909 -0.67909		'CITY OF GIRARD 69KV' 'CITY OF IOLA 69KV'	1.493		-0.68494 -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			CITY OF WELLINGTON 69KV	24			0
WERE	'HOLTON 115KV' 'HOLTON 115KV'	19.8 19.8	-0.67909 -0.67909		COFFEY COUNTY NO. 2 SHARPE 69KV' COLBY 115KV'	19.97 6.639483		-0.68753 -0.6688	0
WERE	HOLTON 115KV	19.8	-0.67909	WERE	'EVANS ENERGY CENTER 138KV'	118.696		-0.68508	0
WERE	'HOLTON 115KV'	19.8			'HUTCHINSON ENERGY CENTER 115KV'	40	0.01275	-0.69184	0
WERE	'HOLTON 115KV' 'HOLTON 115KV'	19.8 19.8			'JEFFREY ENERGY CENTER 230KV' 'JEFFREY ENERGY CENTER 345KV'	470		-0.7136 -0.7139	0
WERE	HOLTON 115KV	19.8		WERE	LAWRENCE ENERGY CENTER 115KV	940		-0.7139	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		-0.72266	0
WERE	'HOLTON 115KV' 'BROWN COUNTY 115KV'	19.8 5.5	-0.67909 -0.32638	WERE	WACO 138KV' 'CHANUTE 69KV'	17.953		-0.68377 -0.3311	0
WERE	'BROWN COUNTY 115KV'	5.5	-0.32638		'CITY OF AUGUSTA 69KV'	17.25201		-0.32359	1
WERE	'BROWN COUNTY 115KV'	5.5		WERE	'CITY OF BURLINGTON 69KV'	4.8		-0.33482	1
WERE	BROWN COUNTY 115KV BROWN COUNTY 115KV	5.5 5.5		WERE	CITY OF ERIE 69KV' CITY OF FREDONIA 69KV'	1.998		-0.3311 -0.33015	1
WERE	BROWN COUNTY 115KV	5.5			CITY OF GIRARD 69KV	1.493		-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 BROWN COUNTY 115KV	5.5		WERE	CITY OF MULVANE 69KV	3.694		-0.33036	1
WERE	BROWN COUNTY 115KV BROWN COUNTY 115KV	5.5 5.5	-0.32638 -0.32638		CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV'	24		-0.3303 -0.33482	1
WERE	'BROWN COUNTY 115KV'	5.5			COLBY 115KV	6.639483		-0.31609	1
WERE	'BROWN COUNTY 115KV'	5.5			'EVANS ENERGY CENTER 138KV'	118.696		-0.33237	1
WERE	BROWN COUNTY 115KV BROWN COUNTY 115KV	5.5 5.5		WERE	'HUTCHINSON ENERGY CENTER 115KV' 'JEFFREY ENERGY CENTER 230KV'	40		-0.33913 -0.36089	1
WERE	BROWN COUNTY 115KV	5.5			JEFFREY ENERGY CENTER 345KV	940		-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			LAWRENCE ENERGY CENTER 230KV	225.5185		-0.35501 -0.36995	1
WERE	BROWN COUNTY 115KV BROWN COUNTY 115KV	5.5 5.5		WERE	TECUMSEH ENERGY CENTER 115KV' WACO 138KV'	48		-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			JUDSON LARGE 115KV	42.10201		-0.18319	1
WEPL WEPL	'GREENLEAF 115KV' 'GREENLEAF 115KV'	14.2			'GRAY COUNTY WIND FARM 115KV' 'JUDSON LARGE 115KV'	42.10201		-0.20932 -0.20933	1
WERE	'SOUTH SENECA 115KV'	16.7		WERE	'CHANUTE 69KV'	35.344		-0.3125	1
WERE	'SOUTH SENECA 115KV'	16.7			CITY OF AUGUSTA 69KV	17.25201		-0.30499	1
WERE	SOUTH SENECA 115KV SOUTH SENECA 115KV	16.7 16.7	-0.30778 -0.30778		CITY OF BURLINGTON 69KV'	4.8		-0.31622 -0.3125	1
WERE	'SOUTH SENECA 115KV'	16.7			CITY OF FREDONIA 69KV	1.298		-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 SOUTH SENECA 115KV	16.7 16.7	-0.30778 -0.30778	WERE	CITY OF IOLA 69KV' CITY OF MULVANE 69KV'	13.978		-0.31325 -0.31176	1
WERE	SOUTH SENECA 115KV	16.7	-0.30778	WERE	CITY OF WELLINGTON 69KV	24	0.00392	-0.31176	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 SOUTH SENECA 115KV	16.7 16.7	-0.30778 -0.30778		COLBY 115KV VEVANS ENERGY CENTER 138KV	6.639483		-0.29749 -0.31377	1
WERE	SOUTH SENECA 115KV SOUTH SENECA 115KV	16.7	-0.30778		HUTCHINSON ENERGY CENTER 138KV	118.696		-0.31377	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		JEFFREY ENERGY CENTER 345KV	940		-0.34259	1
WERE	SOUTH SENECA 115KV SOUTH SENECA 115KV	16.7 16.7	-0.30778 -0.30778	WERE	'LAWRENCE ENERGY CENTER 115KV' 'LAWRENCE ENERGY CENTER 230KV'	225.5185		-0.33608 -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		WACO 138KV	17.953		-0.31246	1
WEPL WEPL	'BELOIT 115KV' 'BELOIT 115KV'	16.6 16.6	-0.12815 -0.12815		'GRAY COUNTY WIND FARM 115KV' 'JUDSON LARGE 115KV'	42.10201	-0.00502	-0.12313 -0.12314	2
WEPL	'SMITH CENTER 115KV'	6.15			'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		3
WERE	'ATWOOD 115KV' 'COLBY 115KV'	4 6.360517			TECUMSEH ENERGY CENTER 115KV TECUMSEH ENERGY CENTER 115KV	48			4
WERE	'GETTY 69KV'	6.360517			'TECUMSEH ENERGY CENTER 115KV'	40		-0.05386	4
WERE	'KNOLL 3 115 115KV'	75	-0.00767	WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.04357	-0.05124	4
WERE	'ATWOOD 115KV'	4			JEFFREY ENERGY CENTER 230KV	470		-0.04453	5
WERE	'ATWOOD 115KV' 'CITY OF AUGUSTA 69KV'	4 10.08799			'JEFFREY ENERGY CENTER 345KV' 'TECUMSEH ENERGY CENTER 115KV'	940		-0.04483 -0.04636	5
WERE	CITY OF WINFIELD 69KV	40			'TECUMSEH ENERGY CENTER 115KV'	48			5
WERE	COLBY 115KV	6.360517			JEFFREY ENERGY CENTER 230KV	470		-0.0448	5
WERE	'COLBY 115KV' 'GETTY 69KV'	6.360517 35			JEFFREY ENERGY CENTER 345KV JEFFREY ENERGY CENTER 230KV	940		-0.0451 -0.04214	5
WERE	'GETTY 69KV'	35	-0.00763	WERE	JEFFREY ENERGY CENTER 230KV JEFFREY ENERGY CENTER 345KV	940		-0.04214	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	WEDE	'JEFFREY ENERGY CENTER 230KV'	470	0.03451	-0.04218	5

	1						1		
WERE	'KNOLL 3 115 115KV'	75	-0.00767		'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 Ma	aximum Increment were determine from the Souce a	and Sink Operating	Points in the	e study mo	dels where limiting facility was identified.				

Maximum Decrement and Maximum Increme Factor = Source GSF - Sink GSF Redispatch Amount = Relief Amount / Factor

Upgrade: Limiting Facility:	Evans - Grant - Chisolm Rebuild and Conversion CHISHOLM (CHISLM1X) 138/69/13.2KV TRANSI								
Direction:	From->To								
Line Outage:	EVANS ENERGY CENTER NORTH - SEDGWICI	K COUNTY NO. 12	2 COLWICH	138KV CKT 1					
Flowgate:	CHIISLM1X1421570405706512208SP								
Date Redispatch Needed:	Starting 2008 6/1 - 10/1 Until EOC								
Season Flowgate Identified:	2008 Summer Peak		_						
		Aggregate Relief							
Reservation	Relief Amount	Amount							
1086655	2.2	2.2							
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source	Increment(MW)	GSF						Amount (MW)
WERE	'GILL ENERGY CENTER 69KV'	73			'CITY OF ERIE 69KV'	23.374		-0.0513	42
WERE	'GILL ENERGY CENTER 69KV'	73			'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.98		-0.05213	42
WERE	'GILL ENERGY CENTER 69KV'	73			'JEFFREY ENERGY CENTER 230KV'	470		-0.05052	43
WERE	'GILL ENERGY CENTER 69KV'	73			'JEFFREY ENERGY CENTER 345KV'	940		-0.05052	43
WERE	'GILL ENERGY CENTER 69KV'	73			'LAWRENCE ENERGY CENTER 115KV'	85		-0.05077	43
WERE	'GILL ENERGY CENTER 69KV'	73	-0.05046	WERE	'LAWRENCE ENERGY CENTER 230KV'	229.0237	0.0003	-0.05076	
		13							
WERE	'GILL ENERGY CENTER 69KV'	73	-0.05046	WERE	'TECUMSEH ENERGY CENTER 115KV'	128		-0.05081	43
WERE WERE	'GILL ENERGY CENTER 69KV' 'GILL ENERGY CENTER 69KV'	73 73	-0.05046 -0.05046	WERE WERE	'BPU - CITY OF MCPHERSON 115KV'	135	-0.00136	-0.0491	44
WERE WERE WERE	GILL ENERGY CENTER 69KV GILL ENERGY CENTER 69KV GILL ENERGY CENTER 69KV	73 73 73	-0.05046 -0.05046 -0.05046	WERE WERE WERE	'BPU - CITY OF MCPHERSON 115KV' 'HUTCHINSON ENERGY CENTER 115KV'	135 120	-0.00136 -0.00183	-0.0491 -0.04863	44 45
WERE WERE	'GILL ENERGY CENTER 69KV' 'GILL ENERGY CENTER 69KV'	73 73	-0.05046 -0.05046 -0.05046 -0.05046	WERE WERE WERE WERE	'BPU - CITY OF MCPHERSON 115KV'	135	-0.00136 -0.00183 -0.00192	-0.0491	44

 WERE
 [GILL ENERGY CENTER 1980/]
 73
 -0.05046 [WERE
 EVANS ENERGY CENTER 1386/]

 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 6								
Limiting Facility:	GILL ENERGY CENTER EAST - GILLJCT269.0 6	9KV CKT 1							
Direction:	From->To								
	GILL ENERGY CENTER EAST - MACARTHUR 6	9KV CKT 1							
Flowgate:	57795577981577955781311107SP								
Date Redispatch Needed:	6/1/07 - 10/1/07								
Season Flowgate Identified:	2007 Summer Peak								
		Aggregate Relief							
	Relief Amount	Amount							
1090817		6.6							
1090964		6.6							
1090965	0.9	6.6			1				
									Aggregate
	_	Maximum		Sink Control		Maximum		_	Redispatch
Source Control Area	Source		GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	'CITY OF MULVANE 69KV'	7.502	-0.08073		'GILL ENERGY CENTER 69KV'	75			
WERE	'CITY OF IOLA 69KV'	13.361	-0.00105		'GILL ENERGY CENTER 69KV'	75		-0.23384	
WERE	'CLAY CENTER JUNCTION 115KV'	15.161	0.00069		'GILL ENERGY CENTER 69KV'	75		-0.2321	
WERE	'GETTY 69KV'	35	-0.00422		'GILL ENERGY CENTER 69KV'	75		-0.23701	
WERE	'HOLTON 115KV'	19.8	-0.00022		'GILL ENERGY CENTER 69KV'	75		-0.23301	28
WERE	'JEFFREY ENERGY CENTER 230KV'	24	-0.00007		'GILL ENERGY CENTER 69KV'	75		-0.23286	
WERE	'JEFFREY ENERGY CENTER 345KV'	42	-0.00007		'GILL ENERGY CENTER 69KV'	75		-0.23286	
WERE	'LATHAM1234.0 345KV'	150	-0.00298		'GILL ENERGY CENTER 69KV'	75		-0.23577	
WERE	'LYONS 115KV'	999	-0.00036		'GILL ENERGY CENTER 69KV'	75		-0.23315	
WERE	'NEOSHO ENERGY CENTER 138KV'	47	-0.00104		'GILL ENERGY CENTER 69KV'	75		-0.23383	
WERE	'SMOKYHIL 230 230KV'	72	0.00205		'GILL ENERGY CENTER 69KV'	75		-0.23074	
WERE	'SOUTH SENECA 115KV'	16.7		WERE	'GILL ENERGY CENTER 69KV'	75		-0.23279	
WERE	'BPU - CITY OF MCPHERSON 115KV'	21.13672	0.00286		'GILL ENERGY CENTER 69KV'	75		-0.22993	
WERE	'GREAT BEND PLANT 69KV'	10	0.00699		'GILL ENERGY CENTER 69KV'	75		-0.2258	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	133	0.00389		'GILL ENERGY CENTER 69KV'	75			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	12		WERE	'GILL ENERGY CENTER 69KV'	75		-0.22889	
WERE	'KNOLL 3 115 115KV'	75	0.00351		'GILL ENERGY CENTER 69KV'	75		-0.22928	
WERE	'PAWNEE 115KV'	999	0.01303		'GILL ENERGY CENTER 69KV'	75		-0.21976	
WERE	'RICE 115KV'	999	0.01303		'GILL ENERGY CENTER 69KV'	75		-0.21976	
WERE	'CITY OF WINFIELD 69KV'	40	0.02493		'GILL ENERGY CENTER 69KV'	75		-0.20786	
WERE	'GETTY 69KV'	35	-0.00422		'GILL ENERGY CENTER 138KV'	171	0.07582	-0.08004	
WERE	'LATHAM1234.0 345KV'	150	-0.00298		'GILL ENERGY CENTER 138KV'	171		-0.0788	
WERE	'NEOSHO ENERGY CENTER 138KV'	47	-0.00104		'GILL ENERGY CENTER 138KV'	171	0.07582	-0.07686	
WERE	'LYONS 115KV'	999	-0.00036		'GILL ENERGY CENTER 138KV'	171	0.07582	-0.07618	
WERE	'JEFFREY ENERGY CENTER 345KV'	42	-0.00007		'GILL ENERGY CENTER 138KV'	171	0.07582	-0.07589	
WERE	'SMOKYHIL 230 230KV'	72	0.00205		'GILL ENERGY CENTER 138KV'	171	0.07582	-0.07377	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	133	0.00389		'GILL ENERGY CENTER 138KV'	171	0.07582	-0.07193	
WERE	'KNOLL 3 115 115KV'	75	0.00351	WERE	'GILL ENERGY CENTER 138KV'	171	0.07582	-0.07231	91

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Upgrade:	GILL ENERGY CENTER EAST - GILLJCT269.0 6	9KV CKT 1				
Limiting Facility:	GILL ENERGY CENTER EAST - GILLJCT269.0 6	9KV CKT 1				
Direction:	From->To					
Line Outage:						
Flowgate:	57795577981HOOVOVER1X4211107SP					
Date Redispatch Needed:	6/1/07 - 10/1/07					
Season Flowgate Identified:	2007 Summer Peak					
		Aggregate Relief				
Reservation	Relief Amount	Amount				
1090817	1.6	4.5				
1090964	2.3	4.5				

ource Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF		Aggregate Redispatch Amount (MW)
VERE	CITY OF MULVANE 69KV	7.502	-0.0605		GILL ENERGY CENTER 69KV	75			
VERE	CITY OF IOLA 69KV	13.361	-0.00102		GILL ENERGY CENTER 69KV	75			2
VERE	'GETTY 69KV'	35	-0.00446		'GILL ENERGY CENTER 69KV'	75			
VERE	HOLTON 115KV	19.8	-0.00003		'GILL ENERGY CENTER 69KV'	75			
VERE	JEFFREY ENERGY CENTER 230KV	24	0.00018	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15861	2
VERE	JEFFREY ENERGY CENTER 345KV	42	0.00017	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15862	
VERE	'LATHAM1234.0 345KV'	150	-0.00277	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.16156	
VERE	'LYONS 115KV'	999	-0.00033	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15912	
VERE	'NEOSHO ENERGY CENTER 138KV'	47		WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15979	
VERE	'SOUTH SENECA 115KV'	16.7	0.0001	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15869	2
VERE	'BPU - CITY OF MCPHERSON 115KV'	21.13672	0.0024	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15639	2
VERE	'CLAY CENTER JUNCTION 115KV'	15.161	0.00077	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15802	2
VERE	'GREAT BEND PLANT 69KV'	10	0.00548	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15331	2
VERE	'HUTCHINSON ENERGY CENTER 115KV'	133	0.00318	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15561	2
VERE	'HUTCHINSON ENERGY CENTER 69KV'	12	0.00319	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.1556	2
VERE	'KNOLL 3 115 115KV'	75	0.00286	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.15593	2
VERE	'SMOKYHIL 230 230KV'	72	0.00179	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.157	2
VERE	'PAWNEE 115KV'	999	0.01005	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.14874	3
VERE	'RICE 115KV'	999	0.01005	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.14874	3
VERE	'CITY OF WINFIELD 69KV'	40	0.01599	WERE	'GILL ENERGY CENTER 69KV'	75	0.15879	-0.1428	
VERE	'GETTY 69KV'	35	-0.00446	WERE	'GILL ENERGY CENTER 138KV'	171	0.05754		
VERE	'LATHAM1234.0 345KV'	150	-0.00277	WERE	'GILL ENERGY CENTER 138KV'	171	0.05754	-0.06031	7
VERE	'NEOSHO ENERGY CENTER 138KV'	47	-0.001	WERE	'GILL ENERGY CENTER 138KV'	171	0.05754	-0.05854	7
VERE	'LYONS 115KV'	999	-0.00033	WERE	'GILL ENERGY CENTER 138KV'	171	0.05754	-0.05787	7
VERE	'JEFFREY ENERGY CENTER 345KV'	42	0.00017	WERE	'GILL ENERGY CENTER 138KV'	171	0.05754	-0.05737	7
VERE	'SMOKYHIL 230 230KV'	72	0.00179	WERE	'GILL ENERGY CENTER 138KV'	171	0.05754	-0.05575	
VERE	'HUTCHINSON ENERGY CENTER 115KV'	133			'GILL ENERGY CENTER 138KV'	171			
VERE	'KNOLL 3 115 115KV'	75			'GILL ENERGY CENTER 138KV'	171			
VERE	'CITY OF WINFIELD 69KV'	40			GILL ENERGY CENTER 138KV Is where limiting facility was identified.	171	0.05754	-0.04155	10

Upgrade:	GILL ENERGY CENTER EAST - MACARTHUR								
Limiting Facility: Direction:	GILL ENERGY CENTER EAST - MACARTHUR 6 From->To	9KV CKT 1							
Line Outage:	GILL ENERGY CENTER EAST - GILLJCT269.0 (OKU CKT 1							
Flowgate:	57795578131577955779811107SP	DAV CKI I							
Date Redispatch Needed:	7/1/07 - 10/1/07								
Season Flowgate Identified:	2007 Summer Peak								
Season Flowgate Identified.	2007 Summer Feak	Aggregate Relief	1						
Reservation	Relief Amount	Amount							
1090817									
1090964									
1090965									
1000000	0.0	0.0		1					Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source		GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	CITY OF MULVANE 69KV	7.502			GILL ENERGY CENTER 69KV	75		-0.28339	
WERE	CITY OF IOLA 69KV	13.361	-0.00097		'GILL ENERGY CENTER 69KV'	75		-0.20083	28
WERE	'CLAY CENTER JUNCTION 115KV'	15.161	0.00067	WERE	'GILL ENERGY CENTER 69KV'	75		-0.19919	
WERE	'GETTY 69KV'	35	-0.004	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.20386	
WERE	'HOLTON 115KV'	19.8	-0.00015		'GILL ENERGY CENTER 69KV'	75		-0.20001	28
WERE	JEFFREY ENERGY CENTER 230KV	24	0.00001	WERE	'GILL ENERGY CENTER 69KV'	75		-0.19985	28
WERE	JEFFREY ENERGY CENTER 345KV	42		WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.19986	
WERE	'LATHAM1234.0 345KV'	150	-0.00271		'GILL ENERGY CENTER 69KV'	75		-0.20257	28
WERE	'LYONS 115KV'	999	-0.00033	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.20019	
WERE	'NEOSHO ENERGY CENTER 138KV'	47	-0.00096	WERE	'GILL ENERGY CENTER 69KV'	75	0.19986	-0.20082	
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		-0.19675	29
WERE	'SMOKYHIL 230 230KV'	72			'GILL ENERGY CENTER 69KV'	75			29
WERE	'PAWNEE 115KV'	999			'GILL ENERGY CENTER 69KV'	75		-0.18847	30
WERE	'RICE 115KV'	999	0.01139		'GILL ENERGY CENTER 69KV'	75		-0.18847	30
WERE	'CITY OF WINFIELD 69KV'	40			'GILL ENERGY CENTER 69KV'	75		-0.17899	32
WERE	'GETTY 69KV'	35		WERE	'GILL ENERGY CENTER 138KV'	171		-0.07003	
WERE	'LATHAM1234.0 345KV'	150	-0.00271		'GILL ENERGY CENTER 138KV'	171		-0.06874	82
WERE	'NEOSHO ENERGY CENTER 138KV'	47	-0.00096		'GILL ENERGY CENTER 138KV'	171		-0.06699	84
WERE	'LYONS 115KV'	999			'GILL ENERGY CENTER 138KV'	171		-0.06636	
WERE	'JEFFREY ENERGY CENTER 345KV'	42		WERE	'GILL ENERGY CENTER 138KV'	171		-0.06603	86
WERE	'SMOKYHIL 230 230KV'	72			'GILL ENERGY CENTER 138KV'	171		-0.06418	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	133			'GILL ENERGY CENTER 138KV'	171		-0.06258	
WERE	'KNOLL 3 115 115KV'	75	0.00311	WERE	'GILL ENERGY CENTER 138KV'	171	0.06603	-0.06292	90

Redispatch Amount = Relief Amount / Factor

Upgrade: Limiting Facility: Direction: Line Outage: Flowgate: Date Redispatch Needed:	GILL ENERGY CENTER EAST - MACARTHUR 6 GILL ENERGY CENTER EAST - MACARTHUR 6 From->TO GILLJCT269.0 - OATVILLE 69KV CKT 1 5779557813157798782511107SP 71/07 - 10/107								
Season Flowgate Identified:	2007 Summer Peak								
		Aggregate Relief							
Reservation	Relief Amount	Amount							
1090817			-						
1090964									
1090965	0.6	4.4			I				
		Maximum		Sink Control		Maximum			Aggregate
October October Anna	0		GSF		Sink	Decrement(MW)	GSF	Factor	Redispatch
Source Control Area	Source CITY OF MULVANE 69KV				GILL ENERGY CENTER 69KV				Amount (MW)
WERE		7.502				75			
WERE	CITY OF IOLA 69KV	13.361	-0.00091		GILL ENERGY CENTER 69KV	75		-0.15533	
WERE	'GETTY 69KV'	35			'GILL ENERGY CENTER 69KV'	75		-0.1584	28
WERE	'HOLTON 115KV'	19.8			'GILL ENERGY CENTER 69KV'	75		-0.15444	
WERE	'JEFFREY ENERGY CENTER 230KV'	24			'GILL ENERGY CENTER 69KV'	75		-0.15426	
WERE	'JEFFREY ENERGY CENTER 345KV'	42			'GILL ENERGY CENTER 69KV'	75		-0.15427	
WERE	'LATHAM1234.0 345KV'	150			'GILL ENERGY CENTER 69KV'	75		-0.15687	28
WERE	'LYONS 115KV'	999			'GILL ENERGY CENTER 69KV'	75		-0.15472	
WERE	'NEOSHO ENERGY CENTER 138KV'	47	-0.00089	WERE	'GILL ENERGY CENTER 69KV'	75	0.15442	-0.15531	
WERE	'SOUTH SENECA 115KV'	16.7	0.0001	WERE	'GILL ENERGY CENTER 69KV'	75	0.15442	-0.15432	
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

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							-		
WERE	'HUTCHINSON ENERGY CENTER 115KV'	133	0.00293		'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
Mauimum Deeremen	et and Mavimum Increment ware determine from the Source -	and Cink Onerating	Dointo in th	a attack case and	ale where limiting facility was identified				

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

Upgrade: Limiting Facility: Direction: Line Outage:	HAYS PLANT - SOUTH HAYS 115KV CKT 1 HAYS PLANT - SOUTH HAYS 115KV CKT 1 ToFrom 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	Assessed Della	1						
Reservation	Relief Amount	Aggregate Relief Amount							
Reservation 1090817									
1090817									
1090829									
1090965									
1090903									
1091057	2.3	23.1					1		Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source			Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	'KNOLL 3 115 115KV'	75			BPU - CITY OF MCPHERSON 115KV	135		-0.6839	
WERE	'KNOLL 3 115 115KV'	75			'HUTCHINSON ENERGY CENTER 115KV'	180		-0.68604	
WERE	'KNOLL 3 115 115KV'	75			'HUTCHINSON ENERGY CENTER 69KV'	40		-0.68604	
WERE	'KNOLL 3 115 115KV'	75	-0.64896	WERE	'ABILENE ENERGY CENTER 115KV'	40	0.02013	-0.66909	
WERE	'KNOLL 3 115 115KV'	75	-0.64896	WERE	JEFFREY ENERGY CENTER 345KV	940	0.00657	-0.65553	
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	
WERE	'KNOLL 3 115 115KV'	75	-0.64896	WERE	'GILL ENERGY CENTER 69KV'	45	0.00418	-0.65314	
WERE	'KNOLL 3 115 115KV'	75	-0.64896	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.00397	-0.65293	
WERE	'KNOLL 3 115 115KV'	75	-0.64896	WERE	'LAWRENCE ENERGY CENTER 115KV'	105	0.00392	-0.65288	
WERE	'KNOLL 3 115 115KV'	75	-0.64896	WERE	'LAWRENCE ENERGY CENTER 230KV'	221.8893	0.00429	-0.65325	
WERE	'KNOLL 3 115 115KV'	75	-0.64896	WERE	'TECUMSEH ENERGY CENTER 115KV'	145.8125	0.00402	-0.65298	
WERE	'KNOLL 3 115 115KV'	75	-0.64896	WERE	'WACO 138KV'	17.967	0.00433	-0.65329	

Aggregate Redispatch Amount (MW)

13 13 13

WERE [KNOLL 3 115 115KV] 75 -0.64896[WERE WACO 138KV] Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified. Factor = Source GSF - Sink GSF Redienatch Amount - Pailet Amount / Factor

nt / Factor

Redispatch	Amount	= Relief	Amount /	Fac

Upgrade: Limiting Facility:	LINWOOD - MCWILLIE STREET 138KV CKT 1 LINWOOD - MCWILLIE STREET 138KV CKT 1							
Direction:	From->To							
Line Outage:	HARTS ISLAND - SOUTH SHREVEPORT 138K	CKT 1						
Flowgate:	53422534281534145344612407SP							
Date Redispatch Needed:	6/1/07 - 10/1/07							
Season Flowgate Identified:	2007 Summer Peak							
Coucon nongato idontatod.	2007 Odilinor Foux	Aggregate Relief	1					
Reservation	Relief Amount	Amount						
1235046	4.7	4.7				-		
		Maximum		Sink Control		Maximum		
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor
AEPW	'ARSENAL HILL 69KV'	TS			COGENTRIX 345KV	200		
AEPW	ARSENAL HILL 69KV	75			COGENTRIX 345KV	160		
AEPW	ARSENAL HILL 69KV	75			COMANCHE 138KV	63		
AEPW	ARSENAL HILL 69KV	75			'FITZHUGH 161KV'	30.99999		
AEPW	ARSENAL HILL 69KV	75			'FLINT CREEK 161KV'	30.99999		
AEPW	ARSENAL HILL 69KV	75			'KNOXLEE 138KV'	280.2402		
AEPW	ARSENAL HILL 69KV	75			NORTHEASTERN STATION 138KV	200.2402		
AEPW	ARSENAL HILL 69KV	75			NORTHEASTERN STATION 138KV	400		
AEPW	ARSENAL HILL 69KV	75			'NORTHEASTERN STATION 345KV'	645		
AEPW	'ARSENAL HILL 69KV'	75			OEC 345KV	269		
AEPW	ARSENAL HILL 69KV	75			'RIVERSIDE STATION 138KV'	646		
AEPW	ARSENAL HILL 69KV	75			SOUTHWESTERN STATION 138KV	335		
AEPW	'ARSENAL HILL 69KV'	75			TULSA POWER STATION 138KV	112		
AEPW	ARSENAL HILL 69KV	75			TULSA POWER STATION 138KV	147		
AEPW	ARSENAL HILL 69KV	75			WELEETKA 138KV	70		
AEPW	ARSENAL HILL 69KV	75			'EASTMAN 138KV'	155		
AEPW	'ARSENAL HILL 69KV'	75			LEBROCK 345KV	515		
AEPW	ARSENAL HILL 69KV	75			PIRKEY GENERATION 138KV	475		
AEPW	'ARSENAL HILL 69KV'	75			WELSH 345KV	990		
AEPW	'ARSENAL HILL 69KV'	75			WILKES 138KV	346.8935		
AEPW	ARSENAL HILL 69KV	75			WILKES 345KV	340.0933		
AEPW	LIEBERMAN 138KV	137			COGENTRIX 345KV	200		
AEPW	LIEBERMAN 138KV	137			COMANCHE 138KV	160		
AEPW	LIEBERMAN 138KV	137			COMANCHE 69KV	63		
AEPW	LIEBERMAN 138KV	137			FITZHUGH 161KV	30,99999		
AEPW	LIEBERMAN 138KV	137			'FLINT CREEK 161KV'	420		
AEPW	LIEBERMAN 138KV	137			'KNOXLEE 138KV'	280.2402		
AEPW	LIEBERMAN 138KV	137			NORTHEASTERN STATION 138KV	200.2402		
AEPW	LIEBERMAN 138KV	137			NORTHEASTERN STATION 138KV	400		
AEPW	LIEBERMAN 138KV	137			'NORTHEASTERN STATION 345KV'	645		
AEPW	LIEBERMAN 138KV	137			OEC 345KV	269		
AEPW	LIEBERMAN 138KV	137			'RIVERSIDE STATION 138KV'	646		
AEPW	LIEBERMAN 138KV	137			SOUTHWESTERN STATION 138KV	335		
AEPW	LIEBERMAN 138KV	137			TULSA POWER STATION 138KV	112		
AEPW	LIEBERMAN 138KV	137			TULSA POWER STATION 138KV	147		
AEPW	LIEBERMAN 138KV	137			WELEETKA 138KV	70		
AEPW	LIEBERMAN 138KV	137			'EASTMAN 138KV'	155		
AEPW	LIEBERMAN 138KV	137			LEBROCK 345KV	515		
AEPW	LIEBERMAN 138KV	137			WELSH 345KV	990		
AEPW	LIEBERMAN 138KV	137			WELSIT 345KV	311		
AEPW	LIEBERMAN 138KV	137			PIRKEY GENERATION 138KV	475		
AEPW	LIEBERMAN 138KV	137			WILKES 138KV	346.8935		
AEPW	ARSENAL HILL 69KV	137	1 -0.21190	AEPW	'LIEBERMAN 138KV'	040.0930	-v.v207	-0.1032

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 TRANSFORME	D CKT 4							
Limiting Facility:	MUSTANG STATION 230/115KV TRANSFORME MUSTANG STATION 230/115KV TRANSFORME								
Direction:	From->To	IN ONT I							
Line Outage:	YOAKUM COUNTY INTERCHANGE 230/115KV								
			JATT						
Flowgate:	51966519691518915189011107SP								
	6/1/07 - 10/1/07								
Season Flowgate Identified:	2007 Summer Peak								
		Aggregate Relief							
Reservation	Relief Amount	Amount							
1090487	42.2	42.2							
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source						GSF		
SPS	Source 'MADOX 115KV'		GSF	Area			GSF 0.24436	Factor	Redispatch Amount (MW)
		Increment(MW)	GSF	Area SPS	Sink	Decrement(MW)	0.24436	Factor -0.36944	Redispatch Amount (MW) 114
SPS SPS	'MADOX 115KV'	Increment(MW) 75 50.00977	GSF -0.12508 -0.1221	Area SPS SPS	Sink 'MUSTG5 118.0 230KV' 'MUSTG5 118.0 230KV'	Decrement(MW) 360	0.24436	Factor -0.36944	Redispatch Amount (MW) 114
SPS SPS	MADOX 115KV' CUNNINGHAM 115KV' ximum Increment were determine from the Souce a	Increment(MW) 75 50.00977	GSF -0.12508 -0.1221	Area SPS SPS	Sink 'MUSTG5 118.0 230KV' 'MUSTG5 118.0 230KV'	Decrement(MW) 360	0.24436	Factor -0.36944	Redispatch Amount (MW) 114
SPS SPS Maximum Decrement and Ma	MADOX 115KV' CUNNINGHAM 115KV' ximum Increment were determine from the Souce a SF	Increment(MW) 75 50.00977	GSF -0.12508 -0.1221	Area SPS SPS	Sink 'MUSTG5 118.0 230KV' 'MUSTG5 118.0 230KV'	Decrement(MW) 360	0.24436	Factor -0.36944	Redispatch Amount (MW) 114

imiting Facility: Direction:	MUSTANG STATION 230/115KV TRANSFORME From->To								
ine Outage:	YOAKUM COUNTY INTERCHANGE 230/115KV	TRANSFORMER (CKT 1						
lowgate:	51966519691518915189011407AP								
Date Redispatch Needed:	Starting 2007 4/1 - 6/1 Until EOC of Upgrade								
Season Flowgate Identified:	2007 April Minimum								
		Aggregate Relief]						
Reservation	Relief Amount	Amount							
109048	7 24.7	24.7							
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF		Amount (M)
SPS	'MUSTANG 115KV'	150			'MUSTG5 118.0 230KV'	125		-0.68695	
SPS	'MUSTANG 115KV'	150			'TOLK 230KV'	1014.384		-0.46054	
SPS	'MUSTANG 115KV'	150			BLACKHAWK 115KV	220		-0.44797	
SPS	'MUSTANG 115KV'	150			CZ 69KV	35		-0.44748	<u> </u>
SPS SPS	'MUSTANG 115KV'	150			HARRINGTON 230KV	706		-0.44804 -0.44566	
SPS SPS	'MUSTANG 115KV' 'MUSTANG 115KV'	150 150			'SAN JUAN 230KV' 'STEER WATER 115KV'	54		-0.44566	
SPS	MUSTANG 115KV MUSTANG 115KV	150			WILWIND 230KV	72		-0.44767	
SPS	MUSTANG 115KV	150			JONES 230KV	104		-0.45007	
SPS	MUSTANG 115KV	150			LP-BRND2 69KV	49.53857		-0.43061	
SPS	MUSTANG 115KV	150			CUNNINGHAM 230KV	49.53657		-0.42941	
SPS	CUNNINGHAM 115KV	71	-0.44259		'MUSTG5 118.0 230KV'	125		-0.41691	
SPS	CUNNINGHAM 115KV	110			'MUSTG5 118.0 230KV'	125		-0.36646	
SPS	'MADOX 115KV'	193			'MUSTG5 118.0 230KV'	125		-0.36944	
SPS	CUNNINGHAM 230KV	250			'MUSTG5 118.0 230KV'	125		-0.27004	
SPS	JONES 230KV	382			'MUSTG5 118.0 230KV'	125		-0.25634	
SPS	LP-BRND2 69KV	182.4614			'MUSTG5 118.0 230KV'	125		-0.25754	
SPS	PLANTX 115KV	253			'MUSTG5 118.0 230KV'	125		-0.23671	
SPS	'PLANTX 230KV'	189			'MUSTG5 118.0 230KV'	125		-0.2282	
SPS	TOLK 230KV	65.61575			'MUSTG5 118.0 230KV'	125		-0.22641	
SPS	'MADOX 115KV'	193			'TOLK 230KV'	1014.384		-0.14303	
SPS	CUNNINGHAM 115KV	71	-0.1221		TOLK 230KV	1014.384		-0.14005	
SPS	CUNNINGHAM 115KV	110			TOLK 230KV	1014.384		-0.14005	
SPS	'MADOX 115KV'	193			WILWIND 230KV	72		-0.13256	
SPS	'MADOX 115KV'	193	-0.12508	SPS	'HARRINGTON 230KV'	706	0.00545	-0.13053	
SPS	'MADOX 115KV'	193	-0.12508	SPS	'BLACKHAWK 115KV'	220	0.00538	-0.13046	
SPS	CUNNINGHAM 115KV	71	-0.1221	SPS	WILWIND 230KV	72	0.00748	-0.12958	
SPS	CUNNINGHAM 115KV	110			WILWIND 230KV	72		-0.12958	
SPS	CUNNINGHAM 115KV	71	-0.1221	SPS	'BLACKHAWK 115KV'	220	0.00538	-0.12748	
SPS	CUNNINGHAM 115KV	110			'BLACKHAWK 115KV'	220		-0.12748	
SPS	CUNNINGHAM 115KV	71	-0.1221		'HARRINGTON 230KV'	706		-0.12755	
SPS	CUNNINGHAM 115KV	110			'HARRINGTON 230KV'	706		-0.12755	
SPS	'MADOX 115KV'	193			'JONES 230KV'	104		-0.1131	
SPS	CUNNINGHAM 115KV	110			JONES 230KV	104		-0.11012	
SPS	CUNNINGHAM 230KV	250	-0.02568	SPS	'TOLK 230KV'	1014.384	0.01795	-0.04363	

Upgrade:	MUSTANG STATION 230/115KV TRANSFORME								
Limiting Facility:	MUSTANG STATION 230/115KV TRANSFORME	R 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		-						
		Aggregate Relief							
Reservation	Relief Amount	Amount							
1090487	2.2	2.2							
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source		GSF		Sink	Decrement(MW)	GSF		Amount (MW)
SPS	'CUNNINGHAM 115KV'	71			'MUSTG5 118.0 230KV'	210		-0.36646	
SPS	'MADOX 115KV'	75			'MUSTG5 118.0 230KV'	210		-0.36944	
SPS	'CARLSBAD 69KV'	18			'MUSTG5 118.0 230KV'	210		-0.28359	;
SPS	'CZ 69KV'	4	0.00489		'MUSTG5 118.0 230KV'	210		-0.23947	
SPS	'HARRINGTON 230KV'	360			'MUSTG5 118.0 230KV'	210		-0.23892	
SPS	'HUBRCO2 69KV'	6	0.00538	SPS	'MUSTG5 118.0 230KV'	210	0.24436	-0.23898	
SPS	'LP-BRND2 69KV'	152	-0.01318	SPS	'MUSTG5 118.0 230KV'	210	0.24436	-0.25754	
SPS	'MOORE COUNTY 115KV'	48	0.00567	SPS	'MUSTG5 118.0 230KV'	210	0.24436	-0.23869	
SPS	'NICHOLS 115KV'	107	0.00525	SPS	'MUSTG5 118.0 230KV'	210	0.24436	-0.23911	
SPS	'NICHOLS 230KV'	113.3726	0.00538	SPS	'MUSTG5 118.0 230KV'	210	0.24436	-0.23898	
SPS	'PLANTX 115KV'	48	0.00765	SPS	'MUSTG5 118.0 230KV'	210		-0.23671	
SPS	'RIVERVIEW 69KV'	23	0.00538	SPS	'MUSTG5 118.0 230KV'	210	0.24436	-0.23898	
SPS	'SIDRCH 69KV'	6	0.00538	SPS	'MUSTG5 118.0 230KV'	210		-0.23898	
SPS	'TOLK 230KV'	65.29117	0.01795	SPS	'MUSTG5 118.0 230KV'	210		-0.22641	10
SPS	'TUCUMCARI 115KV'	15	0.0126	SPS	'MUSTG5 118.0 230KV'	210	0.24436	-0.23176	1
SPS	'MADOX 115KV'	75	-0.12508	SPS	'TOLK 230KV'	1014.709	0.01795	-0.14303	1:
SPS	'CUNNINGHAM 115KV'	71	-0.1221	SPS	'CAPROCK 115KV'	79.99996	0.0126	-0.1347	1
SPS	'CUNNINGHAM 115KV'	71			'PLANTX 230KV'	189		-0.13825	10
SPS	'CUNNINGHAM 115KV'	71	-0.1221	SPS	'TOLK 230KV'	1014.709	0.01795	-0.14005	1
SPS	'MADOX 115KV'	75	-0.12508	SPS	'CAPROCK 115KV'	79.99996	0.0126	-0.13768	1
SPS	'MADOX 115KV'	75	-0.12508	SPS	'PLANTX 230KV'	189	0.01615	-0.14123	1
SPS	CUNNINGHAM 115KV	71			'HARRINGTON 230KV'	706	0.00544	-0.12754	1
SPS	CUNNINGHAM 115KV	71			'NICHOLS 230KV'	130.6274	0.00538	-0.12748	1

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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	'MADOX 115KV'	75	-0.12508	SPS	'HARRINGTON 230KV'	706	0.00544	-0.13052	17
SPS	'MADOX 115KV'	75	-0.12508	SPS	'NICHOLS 230KV'	130.6274	0.00538	-0.13046	17
SPS	'MADOX 115KV'	75	-0.12508	SPS	'PLANTX 115KV'	205	0.00765	-0.13273	17
SPS	'MADOX 115KV'	75	-0.12508	SPS	'SAN JUAN 230KV'	119.9999	0.00307	-0.12815	17
SPS	'MADOX 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	'MADOX 115KV'	75	-0.12508	SPS	JONES 230KV	486	-0.01198	-0.1131	20
SPS	'MADOX 115KV'	75	-0.12508	SPS	'LP-BRND2 69KV'	80	-0.01318	-0.1119	20
SPS	'MADOX 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 Maximum Decrement	'LP-BRND2 69KV'	152	-0.01318	SPS	'TOLK 230KV'	1014.709	0.01795	-0.03113	71

Maximum Decrement and Maximum Increme 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 foll - 12/1 Until EOC of Upgrade
Season Flowgate Identified: 2007 Fall Peak Aggregate Relief Amount Relief Amount Reservation

Source Control Area	Source	Maximum Increment(MW)		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	9
SPS	CUNNINGHAM 115KV	110	-0.21032	SPS	'MUSTG5 118.0 230KV'	210	0.25702	-0.46734	. 9
SPS	'MADOX 115KV'	102.3579	-0.21294	SPS	'MUSTG5 118.0 230KV'	210	0.25702	-0.46996	
SPS	CUNNINGHAM 230KV	306	-0.16698		'MUSTG5 118.0 230KV'	210			
SPS	'NICHOLS 115KV'	213	0.00271		'MUSTG5 118.0 230KV'	210		-0.25431	16
SPS	'NICHOLS 230KV'	244	0.0028	SPS	'MUSTG5 118.0 230KV'	210	0.25702	-0.25422	
SPS	'PLANTX 115KV'	253	0.0048		'MUSTG5 118.0 230KV'	210	0.25702		
SPS	TOLK 230KV	60.2673	0.00822	SPS	'MUSTG5 118.0 230KV'	210	0.25702	-0.2488	16
SPS	'PLANTX 230KV'	189	0.0095	SPS	'MUSTG5 118.0 230KV'	210	0.25702	-0.24752	17
SPS	'MADOX 115KV'	102.3579			'TOLK 230KV'	1019.733	3 0.00822	-0.22116	
SPS	CUNNINGHAM 115KV	71			TOLK 230KV	1019.733		-0.21854	19
SPS	CUNNINGHAM 115KV	110	-0.21032	SPS	'TOLK 230KV'	1019.733		-0.21854	19
SPS	'MADOX 115KV'	102.3579			'BLACKHAWK 115KV'	220		-0.21574	
SPS	'MADOX 115KV'	102.3579	-0.21294	SPS	'HARRINGTON 230KV'	1066	6 0.00284	-0.21578	19
SPS	'MADOX 115KV'	102.3579	-0.21294	SPS	WILWIND 230KV	160	0.00387	-0.21681	19
SPS	'MADOX 115KV'	102.3579	-0.21294	SPS	'STEER WATER 115KV'	79.94999	0.00262	-0.21556	19
SPS	CUNNINGHAM 115KV	71	-0.21032	SPS	WILWIND 230KV	160	0.00387	-0.21419	19
SPS	CUNNINGHAM 115KV	110	-0.21032	SPS	WILWIND 230KV	160	0.00387	-0.21419	19
SPS	CUNNINGHAM 115KV	71	-0.21032	SPS	'BLACKHAWK 115KV'	220	0.0028	-0.21312	19
SPS	CUNNINGHAM 115KV	110	-0.21032	SPS	'BLACKHAWK 115KV'	220	0.0028	-0.21312	19
SPS	CUNNINGHAM 115KV	71	-0.21032	SPS	'HARRINGTON 230KV'	1066	6 0.00284	-0.21316	19
SPS	CUNNINGHAM 115KV	110	-0.21032	SPS	'HARRINGTON 230KV'	1066	6 0.00284	-0.21316	19
SPS	CUNNINGHAM 115KV	71	-0.21032	SPS	'STEER WATER 115KV'	79.94999	0.00262	-0.21294	19
SPS	CUNNINGHAM 115KV	110	-0.21032	SPS	'STEER WATER 115KV'	79.94999	0.00262	-0.21294	- 19
SPS	'MADOX 115KV'	102.3579	-0.21294	SPS	'CAPROCK 115KV'	79.94999	-0.00487	-0.20807	20
SPS	'MADOX 115KV'	102.3579	-0.21294	SPS	JONES 230KV	486	6 -0.00528	-0.20766	20
SPS	CUNNINGHAM 115KV	71	-0.21032	SPS	'CAPROCK 115KV'	79.94999	-0.00487	-0.20545	20
SPS	CUNNINGHAM 115KV	110	-0.21032	SPS	'CAPROCK 115KV'	79.94999	-0.00487	-0.20545	
SPS	CUNNINGHAM 115KV	71	-0.21032	SPS	JONES 230KV	486	6 -0.00528	-0.20504	- 20
SPS	CUNNINGHAM 115KV	110	-0.21032	SPS	JONES 230KV	486			- 20
SPS	CUNNINGHAM 230KV	306	-0.16698		'TOLK 230KV'	1019.733			
SPS	'MADOX 115KV'	102.3579			'SAN JUAN 230KV'	120		-0.17518	
SPS	CUNNINGHAM 115KV	110			'SAN JUAN 230KV'	120		-0.17256	
SPS	CUNNINGHAM 230KV	306	-0.16698		'WILWIND 230KV'	160		-0.17085	
SPS	CUNNINGHAM 230KV	306			'HARRINGTON 230KV'	1066		-0.16982	
SPS	CUNNINGHAM 230KV	306			'JONES 230KV'	486		-0.1617	
SPS	CUNNINGHAM 230KV	306			'SAN JUAN 230KV'	120	-0.03776	-0.12922	32
Maximum Decrement and Factor = Source GSF - Si Redispatch Amount = Rel		e and Sink Operating	Points in th	e study mode	els where limiting facility was identified.				

Upgrade: Limiting Facility: Direction:	MUSTANG STATION 230/115KV TRANSFORME MUSTANG STATION 230/115KV TRANSFORME From->To	R CKT 1							
Line Outage:	LEA COUNTY INTERCHANGE - YOAKUM COU	NTY INTERCHANC	SE 230KV C	KT 1					
Flowgate:	51966519691522055189111107SH								
Date Redispatch Needed:									
Season Flowgate Identified	d: 2007 Summer Shoulder								
		Aggregate Relief							
Reservation	Relief Amount	Amount							
10904	187 25.3	25.3							
		Maximum		Sink Control		Maximum			Aggregate Redispatch
Source Control Area	Source	Increment(MW)			Sink	Decrement(MW)	GSF	Factor	Amount (MW)
SPS	CUNNINGHAM 115KV	71	-0.21033	SPS	'MUSTG5 118.0 230KV'	210	0.257	-0.46733	
SPS	CUNNINGHAM 115KV	110	-0.21033	SPS	'MUSTG5 118.0 230KV'	210	0.257	-0.46733	
SPS	'MADOX 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'	152	-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	'MADOX 115KV'	75	-0.21295	SPS	'PLANTX 230KV'	189	0.00956	-0.22251	114
SPS	'MADOX 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		'TOLK 230KV'	1027.989	0.00826	-0.21859	116
SPS	'MADOX 115KV'	75	-0.21295		'PLANTX 115KV'	163.5259	0.00502	-0.21797	116
SPS	'MADOX 115KV'	75	-0.21295	SPS	'BLACKHAWK 115KV'	220	0.00288	-0.21583	117

SPS	'MADOX 115KV'	75	-0.21295 SPS	'HARRINGTON 230KV'	1066	0.00292	-0.21587	117
SPS	'MADOX 115KV'	75	-0.21295 SPS	'NICHOLS 115KV'	82	0.0028	-0.21575	117
SPS	'MADOX 115KV'	75	-0.21295 SPS	'STEER WATER 115KV'	79.98182	0.00271	-0.21566	117
SPS	'MADOX 115KV'	75	-0.21295 SPS	'WILWIND 230KV'	159.9636	0.00395	-0.2169	117
SPS	CUNNINGHAM 115KV	71	-0.21033 SPS	'PLANTX 115KV'	163.5259	0.00502	-0.21535	118
SPS	CUNNINGHAM 115KV	110	-0.21033 SPS	'PLANTX 115KV'	163.5259	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	'MADOX 115KV'	75	-0.21295 SPS	'CAPROCK 115KV'	79.98182	-0.00481	-0.20814	122
SPS	'MADOX 115KV'	75	-0.21295 SPS	JONES 230KV	486	-0.00544	-0.20751	122
SPS	'MADOX 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	'MADOX 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'	163.5259	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		'SAN JUAN 230KV'	119.9727	-0.03772	-0.12927	196
Maximum Decrement a	and Maximum Increment were determine from the So	uce and Sink Operating		odels where limiting facility was identified.				
Factor - Source CSE								

Maximum Decrement and Maximum Increme Factor = Source GSF - Sink GSF Redispatch Amount = Relief Amount / Factor

Upgrade:	/USTANG STATION 230/115KV TRANSFORMER CKT 1										
Limiting Facility:	MUSTANG STATION 230/115KV TRANSFORME	R CKT 1									
Direction:	From->To										
Line Outage:	LEA COUNTY INTERCHANGE - YOAKUM COUNTY	VTY INTERCHANC	GE 230KV C	KT 1							
Flowgate:	51966519691522055189111407AP										
Date Redispatch Needed:	Starting 2007 4/1 - 6/1 Until EOC of Upgrade										
Season Flowgate Identified:	2007 April Minimum										
		Aggregate Relief]								
Reservation	Relief Amount	Amount									
1090487	41.8	41.8	1								
					Γ						
		Maximum		Sink Control	L						
Source Control Area	Source	Increment(MW)	GSF	Area	\$						
SPS	'MUSTANG 115KV'	150	-0.38901	SPS	F						
SPS	'CUNNINGHAM 115KV'	71	-0.21033	SPS	F						
SPS	CUNNINGHAM 115KV	110	-0.21033	SPS	Г						
SPS	'MADOX 115KV'	193	-0.21295	SPS	F						
SPS	'CUNNINGHAM 230KV'	250	-0.16699	SPS	F						
SPS	'MUSTANG 115KV'	150	-0.38901	SPS	F						
0.00											

SPS CUNNINGHAM 115KV T1 -0.21033 SPS MUSTGS 118.0 220KV 125 0.257 -0.46733 89 SPS CUNNINGHAM 115KV 110 -0.21033 SPS MUSTGS 118.0 220KV 125 0.257 -0.46995 89 SPS CUNNINGHAM 20XV 125 0.257 -0.4299 99 SPS MUSTANG 115KV 150 -0.38901 SPS 1014.344 0.00827 -0.3272 105 SPS MUSTANG 115KV 150 -0.38901 SPS 10014.344 0.00228 -0.32921 105 SPS MUSTANG 115KV 150 -0.38901 SPS 10014.344 0.00228 -0.3912 107 SPS MUSTANG 115KV 150 -0.38901 SPS 1004.230KV 706 0.00227 -0.3917 107 SPS MUSTANG 115KV 150 -0.38901 SPS 1004.230KV 706 0.00271 -0.39172 107 SPS	1090487	41.8	41.8							
Source Increment(MW) GSF Increment(MW) GSF Factor Amount (MW) SPR MUSTANG 115KV 150 0.39801 SPR MUSTG5 118.0 230KV 125 0.257 0.464733 GPR SPR CUNNINGHAM 115KV 110 0.21033 SPR MUSTG5 118.0 230KV 125 0.257 0.464733 GPR SPR CUNNINGHAM 115KV 1101 0.21033 SPR MUSTG5 118.0 230KV 125 0.257 0.44933 GPR SPR CUNNINGHAM 20KV 150 0.39901 SPR MUSTG5 118.0 230KV 1125 0.257 0.44939 GPR SPR MUSTANG 115KV 150 0.39901 SPR TULK 230KV 1014384 0.00227 0.39728 1105 SPR MUSTANG 115KV 150 0.39901 SPR TULK 230KV 706 0.00221 0.3913 107 SPR MUSTANG 115KV 150 0.39901 SPR STEER WATER 115KV 28 0.00221 0.39172 3107										
SPS MUSTANG 115KV 150 -0.38901 SPS MUSTGS 118.0 208VY 125 0.2470 0.64601 65 SPS CUNNINGHAM 115KV 110 -0.21033 SPS MUSTGS 118.0 208VY 125 0.257 -0.46733 SPS SPS MADOX 115KV 110 -0.21235 SPS MUSTGS 118.0 208VY 125 0.257 -0.46733 SPS SPS MADX 115KV 110 -0.21285 SPS MUSTGS 118.0 208VY 125 0.2377 -0.42398 GPS SPS MUSTANG 115KV 150 -0.38901 SPS MUSTGS 118.0 208VY 125 0.2377 -0.42398 GPS MUSTANG 115KV 150 -0.38901 SPS MUSTANG 115KV 220 0.00389 -0.33972 1007 SPS MUSTANG 115KV 150 -0.38901 SPS MUSTANG 115KV 200 -0.39172 1077 SPS MUSTANG 115KV 150 -0.38901 SPS MUSTGS					Sink Control					
SPS CUNNINGHAM 115KV T1 -0.21033 SPS MUSTOS 118.0 220KV 125 0.257 0.46733 89 SPS CUNNINGHAM 115KV 110 -0.21033 SPS MUSTOS 118.0 220KV 125 0.257 -0.46996 89 SPS CUNNINGHAM 20XV 125 0.257 -0.4299 99 SPS MUSTAND 115V/ 150 -0.38901 PS T0.K 20XV 1014.384 0.00827 -0.39728 105 SPS MUSTAND 115V/ 150 -0.38901 PS MUSTAND 115V/ 20.0306 -0.39891 107 SPS MUSTAND 115V/ 150 -0.38901 PS MUSTAND 150 -0.38901 107 706 0.00227 -0.39172 1070 SPS MUSTANG 115V/ 150 -0.38901 PS MUSTAND 150 -0.38901 PS -0.00227 -0.3517 1090 -0.39172 1										
SPS CUNNINGHAM 115KV 110 -0.21235 SPS MUSTGS 118.0.230KV 125 0.257 0.46733 89 SPS MDXOX 115KV 139 -0.21295 SPS MUSTGS 118.0.230KV 125 0.257 -0.46733 89 SPS MUSTANG 15KV 250 -0.1689 SPS MUSTGS 118.0.230KV 125 0.257 -0.42399 89 SPS MUSTANG 115KV 150 -0.38901 SPS VILWIND 230KV 72 0.0036 -0.33927 106 SPS MUSTANG 115KV 150 -0.38901 SPS VILWIND 230KV 72 0.00282 -0.3913 107 SPS MUSTANG 115KV 150 -0.38901 SPS MUSTANG 156 -0.38901 SPS 100 -0.38971 106 -0.38971 107 SPS MUSTANG 115KV 150 -0.38901 SPS 100 -0.38971 106 -0.38971 106 -0.38971 <t< td=""><td>SPS</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	SPS									
SPS MADOX 115KV 193 -0.2128 (SPS MUSTGS 118.0 230KV 125 0.257 0.46995 98 SPS MUSTANG 115KV 150 -0.38901 (SPS TOLK 230KV 1014.384 0.0027 -3.39728 105 SPS MUSTANG 115KV 150 -0.38901 (SPS VII. WIND 230KV 72 0.00386 -0.32972 105 SPS MUSTANG 115KV 150 -0.38901 (SPS VII. WIND 230KV 720 0.00286 0.32972 105 SPS MUSTANG 115KV 150 -0.38901 (SPS HARENTON 230KV 706 0.00221 0.39163 107 SPS MUSTANG 115KV 150 -0.38901 (SPG STEER WATER 115KV 36 0.00621 -0.3267 100 SPS MUSTANG 115KV 150 -0.38901 (SPG IDPRIND2 60KV 49.5387 0.00644 -0.32827 100 SPS MUSTANG 115KV 150 -0.38901 (SPG IDPRIND2 60KV 49.5387 0.00644 -0.32827 100 SPS MUSTANG 115KV </td <td>SPS</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	SPS									
SPS CUNNINGHAM 230KV 250 -0.6299 SPS MUSTAG 115KV 125 0.237 0.42390 99 SPS MUSTAMG 115KV 150 -0.38901 SPS TULK 230KV 1014 344 0.0027 -0.329728 1005 SPS MUSTAMG 115KV 150 -0.38901 SPS BLACKHAWK 115KV 220 0.00286 -0.38207 1060 SPS MUSTAMG 115KV 150 -0.38901 SPS HARRINGTON 230KV 706 0.00221 -0.38102 107 SPS MUSTAMG 115KV 150 -0.38901 SPS STEER WATER 115KV 36 0.00221 -0.3827 109 SPS MUSTAMG 115KV 150 -0.38901 SPS STER WATER 115KV 49.33857 100644 -0.3827 109 SPS MUSTAMG 115KV 150 -0.38901 SPS SAN JUAN 230KV 49.33857 10064 -0.3827 109 SPS JONES 230KV 182 40.00544 SPS SAN JUAN 230KV 125	SPS									
SPS NUSTANG 115KV' 156 -0.38901 SPS VULWIND 230KV' 1014 344 0.00827 -0.38728 105 SPS MUSTANG 115KV' 150 -0.38901 SPS VULWIND 230KV' 72 0.00386 -0.3818 107 SPS MUSTANG 115KV' 150 -0.38901 SPS BLACKHAWK 115KV' 720 0.00286 -0.3818 107 SPS MUSTANG 115KV' 150 -0.38901 SPS NUSTANG 115KV' 706 0.00227 -0.38172 107 SPS MUSTANG 115KV' 150 -0.38901 SPS TUPERNDC 69KV' 49.53857 -0.00644 -0.38377 109 SPS MUSTANG 115KV' 150 -0.38901 SPS SAN JUAN 230KV' 54 -0.0371 -0.33129 119 SPS JONES 230KV 382 -0.00644 SPS SAN JUAN 230KV' 125 0.257 -0.22304 159 SPS PLANTX 115KV 282 -0.00522 SPS MUSTAS 118.0 20267	SPS									
SPS MUSTANG 115KV 150 0.38901 SPS WULWIND 230KV 72 0.03996 0.03997 106 SPS MUSTANG 115KV 150 0.38901 SPS BLACKHAWK 115KV 200 0.0288 0.03918 107 SPS MUSTANG 115KV 150 0.38901 SPS HARRINGTON 230KV 706 0.00221 0.39172 107 SPS MUSTANG 115KV 150 0.38901 SPS JONES 230KV 104 -0.00544 0.3327 109 SPS MUSTANG 115KV 150 0.38901 SPS JONES 230KV 404 -0.00544 -0.33297 108 SPS MUSTANG 115KV 150 0.38901 SPS JONES 230KV 404 -0.00544 -0.33297 109 SPS JONES A30KV 182 40.0044 SPS MUARTANG 115KV -0.36129 119 SPS JONES 230KV 182 0.0257 NUARTANG 115KV 125 0.257 -0.26244 159 SPS<	SPS	'CUNNINGHAM 230KV'	250	-0.16699	SPS	'MUSTG5 118.0 230KV'	125	0.257	-0.42399	99
SPS MUSTANG 115KV' 150 0.38901 SPS BLACKHAWK 115KV' 220 0.0028 0.039189 107 SPS MUSTANG 115KV' 150 0.38901 SPS STEER WATER 115KV' 706 0.00221 -0.39172 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' 49.53867 -0.00644 -0.38297 109 SPS MUSTANG 115KV' 150 0.38901 SPS TSPND2 69KV' 49.53867 -0.00644 -0.38297 109 SPS MUSTANG 115KV' 150 0.38901 SPS TSAN JUAN 230KV' 49.53867 -0.00644 -0.38297 109 SPS JUNES 230KV' 382 -0.00544 SPS MUSTG5 118.0 230KV' 125 0.257 -0.25844 159 SPS IL-BRND2 69KV' 182.4614 -0.00642 SPS MUSTG5 118.0 230KV 125 0.257 -0.24873 166 <td< td=""><td>SPS</td><td></td><td></td><td></td><td></td><td></td><td>1014.384</td><td></td><td></td><td></td></td<>	SPS						1014.384			
SPS MUSTANG 115KV' 150 0.38901 SPS HARRINGTON 230KV 706 0.00222 0.39193 107 SPS MUSTANG 115KV' 150 0.38901 SPS STEER WATER 115KV' 36 0.00221 0.39172 107 SPS MUSTANG 115KV' 150 0.38901 SPS LP-BRND2 69KV 49.53867 0.00644 0.38297 109 SPS MUSTANG 115KV' 150 0.38901 SPS LP-BRND2 69KV 49.53867 0.00644 0.38297 109 SPS MUSTANG 115KV 150 0.38901 SPS MUSTOS 118.0 230KV 125 0.257 0.26244 159 SPS LP-BRND2 69KV 182.414 0.00602 SPS MUSTGS 118.0 230KV 125 0.257 0.26214 159 SPS PLANTX 115KV 253 0.00827 SPS MUSTGS 118.0 230KV 125 0.257 0.24743 169 SPS TOLK 230KV 168 0.00827 SPS	SPS	'MUSTANG 115KV'	150	-0.38901	SPS	'WILWIND 230KV'	72	0.00396	-0.39297	106
SPS MUSTANG 115KV' 150 0.38901 SPS STEER WATER 115KV' 36 0.00271 0.39172 107 SPS MUSTANG 115KV' 150 0.38901 SPS 1005E 320KV' 104 -0.00644 -0.38297 109 SPS MUSTANG 115KV' 150 0.38901 SPS SAN JUAN 230KV' 49.53867 -0.00644 -0.38297 109 SPS MUSTANG 115KV' 150 -0.38901 SPS SAN JUAN 230KV' 54 -0.0372 -0.55129 119 SPS JONES 230KV 38201 SPS MUSTG5 118.0 230KV' 125 0.227 -0.26244 159 SPS TOLK 230KV 182.4614 -0.06942 SPS MUSTG5 118.0 230KV 125 0.227 -0.22844 169 SPS TOLK 230KV 189 0.00827 SPS MUSTG5 118.0 230KV 125 0.227 -0.22483 168 SPS MADX 115KV 193 0.00827 SPS MUSTG5 118.0	SPS	'MUSTANG 115KV'	150	-0.38901	SPS	'BLACKHAWK 115KV'	220	0.00288	-0.39189	107
SPS MUSTANG 115KV 150 0.38901 SPS UONES 230KV 104 -0.00544 -0.38357 1009 SPS MUSTANG 115KV 150 0.38901 SPS UPEND2 69KV 49.5387 -0.00644 -0.38357 1009 SPS MUSTANG 115KV 150 0.38901 SPS LP-BRND2 69KV 352 -0.00544 -0.38357 -0.00644 -0.38357 109 SPS UDNES 230KV 352 0.00544 SPS MUSTAS 1150 230KV 125 0.2257 -0.26304 159 SPS TOLK 230KV 182.4614 -0.00602 SPS MUSTG5 118.0 230KV 125 0.2257 -0.26374 158 SPS TOLK 230KV 65.6156 0.00627 SPS MUSTG5 118.0 230KV 125 0.2257 -0.24373 168 SPS TOLK 230KV 1614.344 0.00627 SPS MUSTG5 118.0 230KV 125 0.227 -0.21473 168 SPS TOLK 230KV <	SPS	'MUSTANG 115KV'	150	-0.38901	SPS	'HARRINGTON 230KV'	706	0.00292	-0.39193	107
SPS MUSTANG 115KV' 150 0.38901 SPS LP-BRND2 69KV' 49.53867 0.00604 0.38297 109 SPS MUSTANG 115KV' 150 0.38901 SPS MUSTANG 115KV' 54 0.0072 0.3512 119 SPS JONES 230KV 382 0.00644 SPS MUSTGS 118.0 230KV' 125 0.257 0.26244 159 SPS LP-BRND2 69KV' 182.4614 0.00604 SPS MUSTGS 118.0 230KV 125 0.257 0.26304 159 SPS TOLK 230KV 65.61575 0.006027 SPS MUSTGS 118.0 230KV 125 0.257 0.24873 168 SPS TOLK 230KV 189 0.00827 SPS MUSTGS 118.0 230KV 125 0.257 0.24473 168 SPS MADX 115KV 193 0.00827 SPS TOLK 230KV 1014.384 0.00827 0.21212 199 SPS CUNNINGHAM 115KV' 110 0.21033 SPS<	SPS	'MUSTANG 115KV'	150	-0.38901	SPS	'STEER WATER 115KV'	36	0.00271	-0.39172	107
SPS MUSTANG 115KV' 150 0.38901 SPS SAN JUAN 230KV' 64 -0.0372 -0.35129 119 SPS UDNES 230KV 382 -0.0644 SPS MUSTG5 118.0 230KV' 125 0.227 -0.28204 159 SPS LP-BRND2 69KV' 182.4614 0.00600 SPS MUSTG5 118.0 230KV' 125 0.227 -0.28204 159 SPS TOLK 230KV 253 0.00602 SPS MUSTG5 118.0 230KV' 125 0.227 -0.228198 166 SPS TOLK 230KV 65.61575 0.00697 SPS MUSTG5 118.0 230KV 125 0.227 -0.24713 168 SPS TOLK 230KV 168 0.00697 SPS MUSTG5 118.0 230KV 125 0.227 -0.24743 169 SPS MADX 115KV 193 -0.21033 SPS TOLK 230KV 1014.344 0.00627 -0.2186 191 SPS CUNNINGHAM 115KV' 71 -0.21033 <td< td=""><td>SPS</td><td>'MUSTANG 115KV'</td><td>150</td><td>-0.38901</td><td>SPS</td><td>JONES 230KV</td><td>104</td><td>-0.00544</td><td>-0.38357</td><td>109</td></td<>	SPS	'MUSTANG 115KV'	150	-0.38901	SPS	JONES 230KV	104	-0.00544	-0.38357	109
SPS UONES 230KV 382 0.0044 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 -0.26244 159 SPS 'PLANTX 115KV 253 0.00602 SPS MUSTG5 118.0 230KV 125 0.257 -0.25194 169 SPS TOLK 230KV 65.61675 0.00627 SPS MUSTG5 118.0 230KV 125 0.257 -0.24873 168 SPS TOLK 230KV 168 0.00627 SPS MUSTG5 118.0 230KV 125 0.257 -0.24743 168 SPS TOLK 230KV 1014.384 0.00827 SPS 102.1203 SPS TOLK 230KV 1014.344 0.00827 -0.2186 191 SPS CUNNINGHAM 115KV 1191 -0.21033 SPS TOLK 230KV 706 0.00292 -0.2186 191 SPS CUNNINGHAM 115KV	SPS	'MUSTANG 115KV'	150	-0.38901	SPS	'LP-BRND2 69KV'	49.53857	-0.00604	-0.38297	109
SPS LP-BRND2 69KV 182.4614 0.00004 SPS MUSTG5 118.0 230KV 125 0.227 0.26304 159 SPS PLANTX 115KV 223 0.00004 SPS MUSTG5 118.0 230KV 125 0.227 -0.28304 159 SPS TOLK 230KV 125 0.257 -0.28304 168 SPS TOLK 230KV 65.61575 0.00027 SPS MUSTG5 118.0 230KV 125 0.257 -0.24873 168 SPS TOLK 230KV 1014 444 0.0027 -0.21463 169 SPS CUNNINGHAM 115KV 171 -0.21033 SPS TOLK 230KV 1014.384 0.00627 -0.2166 191 SPS CUNNINGHAM 115KV 193 -0.21285 SPS TOLK 230KV 1014.384 0.00627 -0.2166 191 SPS MADOX 115KV 193 -0.21285 SPS TUNUNIND 230KV 72 0.00366 -0.21491 193 SPS CUNNINGHAM 115KV 71 -0.21033 <sps< td=""> WLWIND 230KV<td>SPS</td><td>'MUSTANG 115KV'</td><td>150</td><td>-0.38901</td><td>SPS</td><td>'SAN JUAN 230KV'</td><td>54</td><td>-0.03772</td><td>-0.35129</td><td>119</td></sps<>	SPS	'MUSTANG 115KV'	150	-0.38901	SPS	'SAN JUAN 230KV'	54	-0.03772	-0.35129	119
SPS PLANTX 115KV' 253 0.0002 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' 168 0.00857 SPS MUSTG5 118.0 230KV' 125 0.257 -0.24873 168 SPS 'PLANTX 230KV' 193 -0.21285 SPS TOLK 230KV' 1014.344 0.00827 -0.22122 189 SPS CUNNINGHAM 115KV' 193 -0.2133 SPS TOLK 230KV 1014.344 0.00827 -0.2146 191 SPS CUNNINGHAM 115KV' 193 -0.21295 SPS TOLK 230KV 702 0.00386 -0.2146 191 SPS MADOX 115KV 193 -0.21295 SPS TOLK 230KV 702 0.00386 -0.21493 195 SPS CUNNINGHAM 115KV' 193 -0.21295 SPS	SPS	JONES 230KV	382	-0.00544	SPS	'MUSTG5 118.0 230KV'	125	0.257	-0.26244	159
SPS TOLK 230KV 125 0.227 -0.24873 166 SPS PLANTX 230KV 189 0.00627 SPS MUSTGS 118.0 230KV 125 0.227 -0.24873 166 SPS PLANTX 230KV 189 0.0067 SPS MUSTGS 118.0 230KV 1014.384 0.00827 -0.22122 189 SPS CUNNINGHAM 115KV 71 -0.2133 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 119 -0.21033 SPS TOLK 230KV 1014.384 0.00827 -0.2166 191 SPS MADOX 115KV 193 -0.21265 SPS TMLWIND 230KV 72 0.00366 -0.21691 193 SPS CUNNINGHAM 115KV 71 -0.21033 SPS WLWIND 230KV 72 0.00386 -0.21429 195	SPS	'LP-BRND2 69KV'	182.4614	-0.00604	SPS	'MUSTG5 118.0 230KV'	125	0.257	-0.26304	159
SPS PLANTX 230KV 189 0.0097 SPS MUSTOS 118.0 230KV 125 0.227 -0.24743 169 SPS MADOX 115KV 193 -0.21295 SPS TOLK 230KV 1014.384 0.00827 -0.21212 189 SPS CUNNINGHAM 115KV 71 -0.21033 SPS TOLK 230KV 1014.384 0.00827 -0.2186 191 SPS MADOX 115KV 110 -0.21033 SPS TOLK 230KV 1014.384 0.00827 -0.2186 191 SPS MADOX 115KV 193 -0.21265 SPS TOLK 230KV 702 0.00392 -0.2186 191 SPS MADOX 115KV 193 -0.21265 SPS TOLK 230KV 706 0.00292 -0.2186 191 SPS MADOX 115KV 193 -0.21265 SPS THWIND 230KV 72 0.00396 -0.21429 195 SPS CUNNINGHAM 115KV 71 -0.21033 SPS WLWIND 230KV 72 0.00288	SPS	'PLANTX 115KV'	253	0.00502	SPS	'MUSTG5 118.0 230KV'	125	0.257	-0.25198	166
SPS MADX 115KV' 193 -0.21295 SPS TOLK 230KV' 1014.384 0.00827 -0.22122 189 SPS CUNNINGHAM 115KV' 71 -0.2133 SPS TOLK 230KV' 1014.384 0.00827 -0.22122 189 SPS CUNNINGHAM 115KV' 71 -0.2133 SPS TOLK 230KV' 1014.384 0.00827 -0.2186 191 SPS MADX 115KV 110 -0.21285 SPS TOLK 230KV' 72 0.00386 -0.21691 193 SPS MADX 115KV 193 -0.21285 SPS TMLWIND 230KV' 72 0.00386 -0.21691 193 SPS CUNNINGHAM 115KV' 171 -0.21033 SPS TWLWIND 230KV' 72 0.00386 -0.21429 195 SPS CUNNINGHAM 115KV' 171 -0.21033 SPS TWLWIND 230KV' 72 0.00386 -0.21429 195 SPS CUNNINGHAM 115KV' 71 -0.21033 SPS TACKHAWK 115KV' 72 <	SPS	'TOLK 230KV'	65.61575	0.00827	SPS	'MUSTG5 118.0 230KV'	125	0.257	-0.24873	168
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 MADOX 115KV 110 -0.21033 SPS TOLK 230KV 72 0.00327 -0.2186 191 SPS MADOX 115KV 193 -0.21295 SPS TUNIND 230KV 706 0.00292 -0.21597 194 SPS CUNNINGHAM 115KV 171 -0.21033 SPS TUNIND 230KV 72 0.00396 -0.21429 195 SPS CUNNINGHAM 115KV 110 -0.21033 SPS WUNIND 230KV 72 0.00386 -0.21429 195 SPS CUNNINGHAM 115KV 71 -0.21033 SPS BLACKHAWK 115KV 220 0.00288 -0.21321 196 SPS CUNNINGHAM 115KV 71 -0.21033 SPS BLACKHAWK 115KV 220 0.00	SPS	'PLANTX 230KV'	189	0.00957	SPS	'MUSTG5 118.0 230KV'	125	0.257	-0.24743	169
SPS CUNNINGHAM 115KV 110 0.21033 SPS TOLK 230KV 1014.384 0.00827 -0.2186 191 SPS MADOX 115KV 193 0.21033 SPS WILWIND 230KV 72 0.00366 -0.2186 191 SPS MADOX 115KV 193 0.21285 SPS WILWIND 230KV 706 0.00292 -0.21567 193 SPS CUNNINGHAM 115KV 71 -0.21033 SPS WILWIND 230KV 72 0.00386 -0.21429 195 SPS CUNNINGHAM 115KV 71 -0.21033 SPS WILWIND 230KV 72 0.00386 -0.21429 195 SPS CUNNINGHAM 115KV 71 -0.21033 SPS BLACKHAWK 115KV 72 0.00288 -0.21321 196 SPS CUNNINGHAM 115KV 71 -0.21033 SPS BLACKHAWK 115KV 220 0.00288 -0.21321 196 SPS CUNNINGHAM 115KV 71 -0.21033 SPS HACKHAWK 115KV 220 0.0	SPS	'MADOX 115KV'	193	-0.21295	SPS	'TOLK 230KV'	1014.384	0.00827	-0.22122	189
SPS MADOX 115KV' 193 -0.21295 SPS WILWIND 230KV' 72 0.00366 -0.21691 193 SPS MADOX 115KV' 193 -0.21295 SPS 'HARRINGTON 230KV' 706 0.00292 -0.21691 193 SPS 'CUNNINGHAM 115KV' 171 -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' 110 -0.21033 SPS WILWIND 230KV' 72 0.00396 -0.21429 195 SPS 'CUNNINGHAM 115KV' 110 -0.21033 SPS BLACKHAWK 115KV' 220 0.00288 -0.2121 196 SPS 'CUNNINGHAM 115KV' 110 -0.21033 SPS HACKHAWK 115KV' 220 0.00282 -0.21325 196 SPS 'CUNNINGHAM 115KV' 711 -0.21033 SPS 'HARRINGTON 230KV'	SPS	CUNNINGHAM 115KV	71	-0.21033	SPS	'TOLK 230KV'	1014.384	0.00827	-0.2186	191
SPS MADOX 115KV' 193 -0.21295 SPS 'HARRINGTON 230KV' 706 0.00222 -0.21587 194 SPS CUNNINGHAM 115KV' 71 -0.21033 SPS WILWIND 230KV' 72 0.00386 -0.21429 195 SPS CUNNINGHAM 115KV' 110 -0.21033 SPS WILWIND 230KV' 72 0.00386 -0.21429 195 SPS CUNNINGHAM 115KV' 71 -0.21033 SPS BLACKHAWK 115KV' 220 0.00288 -0.21321 196 SPS CUNNINGHAM 115KV' 71 -0.21033 SPS BLACKHAWK 115KV' 220 0.00288 -0.21321 196 SPS CUNNINGHAM 115KV' 71 -0.21033 SPS HACKHAWK 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' 711 -0.21033 SPS 'LARRINGTON 230KV'	SPS	CUNNINGHAM 115KV	110	-0.21033	SPS	'TOLK 230KV'	1014.384	0.00827	-0.2186	191
SPS MADOX 115KV' 193 -0.21295 SPS 'HARRINGTON 230KV' 706 0.00222 -0.21587 194 SPS CUNNINGHAM 115KV' 71 -0.21033 SPS WILWIND 230KV' 72 0.00386 -0.21429 195 SPS CUNNINGHAM 115KV' 110 -0.21033 SPS WILWIND 230KV' 72 0.00386 -0.21429 195 SPS CUNNINGHAM 115KV' 71 -0.21033 SPS BLACKHAWK 115KV' 220 0.00288 -0.21321 196 SPS CUNNINGHAM 115KV' 71 -0.21033 SPS BLACKHAWK 115KV' 220 0.00288 -0.21321 196 SPS CUNNINGHAM 115KV' 71 -0.21033 SPS HACKHAWK 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' 711 -0.21033 SPS 'LARRINGTON 230KV'	SPS	'MADOX 115KV'	193	-0.21295	SPS	'WILWIND 230KV'	72	0.00396	-0.21691	193
SPS CUNNINGHAM 115KV 110 -0.21033 SPS WILWIND 230KV 72 0.00366 -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' 110 -0.21033 SPS BLACKHAWK 115KV' 220 0.00282 -0.21321 196 SPS CUNNINGHAM 115KV' 71 -0.21033 SPS THARRINGTON 230KV' 706 0.00282 -0.21325 196 SPS CUNNINGHAM 115KV' 110 -0.21033 SPS THARRINGTON 230KV' 706 0.00282 -0.21325 196 SPS MADOX 115KV 193 -0.21265 SPS 'JONES 230KV' 704 -0.00544 -0.20491 204 SPS CUNNINGHAM 115KV' 71 -0.21033 SPS 'JONES 230KV'	SPS	'MADOX 115KV'	193			'HARRINGTON 230KV'	706	0.00292	-0.21587	194
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 110 -0.21033 SPS BLACKHAWK 115KV 220 0.00288 -0.21321 196 SPS CUNNINGHAM 115KV 71 -0.21033 SPS HARRINGTON 230KV 706 0.00282 -0.21325 196 SPS CUNNINGHAM 115KV 110 -0.21033 SPS HARRINGTON 230KV 706 0.00282 -0.21325 196 SPS MADOX 115KV 110 -0.21033 SPS JONES 230KV 104 -0.00544 -0.20491 204 SPS 'CUNNINGHAM 115KV' 71 -0.21033 SPS JONES 230KV 104 -0.00544 -0.20489 204 SPS 'CUNNINGHAM 115KV' 71 -0.21033 SPS JONES 230KV 104<	SPS	CUNNINGHAM 115KV	71	-0.21033	SPS	'WILWIND 230KV'	72	0.00396	-0.21429	195
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 0.00282 -0.21325 196 SPS CUNNINGHAM 115KV' 110 -0.21033 SPS HARRINGTON 230KV' 706 0.00282 -0.21325 196 SPS CUNNINGHAM 115KV' 110 -0.21295 SPS 100FS 230KV' 706 0.00282 -0.21325 196 SPS YMADOX 115KV 193 -0.21295 SPS 100FS 230KV' 104 -0.00544 -0.20751 201 SPS CUNNINGHAM 115KV' 711 -0.21033 SPS 100FS 230KV' 104 -0.00544 -0.20498 204 SPS CUNNINGHAM 115KV' 110 -0.21033 SPS JONES 230KV' 104 -0.00544 -0.20489 204 SPS CUNNINGHAM 115KV' 110 -0.21033 <	SPS	CUNNINGHAM 115KV	110	-0.21033	SPS	'WILWIND 230KV'	72	0.00396	-0.21429	195
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 CUNNINGHAM 115KV 110 -0.21333 SPS HARRINGTON 230KV 706 0.00292 -0.21325 196 SPS MADOX 115KV 110 -0.21033 SPS JONES 230KV 104 -0.00544 -0.20499 204 SPS CUNNINGHAM 115KV' 171 -0.21033 SPS JONES 230KV 104 -0.00544 -0.20499 204 SPS CUNNINGHAM 115KV' 110 -0.21033 SPS JONES 230KV 104 -0.00544 -0.20499 204 SPS CUNNINGHAM 15KV' 101 -0.21033 SPS TOLK 230KV 104 -0.00544 -0.2049	SPS	CUNNINGHAM 115KV	71	-0.21033	SPS	'BLACKHAWK 115KV'	220	0.00288	-0.21321	196
SPS CUNNINGHAM 115KV 110 0.21033 SPS HARRINGTON 230KV 706 0.00292 -0.21325 196 SPS MADOX 115KV 193 -0.21285 SPS 'JONES 230KV' 104 -0.00544 -0.20751 201 SPS 'CUNNINGHAM 115KV' 711 -0.21033 SPS 'JONES 230KV' 104 -0.00544 -0.20751 201 SPS 'CUNNINGHAM 115KV' 711 -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 -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 TOLK 230KV	SPS	CUNNINGHAM 115KV	110	-0.21033	SPS	'BLACKHAWK 115KV'	220	0.00288	-0.21321	196
SPS MADOX 115KV' 193 -0.21295 SPS 'JONES 230KV' 104 -0.00544 -0.20751 201 SPS CUNNINGHAM 115KV' 71 -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 115KV' 110 -0.21033 SPS JONES 230KV' 104 -0.00544 -0.20489 204 SPS CUNNINGHAM 230KV' 250 -0.16699 SPS TOLK 230KV' 1014.346 0.00627 -0.17526 238 SPS CUNNINGHAM 230KV' 250 -0.16699 SPS TOLK 230KV' 706 0.00227 -0.17526 238	SPS	CUNNINGHAM 115KV	71	-0.21033	SPS	'HARRINGTON 230KV'	706	0.00292	-0.21325	196
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 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 TOLK 230KV' 706 0.00292 -0.1699 248	SPS	CUNNINGHAM 115KV	110	-0.21033	SPS	'HARRINGTON 230KV'	706	0.00292	-0.21325	196
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 15KV' 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 TOLK 230KV' 706 0.00292 -0.1699 244	SPS	'MADOX 115KV'	193			JONES 230KV	104	-0.00544	-0.20751	201
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 -0.00527 -0.17526 238 SPS 'CUNNINGHAM 230KV' 250 -0.16699 SPS TOLK 230KV' 706 0.00222 -0.16991 246	SPS	CUNNINGHAM 115KV	71				104		-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 TARRINGTON 230KV' 706 0.00232 -0.16991 246	SPS		110							
SPS 'CUNNINGHAM 230KV' 250 -0.16699 SPS 'HARRINGTON 230KV' 706 0.00292 -0.16991 246	SPS								-0.17526	
	SPS									
	SPS									

 SPS
 COUNINGFAM
 200V
 200
 -10699
 SPS
 HARKING TON 20KV

 SPS
 COUNINGFAM
 20KV
 250
 -0.16699
 SPS
 JONES 20KV

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

Upgrade: Limiting Facility: Direction: Line Outage: Flowgate: Date Redispatch Needed: Season Flowgate Identified:	From->To LEA COUNTY INTERCHANGE - YOAKUM COUN 51966519691522055189111407WP 12/1/07 - 4/1/08 2007 Winter Peak	ISTANG STATION 230/115kV TRANSFORMER CKT 1 m->To A COUNTY INTERCHANGE - YOAKUM COUNTY INTERCHANGE 230KV CKT 1 9665 1969 152205519111407WP 1/107 - 4/108 07 Winter Peak Aggregate Relief												
Reservation		Amount												
1090487	15.2	15.2												
									Aggregate					
		Maximum		Sink Control		Maximum			Redispatch					
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)					
SPS	'MUSTANG 115KV'	29	-0.38898	SPS	'MUSTG5 118.0 230KV'	210	0.25703	-0.64601	24					
SPS	'MADOX 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						
SPS	'CUNNINGHAM 230KV'	110	-0.16698	SPS	'MUSTG5 118.0 230KV'	210	0.25703	-0.42401						
SPS	'MUSTANG 115KV'	29	-0.38898	SPS	'TOLK 230KV'	1019.563	0.00822	-0.3972	38					

PS MUSTANG 115KV 22 0.3888 PS BL/CHANK 115KV 220 0.0028 0.3915 33 PS MUSTANG 115KV 22 0.3888 PS 1.448 RM/V115KV 33 0.0025 0.3915 33 PS MUSTANG 115KV 22 0.3888 PS 1.448 RM/V115KV 1.44 0.0025 0.3916 33 PS MUSTANG 115KV 22 0.3888 PS WISTANG 115KV 24 0.3888 PS 1.44 0.0025 0.3916 398 PS MUSTANG 115KV 22 0.3888 PS WISTANG 115KV 24 0.3888 PS 1.0465 2.00025 0.3813 40 PS MUSTANG 115KV 24 0.3888 PS 1.0465 2.00025 0.3813 40 PS MUSTANG 115KV 24 0.0028 PS MUSTANG 115KV 240 0.2027 0.2027 0.2027 0.2027 0.2027 0.2027 0.2027 0.2027 0.2027 0.20	SPS	'CARLSBAD 69KV'	18	0.4254	ene	'MUSTG5 118.0 230KV'	210	0.25703	-0.39243	39
PF MuSTANG 118V 20 -0.3888 [PR V2. BRV 38 0.00231 0.3916 395 PS MUSTANG 118V 20 0.3888 [PR V1.BRNTON 220K 106 0.00221 0.3916 395 PS MUSTANG 118V 20 0.3808 [PR V1.BRNTON 220K 4.0 0.0022 0.3916 395 PS MUSTANG 118V 20 0.3888 [PR V1.BNNTON 220K 4.0 0.0022 0.3916 395 PS MUSTANG 118V 20 0.3888 [PR V1.BNNTON 220K 24 0.0048 0.3812 4.0 PS MUSTANG 118V 20 0.3888 [PR SAN LAN 200V 24 0.0048 0.3912 4.0 0.3912 4.0 0.3912 4.0 0.0017 0.3912 4.0 0.0017 0.3912 4.0 0.0018 PS MUSTANG 118V 4.0 0.0018 PS MUSTANG 118V 7.0 0.2017 0.2017 0.2017 0.2017 0.2017 0.2017 0.2016 0.0017 0.0017<										
PF MLSTANG 118V 28 -0.3888 [PR HARRINGTON 230NV 1086 0.0024 -0.3918 395 PS MLSTANG 118V 28 -0.3888 [PR NUMENTANG 24 0.0028 -0.3316 335 PS MLSTANG 118V 24 -0.3888 [PR NUMENTANG 24 0.0028 -0.3316 335 PS MLSTANG 118V 24 -0.3888 [PR NUMENTANG 24 0.0028 -0.3316 336 PS MLSTANG 118V 24 -0.3888 [PR JAPREQ 66V 24 0.0058 0.3317 40 PS MLSTANG 118V 24 -0.3888 [PR JAPREQ 66V 210 0.2770 -0.2221 63 PS MLSTANG 118V 24 -0.3028 [PR MLSTANG 1180 210 0.2770 -0.2247 68 PS MLORIS SUMMY 21 0.0271 [PR MLSTG 110 210 0.2770 -0.2247 60 PS MLSTANG 118V 21 0.0271 [PR MLSTG 110 23000 </td <td></td>										
PS MUSTANG 118V/ 28 -0.3888 [PS SIDE/CH BWV 14 0.0028 0.39178 33 PS MUSTANG 118V/ 28 -0.3888 [PS TER WATER 118V/ 24 0.0028 -0.3888 33 PS MUSTANG 118V/ 29 -0.3888 PS TUNIND_TAWY 48 0.0028 -0.3888 PS PS MUSTANG 118V/ 29 -0.3888 PS TUNIND_TAWY 48 0.0028 -0.3881 PS MUSTANG 118V/ 29 -0.3888 PS TUNIND_TAWY 60 0.0058 -0.3311 40 PS MUSTANG 118V/ 20 -0.3888 PS TUNIND_TAWY 70 80 -0.0271 -2.84 -0.0281 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>										
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PR MUSTANG 115/V 220 -0.3888 PR SAN_JANG X30V/ 38 -0.3776 -0.3767 -0.3776 -0.3767 -0.36787 -0.3678 MUSTGS 118.0 200V -0.3776 -0.3776 -0.3776 -0.3776 -0.3776 -0.3776 -0.3776 -0.3776 -0.3776 -0.3776 -0.3776 -0.3776	SPS	'MUSTANG 115KV'	29	-0.38898	SPS	JONES 230KV	243	-0.00528	-0.3837	40
SPS JONES 230K/ 243 0.0558 SPS MUSTGS 118.0 230K/ 210 0.25703 0.26231 0.658 SPS MOORE COUNTY 115K/ 48 0.0028 SPS MUSTGS 118.0 230K/ 210 0.25703 0.24241 68 SPS MOORE COUNTY 115K/ 48 0.0028 SPS MUSTGS 118.0 230K/ 210 0.25703 0.24240 60 SPS MUCAL SISK/ 213 0.0028 SPS MUSTGS 118.0 230K/ 210 0.25703 0.24243 60 SPS PLANTX 115K/ 223 0.0028 SPS MUSTGS 118.0 230K/ 210 0.25703 0.24243 60 SPS PLANTX 230K/ 189 0.0003 SPS MUSTGS 118.0 230K/ 210 0.25703 0.24243 61 SPS MUADX 115K/ 0.0484 SPS MUSTGS 118.0 230K/ 210 0.25703 0.24243 61 SPS MUADX 115K/ 0.0482 SPS TOLK 230K/ 100 0.2573 0.24216 60 SPS UNNINGHAM 115K/ 70 0.42102 SPS	SPS	'MUSTANG 115KV'	29	-0.38898	SPS	'LP-BRND2 69KV'	60	-0.00588	-0.3831	40
SPS LD-BIND2 69KV 172 -0.0588 SP6 MUSTGS 118.0.23KV 210 0.2273 -0.22621 -0.58 SPS NUCHOLS 115KV 213 0.0221 SPS MUSTGS 118.0.23KV 210 0.2273 0.22452 60 SPS NUCHOLS 115KV 213 0.0221 SPS MUSTGS 118.0.23KV 210 0.2773 0.22452 60 SPS NUCHOLS 115KV 224 0.0023 SPS MUSTGS 116.0.23KV 210 0.2273 0.22452 60 SPS PUERVEW F8KV 200 0.2023 SPS MUSTGS 116.0.23KV 210 0.2273 0.22452 60 SPS MUSTAKS 115KV 20.4973 0.22452 FS MUSTGS 118.0.23KV 210 0.2273 0.22452 60 SPS MUSTAKG 115KV 80.3449 0.2128 FS MUSTAKG 115KV 109 0.2373 0.24481 61 SPS MUSTAKG 115KV 80.3449 0.2124 SPS TOLK 230KV 109 0.0262 0.2157 77 SPS MADOX	SPS	'MUSTANG 115KV'	29	-0.38898	SPS	'SAN JUAN 230KV'	36	-0.03776	-0.35122	43
PR MOORE COUNTY 115KV 44 0.00286 [PR MUSTGS 118.0 230KV 210 0.23703 0.22407 60 SPS NICHOLS 230KV 213 0.0271 [PS MUSTGS 118.0 230KV 210 0.23703 0.22432 60 SPS PLAITY 115KV 223 0.0002 [PS MUSTGS 118.0 230KV 210 0.23703 0.22423 60 SPS PLAITY 115KV 23 0.0002 [PS MUSTGS 118.0 230KV 210 0.23703 0.22423 60 SPS TOLK 230K' 0.0022 [PS MUSTGS 118.0 230KV 210 0.23703 0.24428 61 SPS TOLK 230K' 0.0022 [PS MUSTGS 118.0 230KV 210 0.23703 0.24428 61 SPS MADOX 115KV 83.3449 0.012244 [PS TULK 230K' 101553 0.0022 [PS 0.0224 216 70 SPS CUNNINGHAM 115KV 88.3449 0.21243<[PS	SPS	JONES 230KV	243	-0.00528	SPS	'MUSTG5 118.0 230KV'	210	0.25703	-0.26231	58
SPS INCHOLS 115KV 213 0.0271 [SPS MUSTGS 118.0 230KV 210 0.23703 0.24342 60 SPS PLANTX 115KV 223 0.0048 [SPS MUSTGS 118.0 230KV 210 0.23703 0.24242 60 SPS PLANTX 115KV 233 0.0048 [SPS MUSTGS 118.0 230KV 210 0.23703 0.24243 60 SPS PLANTX 210KV 0.048 [SPS MUSTGS 116.0 230KV 210 0.23703 0.24243 60 SPS PLANTX 210KV 0.0448 [SPS MUSTGS 116.0 230KV 210 0.25703 0.24243 60 SPS MUSTANIC 115V' 60.3944 10.0822 [SPS TUCK 230KV 101 0.26703 0.24811 60 SPS CUNNINGHAM 115V' 70 0.2428 [SPS TUCK 230KV 1019 [S0.00282 0.2724 70 SPS MADOX 115KV 83.39449 0.21248 [SPS TUCK 230KV 1019 [S0.00282 0.21247 70 SPS MADOX 115KV 83.39449 0.21248 [SPS TUCK 230KV	SPS	'LP-BRND2 69KV'	172	-0.00588	SPS	'MUSTG5 118.0 230KV'	210	0.25703	-0.26291	58
PR INCHOLS 230KV 244 0.0028 PR INLIGUES 210 0.25703 0.25423 600 SPS PLARTX 115KV 253 0.0048 SPS MUSTGS 118.0.230KV 210 0.25703 0.25423 660 SPS PLARTX 230KV 189 0.0065 SPS MUSTGS 118.0.230KV 210 0.25703 0.25423 660 SPS TOLK 230KV 60.45671 0.06622 SPS MUSTGS 118.0.230KV 210 0.25703 0.24831 661 SPS TOLK 230KV 60.34671 0.06622 SPS TOLK 230KV 1019 6.00024 0.2481 671 SPS MUDTANG 115KV 88.39449 0.2214 SPS TOLK 230KV 1019 0.0022 0.21564 700 SPS MADOX 115KV 88.39449 0.2214 SPS HARDKWK 115KV 200 0.0022 0.21578 70 SPS CUNNNOHAM 115KV 711 0.21032 SPS HARDKWK 115KV 220 0.0028	SPS	'MOORE COUNTY 115KV'	48	0.00296	SPS	'MUSTG5 118.0 230KV'	210	0.25703	-0.25407	60
PR INCHOLS 230KV 244 0.0028 PR INLIGUES 210 0.25703 0.25423 600 SPS PLARTX 115KV 253 0.0048 SPS MUSTGS 118.0.230KV 210 0.25703 0.25423 660 SPS PLARTX 230KV 189 0.0065 SPS MUSTGS 118.0.230KV 210 0.25703 0.25423 660 SPS TOLK 230KV 60.45671 0.06622 SPS MUSTGS 118.0.230KV 210 0.25703 0.24831 661 SPS TOLK 230KV 60.34671 0.06622 SPS TOLK 230KV 1019 6.00024 0.2481 671 SPS MUDTANG 115KV 88.39449 0.2214 SPS TOLK 230KV 1019 0.0022 0.21564 700 SPS MADOX 115KV 88.39449 0.2214 SPS HARDKWK 115KV 200 0.0022 0.21578 70 SPS CUNNNOHAM 115KV 711 0.21032 SPS HARDKWK 115KV 220 0.0028	SPS									
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SPS CUNNIGHAM 115KV' 110 -0.21032 SPS BLACKHAWK 115KV' 220 0.0028 0.21132 71 SPS CUNNIGHAM 115KV' 71 -0.21032 SPS C2.66KV 35 0.00253 -0.21286 71 SPS CUNNIGHAM 115KV' 71 -0.21032 SPS IC2.66KV 35 0.00253 -0.21286 71 SPS CUNNINGHAM 115KV' 71 -0.21032 SPS HARRINGTON 230KV' 10066 0.00224 -0.21286 71 SPS CUNNINGHAM 115KV' 71 -0.21032 SPS STEER WATER 115KV' 24 0.00262 -0.21294 71 SPS CUNNINGHAM 115KV 71 -0.21032 SPS VILWIND 230KV' 48 0.00387 -0.21191 71 SPS CUNNINGHAM 115KV 71 -0.21032 SPS VILWIND 230KV' 48 0.00387 -0.21191 71 SPS CUNNINGHAM 115KV 71 -0.21032 SPS VILWIND 230KV' 48										
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SPS CUNNINGHAM 115KV 110 -0.21032 SPS WILWIND 230KV 48 0.00387 -0.21419 71 SPS MADOX 115KV 88.34449 -0.21032 SPS CelekV 35 0.00253 -0.21419 71 SPS MADOX 115KV 88.34449 -0.21294 SPS C2 GelKV 24 0.00252 -0.21566 71 SPS MADOX 115KV 88.3449 -0.21294 SPS UONES 230KV 243 -0.00252 -0.2056 73 SPS MADOX 115KV 88.3449 -0.21294 SPS UONES 230KV 243 -0.00258 -0.20566 73 SPS CUNNINGHAM 115KV 71 -0.21032 SPS UP-BRND2 69KV 243 -0.00258 -0.20504 74 SPS CUNNINGHAM 115KV 110 -0.21032 SPS UP-BRND2 69KV 243 -0.00258 -0.20444 74 SPS CUNNINGHAM 115KV 110 -0.21032 SPS UP-BRND2 69KV 60 -0.00588 -0.2144 74 SPS CUNNINGHAM 115KV 110<	SPS		110				24	0.00262	-0.21294	
SPS MADOX 115KV 88.39449 -0.21294 SPS CZ 69KV -35 0.00253 -0.21547 71 SPS MADOX 115KV 88.39449 -0.21294 SPS STER WATER 115KV' 24 0.00253 -0.21567 71 SPS MADOX 115KV 88.39449 -0.21294 SPS JONES 230KV 243 -0.0058 -0.20766 73 SPS MADOX 115KV 88.39449 -0.21294 SPS UP-BRND2 69KV 60 -0.00588 -0.20706 73 SPS CUNNINGHAM 115KV T1 -0.21032 SPS UP-BRND2 69KV 243 -0.00528 -0.20504 74 SPS CUNNINGHAM 115KV T1 -0.21032 SPS UP-BRND2 69KV 60 -0.00588 -0.2044 74 SPS CUNNINGHAM 115KV T10 -0.21032 SPS UP-BRND2 69KV 60 -0.00588 -0.2044 74 SPS CUNNINGHAM 115KV 110 -0.16698 SPS TOLK 230KV 104.605 -0.1724 487 SPS CUNNINGHAM 115KV 110	SPS		71				48			
SPS MADOX 115KV 88.39449 -0.21294 SPS STEER WATER 115KV 24 0.00262 -0.21356 771 SPS MADOX 115KV 88.39449 -0.21294 SPS UNDES 230KV 243 -0.00262 -0.21356 771 SPS MADOX 115KV 88.39449 -0.21294 SPS UNDES 230KV 243 -0.00528 -0.2056 73 SPS CUNNINGHAM 115KV 71 -0.21032 SPS UNES 230KV 243 -0.00528 -0.20504 74 SPS CUNNINGHAM 115KV 71 -0.21032 SPS UP-BRND2 69KV 243 -0.00528 -0.20504 74 SPS CUNNINGHAM 115KV 110 -0.21032 SPS UP-BRND2 69KV 2043 -0.00588 -0.20444 74 SPS CUNNINGHAM 115KV 110 -0.21032 SPS UP-BRND2 69KV 60 -0.00588 -0.20144 74 SPS MUSTANG 115KV 110 -0.1038 SPS TOLK 230KV 1014.6055 -0.2164 716 SPS TUNNINGHAM 115KV 110	SPS	'CUNNINGHAM 115KV'								
SPS MADOX 115KV 88.39449 -0.21294 SPS I/ONES 230KV -243 -0.00528 -0.20766 73 SPS MADOX 115KV 88.39449 -0.21294 SPS I/DNES 230KV 60 -0.00528 -0.20766 73 SPS CUNNINGHAM 115KV T1 -0.21032 SPS J/DNES 230KV 243 -0.00528 -0.20504 74 SPS CUNNINGHAM 115KV T1 -0.21032 SPS J/DNES 230KV 243 -0.00528 -0.20504 74 SPS CUNNINGHAM 115KV T1 -0.21032 SPS L/P.BRID2 69KV 60 -0.00588 -0.20504 74 SPS CUNNINGHAM 115KV T1 -0.21032 SPS L/P.BRID2 69KV 60 -0.00588 -0.2044 74 SPS MUDOX 115KV 101 -0.21032 SPS L/P.BRID2 69KV 60 -0.00588 -0.2044 74 SPS MUDOX 115KV 110 -0.16089 SPS TOLK 230KV 104 -0.1752 87 SPS CUNNINGHAM 125KV T1 -0.210	SPS	'MADOX 115KV'	88.39449						-0.21547	
BPS MADOX 115KV 88.39449 -0.21032 SPS LP-BRND2 69KV' 60 -0.00588 -0.20708 73 SPS CUNNINGHAM 115KV' 71 -0.21032 SPS JONES 230KV' 243 -0.00588 -0.20704 74 SPS CUNNINGHAM 115KV' 110 -0.21032 SPS JONES 230KV' 243 -0.00588 -0.20504 74 SPS CUNNINGHAM 115KV' 111 -0.21032 SPS LP-BRND2 69KV' 60 -0.00588 -0.20444 74 SPS CUNNINGHAM 115KV' 110 -0.21032 SPS LP-BRND2 69KV' 60 -0.00588 -0.20444 74 SPS CUNNINGHAM 115KV' 101 -0.21032 SPS LP-BRND2 69KV' 104.6055 -0.02144 -0.74 SPS TWUNINGHAM 115KV' 10 -0.1698 SPS MADX 115KV' 1010 -0.1698 -0.20742 -0.17640 86 SPS TUNINGHAM 115KV 71 -0.21032 SPS SAN JUAN 230KV' <td< td=""><td>SPS</td><td>'MADOX 115KV'</td><td>88.39449</td><td>-0.21294</td><td>SPS</td><td>'STEER WATER 115KV'</td><td>24</td><td>0.00262</td><td>-0.21556</td><td>71</td></td<>	SPS	'MADOX 115KV'	88.39449	-0.21294	SPS	'STEER WATER 115KV'	24	0.00262	-0.21556	71
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 110 -0.21032 SPS L/D-BRND2 69KV 60 -0.00588 -0.20444 74 SPS CUNNINGHAM 115KV 110 -0.21032 SPS L/D-BRND2 69KV 60 -0.00588 -0.20444 74 SPS MUSTANG 115KV 29 -0.3889 SPS MDXX115KV 104 -0.00588 -0.20444 74 SPS CUNNINGHAM 230KV 110 -0.16698 SPS TOLK 230KV 104 0.00522 -0.1752 87 SPS CUNNINGHAM 115KV 71 -0.21032 SPS SAN JUAN 230KV 36 -0.0376 -0.17256 88 SPS CUNNINGHAM 115KV 71 -0.21032 SPS SAN JUAN 230KV 36 -0.03776	SPS	'MADOX 115KV'	88.39449			JONES 230KV	243	-0.00528	-0.20766	73
SPS CUNNINGHAM 115KV 110 -0.21032 SPS JONES 230KV 243 -0.00528 -0.20594 744 SPS CUNNINGHAM 115KV 71 -0.21032 SPS LP.BRND2 69KV 60 -0.00588 -0.2054 74 SPS CUNNINGHAM 115KV 110 -0.21032 SPS LP.BRND2 69KV 60 -0.00588 -0.20444 74 SPS CUNNINGHAM 115KV 29 -0.38898 SPS IMADX 115KV 104.6055 -0.21294 -0.1764 86 SPS CUNNINGHAM 230KV 110 -0.16898 SPS TOLK 230KV 104.6055 -0.03776 -0.1754 87 SPS TOUNNINGHAM 115KV 71 -0.21032 SPS SAN JUAN 230KV 36 -0.03776 -0.1756 88 SPS CUNNINGHAM 115KV 71 -0.21032 SPS SAN JUAN 230KV 36 -0.03776 -0.17256 88 SPS CUNNINGHAM 230KV 110 -0.16689 SPS MUIND 230KV 36 -0.03776 -0.17256 88 SPS CUNNINGHAM 230KV </td <td>SPS</td> <td>'MADOX 115KV'</td> <td>88.39449</td> <td>-0.21294</td> <td>SPS</td> <td>'LP-BRND2 69KV'</td> <td>60</td> <td>-0.00588</td> <td>-0.20706</td> <td>73</td>	SPS	'MADOX 115KV'	88.39449	-0.21294	SPS	'LP-BRND2 69KV'	60	-0.00588	-0.20706	73
SPS CUNNINGHAM 115KV 71 -0.21032 SPS LP-BRND2 69KV' 60 -0.00588 -0.20444 74 SPS (CUNNINGHAM 115KV' 110 -0.21032 SPS LP-BRND2 69KV' 60 -0.00588 -0.20444 74 SPS (MUSTANG 115KV' 29 -0.38898 SPS MADOX 115KV 104.6055 -0.21294 -0.17604 86 SPS (CUNNINGHAM 230KV' 110 -0.21032 SPS TOLK 230KV' 1019.563 0.00822 -0.1752 87 SPS (CUNNINGHAM 15KV' 88.3949 -0.21294 SPS SAN JUAN 230KV' 36 -0.03776 -0.17518 87 SPS (CUNNINGHAM 115KV' 71 -0.21032 SPS SAN JUAN 230KV' 36 -0.03776 -0.17526 88 SPS (CUNNINGHAM 115KV' 110 -0.21032 SPS SAN JUAN 230KV' 36 -0.03776 -0.17526 88 SPS (CUNNINGHAM 230KV' 110 -0.16698 SPS VILWIND 230KV' 36 -0.03776 -0.17256 89 SPS	SPS	CUNNINGHAM 115KV	71	-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 SPS (CUNNINGHAM 115KV' 110 -0.21032 SPS LP-BRND2 69KV' 60 -0.00588 -0.20444 74 SPS (MUSTANG 115KV' 29 -0.38898 SPS MADOX 115KV 104.6055 -0.21294 -0.17604 86 SPS (CUNNINGHAM 230KV' 110 -0.21032 SPS TOLK 230KV' 1019.563 0.00822 -0.1752 87 SPS (CUNNINGHAM 15KV' 88.3949 -0.21294 SPS SAN JUAN 230KV' 36 -0.03776 -0.17518 87 SPS (CUNNINGHAM 115KV' 71 -0.21032 SPS SAN JUAN 230KV' 36 -0.03776 -0.17526 88 SPS (CUNNINGHAM 115KV' 110 -0.21032 SPS SAN JUAN 230KV' 36 -0.03776 -0.17526 88 SPS (CUNNINGHAM 230KV' 110 -0.16698 SPS VILWIND 230KV' 36 -0.03776 -0.17256 89 SPS	SPS									
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SPS CUNNINGHAM 230KV 110 -0.16698 SPS TOLK 230KV 1019.563 0.00822 -0.1752 87 SPS MADOX 115KV 88.39449 -0.21294 SPS SAN JUAN 230KV 36 -0.03776 -0.17526 87 SPS CUNNINGHAM 115KV 71 -0.21032 SPS SAN JUAN 230KV 36 -0.03776 -0.17256 88 SPS CUNNINGHAM 115KV 110 -0.21032 SPS 'SAN JUAN 230KV' 36 -0.03776 -0.17256 88 SPS 'CUNNINGHAM 230KV' 110 -0.16698 SPS 'WININD 230KV' 48 0.003776 -0.17256 88 SPS 'CUNNINGHAM 230KV' 110 -0.16698 SPS 'WINID 230KV' 48 0.003776 -0.17256 89 SPS 'CUNNINGHAM 230KV' 110 -0.16698 SPS 'WINID 230KV' 48 0.003776 -0.17256 89 SPS 'CUNNINGHAM 230KV' 110 -0.16698 SPS WIND 230KV' 48	SPS									
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SPS CUNNINGHAM 115KV 110 -0.21032 SPS SAN JUAN 230KV 36 -0.3376 -0.17256 88 SPS CUNNINGHAM 230KV 110 -0.16698 SPS WUND 230KV 48 0.03376 -0.17256 88 SPS CUNNINGHAM 230KV 110 -0.16698 SPS WUND 230KV 48 0.03376 -0.17256 88 SPS CUNNINGHAM 230KV 110 -0.16698 SPS BLACKHAWK 115KV 220 0.0028 -0.16975 90 SPS CUNNINGHAM 230KV 110 -0.16698 SPS BLACKHAWK 115KV 220 0.0028 -0.16975 90 SPS CUNNINGHAM 230KV 110 -0.16698 SPS GPS -0.1077 35 0.00253 -0.16981 90 SPS CUNNINGHAM 230KV 110 -0.16698 SPS HARINGTON 230KV' 1066 0.00254 -0.16981 90 SPS CUNNINGHAM 230KV 110 -0.16698 SPS JONES 230KV' 1066 0.00258 -0.1617 94 SPS CUNNING	SPS									
SPS CUNNINGHAM 230KV 110 -0.16698 SPS WILWIND 230KV' 48 0.00387 -0.17085 89 SPS 'CUNNINGHAM 230KV' 110 -0.16698 SPS 'BLACKHAWK 115KV' 220 0.0028 -0.16951 90 SPS 'CUNNINGHAM 230KV' 110 -0.16698 SPS 'CC 6KV' 35 0.0028 -0.16951 90 SPS 'CUNNINGHAM 230KV' 110 -0.16698 SPS 'CC 6KV' 35 0.00284 -0.16982 90 SPS 'CUNNINGHAM 230KV' 110 -0.16698 SPS 'HARRINGTON 230KV' 1066 0.00284 -0.16982 90 SPS 'CUNNINGHAM 230KV' 110 -0.16698 SPS 'JONES 230KV' 243 -0.00284 -0.16982 90 SPS 'CUNNINGHAM 230KV' 110 -0.16698 SPS 'JONES 230KV' 243 -0.00284 -0.16182 94 SPS 'CUNNINGHAM 230KV' 110 -0.16698 SPS' 'JONES 230KV' 6	SPS									
SPS CUNNINGHAM 230KV' 110 -0.16698 SPS BLACKHAWK 115KV' 220 0.0028 -0.16978 90 SPS CUNNINGHAM 230KV' 110 -0.16698 SPS C2 GRV' 35 0.0028 -0.16978 90 SPS CUNNINGHAM 230KV' 110 -0.16698 SPS C2 GRV' 35 0.00284 -0.16982 90 SPS CUNNINGHAM 230KV' 110 -0.16698 SPS HARRINGTON 230KV' 1066 0.00284 -0.16982 90 SPS CUNNINGHAM 230KV' 110 -0.16698 SPS HARRINGTON 230KV' 1066 0.00284 -0.16982 90 SPS CUNNINGHAM 230KV' 110 -0.16698 SPS JONES 230KV' 243 -0.00528 -0.1617 94 SPS CUNNINGHAM 230KV' 110 -0.16698 SPS JONES 230KV' 60 -0.00528 -0.1617 94										
SPS CUNNINGHAM 230KV' 110 -0.16698 SPS CZ 69KV' 35 0.00253 -0.16951 90 SPS 'CUNNINGHAM 230KV' 110 -0.16698 SPS 'HARRINGTON 230KV' 1066 0.00284 -0.16982 90 SPS 'CUNNINGHAM 230KV' 110 -0.16698 SPS 'JONES 230KV' 243 -0.00528 -0.1617 94 SPS 'CUNNINGHAM 230KV' 110 -0.16698 SPS 'JONES 230KV' 243 -0.00528 -0.1617 94 SPS 'CUNNINGHAM 230KV' 110 -0.16698 SPS 'JONES 230KV' 60 -0.00528 -0.1617 94										
SPS CUNNINGHAM 230KV' 110 -0.16689 SPS HARRINGTON 230KV' 1066 -0.00284 -0.16982 90 SPS 'CUNNINGHAM 230KV' 110 -0.16689 SPS JONES 230KV' 243 -0.00528 -0.1617 94 SPS 'CUNNINGHAM 230KV' 110 -0.16689 SPS LNNES 230KV' 60 -0.00588 -0.1611 94										
SPS 'CUNNINGHAM 230KV' 110 -0.16698 SPS JONES 230KV' 243 -0.00528 -0.1617 94 SPS 'CUNNINGHAM 230KV' 110 -0.16698 SPS 'LP-BRND2 69KV' 60 -0.00588 -0.1611 94										
SPS CUNNINGHAM 230KV' 110 -0.16698 SPS LP-BRND2 69KV' 60 -0.00588 -0.1611 94										
							60	-0.00588	-0.1611	94

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

Upgrade: Limiting Facility:	MUSTANG STATION 230/115KV TRANSFORME MUSTANG STATION 230/115KV TRANSFORME								
Direction:	From->To	RUKII							
Line Outage:	GEN:51971 1								
Flowgate:	51966519691GEN5197111107AP								
Date Redispatch Needed:	Starting 2007 4/1 - 6/1 Until EOC of Upgrade 2007 April Minimum								
Season Flowgate Identified:	2007 April Minimum	Assessments Dellef	1						
Reservation	Relief Amount	Aggregate Relief Amount							
1090487	15.2	15.2							
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
SPS	'MUSTANG 115KV'	114.3489	-0.39792		'MUSTG5 118.0 230KV'	125		-0.60911	
SPS	'MUSTANG 115KV'	114.3489	-0.39792		'TOLK 230KV'	1020.232		-0.40951	3
SPS	'MUSTANG 115KV'	114.3489	-0.39792		'BLACKHAWK 115KV'	220		-0.40151	3
SPS	'MUSTANG 115KV'	114.3489			'CAPROCK 115KV'	79.98182	0.00665	-0.40457	
SPS	'MUSTANG 115KV'	114.3489	-0.39792		'CZ 69KV'	35		-0.40118	
SPS	'MUSTANG 115KV'	114.3489	-0.39792		'HARRINGTON 230KV'	706		-0.40155	
SPS	'MUSTANG 115KV'	114.3489			'SIDRCH 69KV'	14		-0.4015	
SPS	'MUSTANG 115KV'	114.3489	-0.39792		'STEER WATER 115KV'	79.98182	0.00338	-0.4013	
SPS	'MUSTANG 115KV'	114.3489	-0.39792		'WILWIND 230KV'	159.9636	0.00497	-0.40289	
SPS	'MUSTANG 115KV'	114.3489			JONES 230KV	104		-0.39022	
SPS	'MUSTANG 115KV'	114.3489	-0.39792		'LP-BRND2 69KV'	60		-0.38939	
SPS	'MUSTANG 115KV'	114.3489	-0.39792		'SAN JUAN 230KV'	119.9727	-0.00356	-0.39436	
SPS	'MUSTANG 115KV'	114.3489	-0.39792		CUNNINGHAM 230KV	56		-0.36185	
SPS	'MADOX 115KV'	193	-0.11872		'MUSTG5 118.0 230KV'	125		-0.32991	4
SPS	'CUNNINGHAM 115KV'	71	-0.11614		'MUSTG5 118.0 230KV'	125		-0.32733	
SPS	'CUNNINGHAM 115KV'	110	-0.11614		'MUSTG5 118.0 230KV'	125		-0.32733	
SPS	'CUNNINGHAM 230KV'	250	-0.03607		'MUSTG5 118.0 230KV'	125		-0.24726	
SPS	'LP-BRND2 69KV'	172			'MUSTG5 118.0 230KV'	125		-0.21972	
SPS	'JONES 230KV'	382	-0.0077		'MUSTG5 118.0 230KV'	125		-0.21889	
SPS	'MOORE COUNTY 115KV'	48	0.00378		'MUSTG5 118.0 230KV'	125	0.21119	-0.20741	
SPS	'PLANTX 115KV'	253	0.00555		'MUSTG5 118.0 230KV'	125		-0.20564	
SPS	'PLANTX 230KV'	189	0.01083		'MUSTG5 118.0 230KV'	125		-0.20036	
SPS	'TOLK 230KV'	59.76834	0.01159		'MUSTG5 118.0 230KV'	125		-0.1996	
SPS	'MADOX 115KV'	193	-0.11872		'TOLK 230KV'	1020.232	0.01159	-0.13031	
SPS	'CUNNINGHAM 115KV'	71	-0.11614		'TOLK 230KV'	1020.232	0.01159	-0.12773	
SPS	'CUNNINGHAM 115KV'	110	-0.11614		'TOLK 230KV'	1020.232	0.01159	-0.12773	
SPS	'MADOX 115KV'	193	-0.11872		'CAPROCK 115KV'	79.98182	0.00665	-0.12537	
SPS	'MADOX 115KV'	193	-0.11872		'WILWIND 230KV'	159.9636	0.00497	-0.12369	
SPS	'CUNNINGHAM 115KV'	71	-0.11614		'CAPROCK 115KV'	79.98182	0.00665	-0.12279	
SPS	'CUNNINGHAM 115KV'	110	-0.11614		'CAPROCK 115KV'	79.98182	0.00665	-0.12279	
SPS	'MADOX 115KV'	193	-0.11872		'BLACKHAWK 115KV'	220	0.00359	-0.12231	12
SPS	'MADOX 115KV'	193	-0.11872		'HARRINGTON 230KV'	706		-0.12235	
SPS	'MADOX 115KV'	193	-0.11872		'STEER WATER 115KV'	79.98182	0.00338	-0.1221	
SPS	'CUNNINGHAM 115KV'	71	-0.11614		'WILWIND 230KV'	159.9636	0.00497	-0.12111	
SPS	'CUNNINGHAM 115KV'	110	-0.11614		'WILWIND 230KV'	159.9636		-0.12111	
SPS	'CUNNINGHAM 115KV'	71	-0.11614		'BLACKHAWK 115KV'	220		-0.11973	
SPS	'CUNNINGHAM 115KV'	110	-0.11614		'BLACKHAWK 115KV'	220		-0.11973	
SPS	'CUNNINGHAM 115KV'	71	-0.11614		'HARRINGTON 230KV'	706		-0.11977	
SPS	'CUNNINGHAM 115KV'	110	-0.11614		'HARRINGTON 230KV'	706		-0.11977	12
SPS	'CUNNINGHAM 115KV'	71	-0.11614	SPS	'STEER WATER 115KV'	79.98182	0.00338	-0.11952	12

SPS	'CUNNINGHAM 115KV'	110	-0.11614	SPS	'STEER WATER 115KV'	79.98182	0.00338	-0.11952	128		
SPS	'MADOX 115KV'	193	-0.11872	SPS	'SAN JUAN 230KV'	119.9727	-0.00356	-0.11516	132		
SPS	'CUNNINGHAM 115KV'	71	-0.11614	SPS	'SAN JUAN 230KV'	119.9727	-0.00356	-0.11258	135		
SPS	'CUNNINGHAM 115KV'	110	-0.11614	SPS	'SAN JUAN 230KV'	119.9727	-0.00356	-0.11258	135		
SPS	'MADOX 115KV'	193	-0.11872	SPS	JONES 230KV	104	-0.0077	-0.11102	137		
SPS	'CUNNINGHAM 115KV'	71	-0.11614	SPS	JONES 230KV	104	-0.0077	-0.10844	141		
SPS	'CUNNINGHAM 115KV'	110	-0.11614	SPS	JONES 230KV	104	-0.0077	-0.10844	141		
SPS	'CUNNINGHAM 230KV'	250	-0.03607	SPS	'TOLK 230KV'	1020.232	0.01159	-0.04766	320		
SPS	'CUNNINGHAM 230KV'	250	-0.03607	SPS	'WILWIND 230KV'	159.9636	0.00497	-0.04104	371		
SPS	'CUNNINGHAM 230KV'	250	-0.03607	SPS	'HARRINGTON 230KV'	706	0.00363	-0.0397	384		
Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study models where limiting facility was identified.											

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

Upgrade: Limiting Facility: Direction: Line Outage: Flowgate: Date Redispatch Needed: Season Flowgate Identified: Reservation	NUSTANG STATION 230/115KV TRANSFORME MUSTANG STATION 230/115KV TRANSFORME From->To GEN:51971 1 51966519691GEN5197111107FA Starting 2007 T0/1 - 12/1 Until EOC of Upgrade 2007 Fall Peak Relief Amount]						
1090487	32.5	32.5							
		Maximum		Sink Control		Maximum			Aggregate Redispatch
Source Control Area	Source			Area	Sink		GSF		Amount (MW)
SPS	CUNNINGHAM 115KV	71	-0.11612		MUSTG5 118.0 230KV	210			
SPS	CUNNINGHAM 115KV	110	-0.11612		'MUSTG5 118.0 230KV'	210			
SPS	MADOX 115KV	102.3579			'MUSTG5 118.0 230KV'	210			99
SPS	CUNNINGHAM 230KV	306			'MUSTG5 118.0 230KV'	210			131
SPS	'NICHOLS 115KV'	213	0.00339		'MUSTG5 118.0 230KV'	210			156
SPS	'NICHOLS 230KV'	244	0.00348	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.20773	156
SPS	'PLANTX 115KV'	253	0.00527	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.20594	158
SPS	'PLANTX 230KV'	189	0.01075	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.20046	162
SPS	'TOLK 230KV'	60.2673	0.01153	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.19968	163
SPS	'MADOX 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	
SPS	'MADOX 115KV'	102.3579	-0.1187		'WILWIND 230KV'	160		-0.12357	263
SPS	'MADOX 115KV'	102.3579	-0.1187		'BLACKHAWK 115KV'	220			
SPS	'MADOX 115KV'	102.3579			'HARRINGTON 230KV'	1066			266
SPS	'CUNNINGHAM 115KV'	110			'WILWIND 230KV'	160			
SPS	'CUNNINGHAM 115KV'	110	-0.11612		'BLACKHAWK 115KV'	220			
SPS	'CUNNINGHAM 115KV'	110	-0.11612		'HARRINGTON 230KV'	1066			272
SPS	'MADOX 115KV'	102.3579	-0.1187		'SAN JUAN 230KV'	120		-0.1151	282
SPS	CUNNINGHAM 115KV	110	-0.11612		'SAN JUAN 230KV'	120			
SPS	'MADOX 115KV'	102.3579	-0.1187		'JONES 230KV'	486		-0.11119	
SPS	CUNNINGHAM 115KV	110	-0.11612		'JONES 230KV'	486		-0.10861	299
SPS	'CUNNINGHAM 230KV'	306	-0.03606	SPS	'TOLK 230KV'	1019.733	0.01153	-0.04759	683

 SPS
 CUNNINGHAM 230KV
 306
 -0.05606 [SPS
 10LK 230KV

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

Upgrade: Limiting Facility:	MUSTANG STATION 230/115KV TRANSFORME MUSTANG STATION 230/115KV TRANSFORME								
Direction:	From->To								
Line Outage:	GEN:51971 1								
Flowgate:	51966519691GEN5197111107SH								
Date Redispatch Needed:	6/1 - 10/1 Until EOC of Upgrade								
	2007 Summer Shoulder								
		Aggregate Relief	1						
Reservation	Relief Amount	Amount							
1090487	29.2	29.2	1						
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
SPS	'MADOX 115KV'	75			'MUSTG5 118.0 230KV'	210			88
SPS	'CUNNINGHAM 115KV'	71			'MUSTG5 118.0 230KV'	210			
SPS	'CUNNINGHAM 115KV'	110			'MUSTG5 118.0 230KV'	210			
SPS	'CUNNINGHAM 230KV'	110			'MUSTG5 118.0 230KV'	210			
SPS	'NICHOLS 115KV'	131			'MUSTG5 118.0 230KV'	210			
SPS	'MOORE COUNTY 115KV'	48			'MUSTG5 118.0 230KV'	210			141
SPS	'NICHOLS 230KV'	244			'MUSTG5 118.0 230KV'	210			141
SPS	'PLANTX 115KV'	89.47412			'MUSTG5 118.0 230KV'	210			
SPS	'TOLK 230KV'	52.01129			'MUSTG5 118.0 230KV'	210			146
SPS	'MADOX 115KV'	75			'TOLK 230KV'	1027.989			224 225
SPS	'MADOX 115KV'	75			'PLANTX 230KV'	189			225
SPS	'CUNNINGHAM 115KV'	110			'TOLK 230KV'	1027.989			228
SPS	'CUNNINGHAM 115KV'	110			'PLANTX 230KV'	189			
SPS	'CUNNINGHAM 115KV'	110			'WILWIND 230KV'	159.9636			241
SPS	'CUNNINGHAM 115KV'	110			'BLACKHAWK 115KV'	220			244
SPS	'CUNNINGHAM 115KV'	110			'HARRINGTON 230KV'	1066			244
SPS	'CUNNINGHAM 115KV'	110			'NICHOLS 115KV'	82			
SPS	'CUNNINGHAM 115KV'	110			'SAN JUAN 230KV'	119.9727			
SPS	'CUNNINGHAM 115KV'	110			JONES 230KV	486	-0.0077	-0.10844	269
Maximum Decrement and Ma	iximum Increment were determine from the Souce :	and Sink Operating	Points in th	e study mode	Is where limiting facility was identified.				

Upgrade: Limiting Facility: Direction: Line Outage: Flowgate: Date Redispatch Needed: Season Flowgate Identified:	NUSTANG STATION 230/115KV TRANSFORME MUSTANG STATION 230/115KV TRANSFORME From-sto GEN:51971 1 51966519891GEN5197111107SP 6/1/07 - 10/1/07 2007 Summer Peak								
		Aggregate Relief							
Reservation	Relief Amount	Amount							
1090487	35.6	35.6							
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
SPS	'MADOX 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
	CUNNINGHAM 115KV					360	0.21119	-0.32733	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 CSF - Sink GSF Redispatch Amount = Relief Amount / Factor

MUSTANG STATION 230/115KV TRANSFORMER CKT 1 MUSTANG STATION 230/115KV TRANSFORMER CKT 1 Upgrade: Limiting Facility:

ine Outage:	GEN:51971 1								
lowgate:	51966519691GEN5197111107WP								
ate Redispatch Needed:	12/1/07 - 4/1/08								
eason Flowgate Identified:	2007 Winter Peak		1						
	Relief Amount	Aggregate Relief Amount							
Reservation 1090487		Amount 22.4							
1090487	2	.4 22.4						1	Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MV
PS	'MUSTANG 115KV'	29			'MUSTG5 118.0 230KV'	210		-0.6091	
iPS	'MUSTANG 115KV'	29			CAPROCK 115KV	79.98182			
SPS	'MUSTANG 115KV'	29			TOLK 230KV	1019.542			
SPS	'MUSTANG 115KV'	29			'BLACKHAWK 115KV'	220	0.00348	-0.40137	
SPS	'MUSTANG 115KV'	29			'CZ 69KV'	35		-0.40105	
SPS .	'MUSTANG 115KV'	29			'HARRINGTON 230KV'	1066		-0.40142	
SPS	'MUSTANG 115KV'	29			'STEER WATER 115KV'	79.98182		-0.40117	
SPS .	'MUSTANG 115KV'	29	-0.39789		'WILWIND 230KV'	159.9636		-0.40276	
SPS	'MUSTANG 115KV'	29			'JONES 230KV'	243		-0.39038	
SPS	'MUSTANG 115KV'	29			'LP-BRND2 69KV'	60		-0.38955	
SPS .	'MUSTANG 115KV'	29			'SAN JUAN 230KV'	119.9727		-0.39429	
SPS	'MUSTANG 115KV'	29			CUNNINGHAM 230KV	196		-0.36183	
SPS	CUNNINGHAM 115KV	71	-0.11611		'MUSTG5 118.0 230KV'	210		-0.32732	
SPS	CUNNINGHAM 115KV'	110	-0.11611		'MUSTG5 118.0 230KV'	210		-0.32732	
SPS SPS	MADOX 115KV 'MUSTANG 115KV'		-0.1187		'MUSTG5 118.0 230KV' 'MADOX 115KV'	92.91113		-0.32991 -0.27919	
SPS	CUNNINGHAM 230KV	29	-0.39789	0000	MADOX 115KV 'MUSTG5 118.0 230KV'	92.91113		-0.27919	
SPS	JONES 230KV	243	-0.03606		'MUSTG5 118.0 230KV'	210		-0.24727	
SPS	LP-BRND2 69KV	172	-0.00834		'MUSTG5 118.0 230KV'	210		-0.21955	
SPS	MOORE COUNTY 115KV	48	0.00368		'MUSTG5 118.0 230KV'	210		-0.20753	
SPS	'NICHOLS 115KV'	213	0.00339		'MUSTG5 118.0 230KV'	210			
SPS	'NICHOLS 230KV'	244	0.00349		'MUSTG5 118.0 230KV'	210		-0.20772	
SPS	'PLANTX 115KV'	253	0.00528		'MUSTG5 118.0 230KV'	210		-0.20593	1
SPS	'PLANTX 230KV'	189	0.01076		'MUSTG5 118.0 230KV'	210		-0.20045	1
SPS	'TOLK 230KV'	60.45752	0.01154	SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.19967	1
SPS	'MADOX 115KV'	100.0889	-0.1187	SPS	'TOLK 230KV'	1019.542	0.01154	-0.13024	1
SPS	'CUNNINGHAM 115KV'	71	-0.11611		'TOLK 230KV'	1019.542		-0.12765	
SPS	'CUNNINGHAM 115KV'	110	-0.11611		'TOLK 230KV'	1019.542		-0.12765	
SPS	'MADOX 115KV'	100.0889	-0.1187		'CAPROCK 115KV'	79.98182		-0.12529	
SPS	'MADOX 115KV'	100.0889	-0.1187		'WILWIND 230KV'	159.9636		-0.12357	
SPS	'CUNNINGHAM 115KV'	71	-0.11611		CAPROCK 115KV	79.98182		-0.1227	
SPS	CUNNINGHAM 115KV	110	-0.11611		CAPROCK 115KV	79.98182			1
SPS	MADOX 115KV	100.0889	-0.1187		BLACKHAWK 115KV	220		-0.12218	1
SPS SPS	'MADOX 115KV' 'MADOX 115KV'	100.0889	-0.1187		HARRINGTON 230KV	1066		-0.12223	
SPS SPS	CUNNINGHAM 115KV'	100.0889	-0.1187		'STEER WATER 115KV' 'WILWIND 230KV'	79.98182		-0.12198	
PS PS	CUNNINGHAM 115KV	110			WILWIND 230KV	159.9636		-0.12098	
SPS	CUNNINGHAM 115KV	71	-0.11611		BLACKHAWK 115KV	220			
PS	CUNNINGHAM 115KV	110	-0.11611	SPS	BLACKHAWK 115KV	220	0.00348	-0.11959	
SPS	CUNNINGHAM 115KV	71	-0.11611		'HARRINGTON 230KV'	1066		-0.11964	
SPS	CUNNINGHAM 115KV	110	-0.11611		'HARRINGTON 230KV'	1066		-0.11964	
SPS .	'CUNNINGHAM 115KV'	71	-0.11611	SPS	'STEER WATER 115KV'	79.98182			
PS	CUNNINGHAM 115KV	110	-0.11611		'STEER WATER 115KV'	79.98182		-0.11939	
PS	'MADOX 115KV'	100.0889	-0.1187		'SAN JUAN 230KV'	119.9727		-0.1151	
PS	'CUNNINGHAM 115KV'	71	-0.11611		'SAN JUAN 230KV'	119.9727		-0.11251	
PS	'CUNNINGHAM 115KV'	110	-0.11611		'SAN JUAN 230KV'	119.9727		-0.11251	
PS	'MADOX 115KV'	100.0889	-0.1187		'JONES 230KV'	243		-0.11119	
PS	'CUNNINGHAM 115KV'	71	-0.11611		'JONES 230KV'	243		-0.1086	
SPS .	'CUNNINGHAM 115KV'	110	-0.11611		JONES 230KV	243		-0.1086	
SPS	'MADOX 115KV'	100.0889	-0.1187		CUNNINGHAM 230KV	196		-0.08264	
SPS	CUNNINGHAM 115KV	110	-0.11611	ISPS	CUNNINGHAM 230KV	196	-0.03606	-0.08005	

imiting Facility: irection:	MUSTANG STATION 230/115KV TRANSFORME From->To	IN ON LI							
Line Outage:	GEN:51971 1								
lowgate:	51966519691GEN5197114107G								
Date Redispatch Needed:	Starting 2007 4/1 - 6/1 Until EOC of Upgrade								
Season Flowgate Identified:	2007 Spring Peak								
season nowgate identified.	2007 Spring Feak	Aggregate Relief							
Reservation	Relief Amount	Amount							
1090487		17.0							
1030401	17.0	17.0					1		Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW
PS	CUNNINGHAM 115KV	71	-0.11614		'MUSTG5 118.0 230KV'	210	0.21119	-0.32733	5
SPS	'MADOX 115KV'	75			'MUSTG5 118.0 230KV'	210	0.21119	-0.32991	
SPS	'LP-BRND2 69KV'	152	-0.00854	SPS	'MUSTG5 118.0 230KV'	210	0.21119	-0.21973	
SPS	'HARRINGTON 230KV'	360	0.00363	SPS	'MUSTG5 118.0 230KV'	210	0.21119	-0.20756	
SPS	'MOORE COUNTY 115KV'	48	0.00378		'MUSTG5 118.0 230KV'	210	0.21119	-0.20741	
SPS	'NICHOLS 115KV'	107	0.0035		'MUSTG5 118.0 230KV'	210	0.21119	-0.20769	
SPS	'NICHOLS 230KV'	113.3726	0.00359	SPS	'MUSTG5 118.0 230KV'	210	0.21119	-0.2076	
SPS	'PLANTX 115KV'	48	0.00555	SPS	'MUSTG5 118.0 230KV'	210	0.21119	-0.20564	
SPS	'TOLK 230KV'	65.29117	0.01159	SPS	'MUSTG5 118.0 230KV'	210	0.21119	-0.1996	
SPS	'MADOX 115KV'	75	-0.11872	SPS	'TOLK 230KV'	1014.709	0.01159	-0.13031	1:
SPS	'MADOX 115KV'	75	-0.11872	SPS	'PLANTX 230KV'	189	0.01083	-0.12955	1:
SPS	'CUNNINGHAM 115KV'	71	-0.11614		'TOLK 230KV'	1014.709	0.01159	-0.12773	1:
SPS	'CUNNINGHAM 115KV'	71	-0.11614	SPS	'PLANTX 230KV'	189	0.01083	-0.12697	1:
SPS	'MADOX 115KV'	75			'CAPROCK 115KV'	79.99996	0.00665	-0.12537	1:
SPS	'MADOX 115KV'	75			'PLANTX 115KV'	205	0.00555	-0.12427	1:
SPS	'MADOX 115KV'	75			'WILWIND 230KV'	159.9999		-0.12369	1:
SPS	'CUNNINGHAM 115KV'	71	-0.11614	SPS	'CAPROCK 115KV'	79.99996	0.00665	-0.12279	1:
SPS	'MADOX 115KV'	75			'HARRINGTON 230KV'	706	0.00363	-0.12235	13
SPS	'MADOX 115KV'	75			'NICHOLS 230KV'	130.6274	0.00359	-0.12231	1:
SPS	'CUNNINGHAM 115KV'	71	-0.11614		'PLANTX 115KV'	205	0.00555	-0.12169	14
SPS	'CUNNINGHAM 115KV'	71	-0.11614		'WILWIND 230KV'	159.9999	0.00497	-0.12111	14
SPS	'CUNNINGHAM 115KV'	71	-0.11614		'HARRINGTON 230KV'	706	0.00363	-0.11977	14
SPS	'CUNNINGHAM 115KV'	71	-0.11614		'NICHOLS 230KV'	130.6274	0.00359	-0.11973	14
SPS	'MADOX 115KV'	75			'SAN JUAN 230KV'	119.9999		-0.11516	1.
SPS	'CUNNINGHAM 115KV'	71	-0.11614		'SAN JUAN 230KV'	119.9999	-0.00356	-0.11258	1
SPS	'MADOX 115KV'	75			JONES 230KV	486	-0.0077	-0.11102	1
SPS	'CUNNINGHAM 115KV'	71	-0.11614		JONES 230KV	486	-0.0077	-0.10844	15
SPS	'MADOX 115KV'	75			CUNNINGHAM 230KV	306	-0.03607	-0.08265	2
SPS	CUNNINGHAM 115KV aximum Increment were determine from the Souce a	71	-0.11614		CUNNINGHAM 230KV	306	-0.03607	-0.08007	2

Upgrade: Limiting Facility: Direction: Line Outage: Flowgate: Date Redispatch Needed: Season Flowgate Identified: Reservation	MUSTANG STATION 230/115KV TRANSFORME MUSTANG STATION 230/115KV TRANSFORME From->To GEN:51972 1 51966519691GEN5197211107FA Starting 2007 Tol/ 1 = 20/7 Fall Peak Relief Amount								
1090487	31.8	31.8							
		Maximum		Sink Control		Maximum			Aggregate Redispatch
Source Control Area	Source			Area	Sink	Decrement(MW)		Factor	Amount (MW)
SPS	'MADOX 115KV'	102.3579	-0.1187		'MUSTG5 118.0 230KV'	210			96
SPS	'CUNNINGHAM 115KV'	71	-0.11612		'MUSTG5 118.0 230KV'	210	0.21121	-0.32733	
SPS	'CUNNINGHAM 115KV'	110	-0.11612		'MUSTG5 118.0 230KV'	210	0.21121	-0.32733	
SPS	'CUNNINGHAM 230KV'	306	-0.03606		'MUSTG5 118.0 230KV'	210	0.21121	-0.24727	
SPS	'NICHOLS 115KV'	213	0.00339		'MUSTG5 118.0 230KV'	210	0.21121	-0.20782	
SPS	'NICHOLS 230KV'	244	0.00348		'MUSTG5 118.0 230KV'	210	0.21121	-0.20773	
SPS	'PLANTX 115KV'	253	0.00527		'MUSTG5 118.0 230KV'	210	0.21121	-0.20594	
SPS	'PLANTX 230KV'	189	0.01075		'MUSTG5 118.0 230KV'	210	0.21121	-0.20046	
SPS	'TOLK 230KV'	60.2673	0.01153		'MUSTG5 118.0 230KV'	210	0.21121	-0.19968	
SPS	'MADOX 115KV'	102.3579	-0.1187		'TOLK 230KV'	1019.733	0.01153	-0.13023	
SPS	'CUNNINGHAM 115KV'	110	-0.11612		'TOLK 230KV'	1019.733	0.01153	-0.12765	
SPS	'MADOX 115KV'	102.3579	-0.1187		'WILWIND 230KV'	160	0.00487	-0.12357	
SPS	'MADOX 115KV'	102.3579	-0.1187		'BLACKHAWK 115KV'	220	0.00348	-0.12218	
SPS	'MADOX 115KV'	102.3579	-0.1187		'HARRINGTON 230KV'	1066	0.00352	-0.12222	
SPS	'CUNNINGHAM 115KV'	110	-0.11612		'WILWIND 230KV'	160	0.00487	-0.12099	
SPS	'CUNNINGHAM 115KV'	110	-0.11612		'BLACKHAWK 115KV'	220	0.00348	-0.1196	
SPS	'CUNNINGHAM 115KV'	110	-0.11612		'HARRINGTON 230KV'	1066	0.00352	-0.11964	
SPS	'MADOX 115KV'	102.3579	-0.1187		'SAN JUAN 230KV'	120	-0.0036	-0.1151	276
SPS	'CUNNINGHAM 115KV'	110	-0.11612		'SAN JUAN 230KV'	120	-0.0036	-0.11252	
SPS	'MADOX 115KV'	102.3579	-0.1187	SPS	JONES 230KV	486	-0.00751	-0.11119	
SPS	'CUNNINGHAM 115KV'	110	-0.11612		JONES 230KV	486	-0.00751	-0.10861	293
SPS	CUNNINGHAM 230KV	306	-0.03606	SPS	TOLK 230KV	1019.733	0.01153	-0.04759	668

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

Limiting Facility:	MUSTANG STATION 230/115KV TRANSFORM	IER CKT 1							
Direction:	From->To								
Line Outage:	GEN:51972 1								
Flowgate:	51966519691GEN5197211107SH								
	6/1 - 10/1 Until EOC of Upgrade								
Season Flowgate Identified:	2007 Summer Shoulder		-						
		Aggregate Relief							
Reservation	Relief Amount	Amount							
1090487	28	.5 28.5			a	·			,
									Aggregate
	_	Maximum		Sink Control		Maximum		_	Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
SPS	'MADOX 115KV'	75			'MUSTG5 118.0 230KV'	210			
SPS	CUNNINGHAM 115KV	71			'MUSTG5 118.0 230KV'	210			
SPS	CUNNINGHAM 115KV	110			'MUSTG5 118.0 230KV'	210			
SPS	'CUNNINGHAM 230KV'	110			'MUSTG5 118.0 230KV'	210			
SPS	'MOORE COUNTY 115KV'	48			'MUSTG5 118.0 230KV'	210			
SPS	'NICHOLS 115KV'	131			'MUSTG5 118.0 230KV'	210			
SPS	'NICHOLS 230KV'	244			'MUSTG5 118.0 230KV'	210			
SPS	'PLANTX 115KV'	89.47412			'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	'MADOX 115KV'	75	-0.11872	SPS	'TOLK 230KV'	1027.989	0.01159	-0.13031	218
SPS	'MADOX 115KV'	75	-0.11872	SPS	'PLANTX 230KV'	189	0.01083	-0.12955	
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	
SPS	CUNNINGHAM 115KV	110	-0.11614	SPS	'STEER WATER 115KV'	79.98182	0.00338	-0.11952	
SPS	CUNNINGHAM 115KV	110	-0.11614	SPS	'SAN JUAN 230KV'	119.9727	-0.00356	-0.11258	
SPS	CUNNINGHAM 115KV	110	-0.11614	SPS	JONES 230KV	486	-0.0077	-0.10844	
Mewimum Decrement and Me	ximum Increment were determine from the Souc	and Sink Operating	Dointe in th	o ctudy mode	le whore limiting facility was identified				

Upgrade:	MUSTANG STATION 230/115KV TRANSFORME	R CKT 1		
Limiting Facility:	MUSTANG STATION 230/115KV TRANSFORME	R 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			
		Aggregate Relief		
Reservation	Relief Amount	Amount		
1090487	35.6	35.6		
		Maximum		Sink Control
Source Control Area	Source	Increment(MW)	GSF	Area
SPS	'MADOX 115KV'	75	-0.11872	SPS
CDC	CUNNINGHAM 115KV/	50 00077	0 11614	CDC

Aggregate Redispatch Amount (MW) 108 109 Maximum Decrement(MW) GSF Factor / 360 0.21119 -0.32991 360 0.21119 -0.32733 Sink MUSTG5 118.0 230KV' MUSTG5 118.0 230KV' els where limiting facility was identified.
 SPS
 CUNNINGHAM
 115KV'
 50.00977
 -0.11614
 SPS

 Maximum Decrement and Maximum Increment were determine from the Souce and Sink Operating Points in the study mode Factor = Source GSF - Sink GSF
 Sink GSF
 Redispatch Amount = Relief Amount / Factor

Upgrade: Limiting Facility: Direction: Line Outage: Flowgate: Date Redispatch Needed: Season Flowqate Identified:	MUSTANG STATION 230/115KV TRANSFORME MUSTANG STATION 230/115KV TRANSFORME From-5To GEN:51972 1 51966519691GEN5197211107WP 12/107 - 4/108 2007 Winter Peak								
Reservation	Relief Amount	Aggregate Relief Amount							
1090487	7 21.9	21.9							
		Maximum		Sink Control		Maximum			Aggregate Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	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	-0.3978	9 SPS	CAPROCK 115KV	79.98182	0.00659	-0.40448	54
SPS	'MUSTANG 115KV'	29	-0.3978		'WILWIND 230KV'	159.9636	0.00487	-0.40276	54
SPS	'MUSTANG 115KV'	29	-0.3978		'BLACKHAWK 115KV'	220	0.00348	-0.40137	55
SPS	'MUSTANG 115KV'	29	-0.3978	9 SPS	'CZ 69KV'	35	0.00316	-0.40105	55
SPS	'MUSTANG 115KV'	29	-0.3978	9 SPS	'HARRINGTON 230KV'	1066	0.00353	-0.40142	55
SPS	'MUSTANG 115KV'	29	-0.3978	9 SPS	STEER WATER 115KV	79.98182	0.00328	-0.40117	55
SPS	'MUSTANG 115KV'	29	-0.3978	9 SPS	JONES 230KV	243	-0.00751	-0.39038	56
SPS	'MUSTANG 115KV'	29	-0.3978	9 SPS	'LP-BRND2 69KV'	60	-0.00834	-0.38955	56
SPS	'MUSTANG 115KV'	29	-0.3978	9 SPS	'SAN JUAN 230KV'	119.9727	-0.0036	-0.39429	56
SPS	'MUSTANG 115KV'	29	-0.3978	9 SPS	CUNNINGHAM 230KV	196	-0.03606	-0.36183	60
SPS	'MADOX 115KV'	100.0889	-0.118		'MUSTG5 118.0 230KV'	210	0.21121	-0.32991	66
SPS	CUNNINGHAM 115KV	71	-0.1161	1 SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.32732	67
SPS	CUNNINGHAM 115KV	110	-0.1161		'MUSTG5 118.0 230KV'	210		-0.32732	67
SPS	'MUSTANG 115KV'	29	-0.3978	9 SPS	'MADOX 115KV'	92,91113	-0.1187	-0.27919	78
SPS	CUNNINGHAM 230KV	110	-0.0360		'MUSTG5 118.0 230KV'	210	0.21121	-0.24727	89
SPS	JONES 230KV	243	-0.0075	1 SPS	'MUSTG5 118.0 230KV'	210	0.21121	-0.21872	100
SPS	'LP-BRND2 69KV'	172	-0.0083		'MUSTG5 118.0 230KV'	210	0.21121	-0.21955	100
SPS	'MOORE COUNTY 115KV'	48	0.0036		'MUSTG5 118.0 230KV'	210		-0.20753	105
SPS	'NICHOLS 115KV'	213	0.0033		'MUSTG5 118.0 230KV'	210		-0.20782	105
SPS	'NICHOLS 230KV'	244	0.0034		'MUSTG5 118.0 230KV'	210	0.21121	-0.20772	105
SPS	PLANTX 115KV	253	0.0052		'MUSTG5 118.0 230KV'	210	0.21121	-0.20593	106
SPS	'PLANTX 230KV'	189	0.0107		'MUSTG5 118.0 230KV'	210	0.21121	-0.20045	109
SPS	TOLK 230KV	60.45752	0.0115		'MUSTG5 118.0 230KV'	210		-0.19967	110
SPS	'MADOX 115KV'	100.0889	-0.118		'TOLK 230KV'	1019.542		-0.13024	168
SPS	CUNNINGHAM 115KV	71	-0.1161		TOLK 230KV	1019.542	0.01154	-0.12765	171
SPS	CUNNINGHAM 115KV	110	-0.1161		TOLK 230KV	1019.542	0.01154	-0.12765	171
SPS	'MADOX 115KV'	100.0889	-0.118		CAPROCK 115KV	79.98182	0.00659	-0.12529	175
SPS	'MADOX 115KV'	100.0889	-0.118		WILWIND 230KV'	159.9636	0.00487	-0.12357	177
SPS	CUNNINGHAM 115KV	71	-0.1161		CAPROCK 115KV	79.98182		-0.1227	178
SPS	CUNNINGHAM 115KV	110	-0.1161		CAPROCK 115KV	79.98182	0.00659	-0.1227	178
SPS	'MADOX 115KV'	100.0889	-0.118		BLACKHAWK 115KV	220	0.00348	-0.12218	179
SPS	'MADOX 115KV'	100.0889	-0.118		'HARRINGTON 230KV'	1066	0.00353	-0.12223	179
SPS	MADOX 115KV	100.0889	-0.118		STEER WATER 115KV	79.98182	0.00328	-0.12198	179
SPS	CUNNINGHAM 115KV	71	-0.1161		WILWIND 230KV'	159,9636	0.00487	-0.12098	181
SPS	CUNNINGHAM 115KV	110	-0.1161		WILWIND 230KV'	159.9636	0.00487	-0.12098	181
SPS	CUNNINGHAM 115KV	71	-0.1161		BLACKHAWK 115KV	220	0.00348	-0.11959	183
SPS	CUNNINGHAM 115KV	110	-0.1161		BLACKHAWK 115KV	220	0.00348	-0.11959	183
SPS	CUNNINGHAM 115KV	71	-0.1161		'HARRINGTON 230KV'	1066	0.00353	-0.11964	183
SPS	CUNNINGHAM 115KV	110	-0.1161		'HARRINGTON 230KV'	1066	0.00353	-0.11964	183
SPS	CUNNINGHAM 115KV	71	-0.1161		STEER WATER 115KV	79.98182		-0.11939	183
SPS	CUNNINGHAM 115KV	110	-0.1161		STEER WATER 115KV	79.98182	0.00328	-0.11939	183
SPS	MADOX 115KV	100.0889	-0.118		SAN JUAN 230KV	119.9727	-0.0036	-0.1151	190
SPS	CUNNINGHAM 115KV	71	-0.1161		SAN JUAN 230KV	119.9727	-0.0036	-0.11251	195
SPS	CUNNINGHAM 115KV	110	-0.1161		SAN JUAN 230KV	119.9727	-0.0036	-0.11251	195
SPS	'MADOX 115KV'	100.0889	-0.118		JONES 230KV	243	-0.00751	-0.11119	197
SPS	CUNNINGHAM 115KV	71	-0.1161		JONES 230KV	243	-0.00751	-0.1086	202
SPS	CUNNINGHAM 115KV	110	-0.1161		JONES 230KV	243	-0.00751	-0.1086	202
SPS	MADOX 115KV	100.0889	-0.118		CUNNINGHAM 230KV	196	-0.03606	-0.08264	265
SPS	CUNNINGHAM 115KV	110			CUNNINGHAM 230KV	190	-0.03606	-0.08204	203
	t and Maximum Increment were determine from the					190	0.00000	0.00000	213

Upgrade: Limiting Facility:	MUSTANG STATION 230/115KV TRANSFORME	R 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				
·····		Aggregate Relief			
Reservation	Relief Amount	Amount			
1090487	16.1	16.1			
		Maximum		Sink Control	
Source Control Area	Source	Increment(MW)	GSF	Area	Sink
SPS	CUNNINGHAM 115KV	71	-0.11614		'MUSTG5 118.0 230KV'
SPS	'MADOX 115KV'	75	-0.11872		'MUSTG5 118.0 230KV'
SPS	'LP-BRND2 69KV'	152	-0.00854		'MUSTG5 118.0 230KV'
SPS	'HARRINGTON 230KV'	360	0.00363		'MUSTG5 118.0 230KV'
SPS	'MOORE COUNTY 115KV'	48	0.00378		'MUSTG5 118.0 230KV'
SPS	'NICHOLS 115KV'	107	0.0035		'MUSTG5 118.0 230KV'
SPS	'NICHOLS 230KV'	113.3726	0.00359		'MUSTG5 118.0 230KV'
SPS	'PLANTX 115KV'	48	0.00555	SPS	'MUSTG5 118.0 230KV'
SPS	'TOLK 230KV'	65.29117	0.01159	SPS	'MUSTG5 118.0 230KV'
SPS	'MADOX 115KV'	75	-0.11872	SPS	'PLANTX 230KV'
SPS	'MADOX 115KV'	75	-0.11872	SPS	'TOLK 230KV'
SPS	'CUNNINGHAM 115KV'	71	-0.11614	SPS	'TOLK 230KV'
SPS	'CUNNINGHAM 115KV'	71	-0.11614	SPS	'PLANTX 230KV'
SPS	'MADOX 115KV'	75	-0.11872	SPS	'CAPROCK 115KV'
SPS	'MADOX 115KV'	75	-0.11872	SPS	'PLANTX 115KV'
SPS	'MADOX 115KV'	75	-0.11872	SPS	'WILWIND 230KV'
SPS	CUNNINGHAM 115KV	71	-0.11614	SPS	'CAPROCK 115KV'
SPS	CUNNINGHAM 115KV	71	-0.11614	SPS	'PLANTX 115KV'
SPS	'MADOX 115KV'	75	-0.11872	SPS	'HARRINGTON 230KV'
SPS	'MADOX 115KV'	75	-0.11872	SPS	'NICHOLS 230KV'
SPS	CUNNINGHAM 115KV	71	-0.11614	SPS	WILWIND 230KV
SPS	CUNNINGHAM 115KV	71	-0.11614		'HARRINGTON 230KV'
SPS	CUNNINGHAM 115KV	71	-0.11614		'NICHOLS 230KV'
SPS	'MADOX 115KV'	75	-0.11872		'SAN JUAN 230KV'
SPS	CUNNINGHAM 115KV	71	-0.11614		'SAN JUAN 230KV'
SPS	'MADOX 115KV'	75	-0.11872		JONES 230KV
SPS	CUNNINGHAM 115KV	71	-0.11614		JONES 230KV
SPS	'MADOX 115KV'	75	-0.11872		CUNNINGHAM 230KV
SPS	CUNNINGHAM 115KV	71	-0.11614		CUNNINGHAM 230KV

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

Upgrade:	Mustang-San Andr-Amerada Hess 115KV Displac	ement			
Limiting Facility:	DENVER CITY INTERCHANGE N - MUSTANG S	TATION 115KV C	KT 1		
Direction:	To->From				
Line Outage:	DENVER CITY INTERCHANGE S - MUSTANG S	TATION 115KV CI	KT 1		
Flowgate:	51960519661519625196811107SH				
Date Redispatch Needed:	6/1 - 10/1 Until EOC of Upgrade				
Season Flowgate Identified:	2007 Summer Shoulder				
		Aggregate Relief			
Reservation	Relief Amount	Amount			
1090487	13.3	13.3			
		Maximum		Sink Control	
Source Control Area	Source	Increment(MW)	GSF	Area	Si

Maximum		Sink Control		Maximum	
Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF

 ment(MW)
 GSF
 Factor

 210
 0.21119
 -0.32733

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 -0.12897

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 -0.12427

 205
 0.00555
 -0.12427

 205
 0.00555
 -0.12416

 706
 0.00362
 -0.12231

 159.9999

Maximum Decrement(MW)

Τ

Aggregate Redispatch

Amount (MW)

201

Aggregate Redispatch Amount (MW)

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SPS	'MADOX 115KV'	75			'MUSTG5 118.0 230KV'	210	0.15058	-0.3151	42
SPS	CUNNINGHAM 115KV	71	-0.16155		'MUSTG5 118.0 230KV'	210	0.15058	-0.31213	43
SPS	CUNNINGHAM 115KV	110	-0.16155		'MUSTG5 118.0 230KV'	210	0.15058	-0.31213	43
SPS	'CUNNINGHAM 230KV'	110	-0.07301		'MUSTG5 118.0 230KV'	210	0.15058	-0.22359	60
SPS	'MADOX 115KV'	75	-0.16452		'PLANTX 230KV'	189	0.00438	-0.1689	79
SPS	'MADOX 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		'PLANTX 230KV'	189	0.00438	-0.16593	80
SPS	'MADOX 115KV'	75	-0.16452		'BLACKHAWK 115KV'	220	0.0013	-0.16582	80
SPS	'MADOX 115KV'	75	-0.16452		'HARRINGTON 230KV'	1066	0.00132	-0.16584	80
SPS	MADOX 115KV	75	-0.16452		'NICHOLS 115KV'	82	0.00132	-0.16578	80
SPS	'MADOX 115KV'	75	-0.16452		'PLANTX 115KV'	163.5259	0.00120	-0.16672	80
	MADOX 115KV					79.98182			80
SPS		75	-0.16452		STEER WATER 115KV		0.00122	-0.16574	
SPS	'MADOX 115KV'	75	-0.16452		'WILWIND 230KV'	159.9636	0.00178	-0.1663	80
SPS	CUNNINGHAM 115KV	71	-0.16155		'PLANTX 115KV'	163.5259	0.0022	-0.16375	81
SPS	CUNNINGHAM 115KV	110	-0.16155	SPS	'PLANTX 115KV'	163.5259	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		'HARRINGTON 230KV'	1066	0.00132	-0.16287	82
SPS	CUNNINGHAM 115KV	110	-0.16155		'HARRINGTON 230KV'	1066	0.00132	-0.16287	82
SPS	CUNNINGHAM 115KV	71	-0.16155		'NICHOLS 115KV'	82	0.00126	-0.16281	82
SPS	CUNNINGHAM 115KV	110	-0.16155		'NICHOLS 115KV'	82	0.00126	-0.16281	82
SPS	CUNNINGHAM 115KV	71	-0.16155	SF 3	STEER WATER 115KV	79.98182	0.00120	-0.16277	82
SPS	CUNNINGHAM 115KV	110	-0.16155	5P5	STEER WATER 115KV	79.98182	0.00122	-0.16277	82
SPS	CUNNINGHAM 115KV	71	-0.16155		'WILWIND 230KV'	159.9636	0.00178	-0.16333	82
SPS	CUNNINGHAM 115KV	110	-0.16155		'WILWIND 230KV'	159.9636	0.00178	-0.16333	82
SPS	'MADOX 115KV'	75	-0.16452		'CAPROCK 115KV'	79.98182	-0.00267	-0.16185	82
SPS	'MADOX 115KV'	75	-0.16452		JONES 230KV	486	-0.00223	-0.16229	82
SPS	'MADOX 115KV'	75	-0.16452	SPS	'LP-BRND2 69KV'	80	-0.00258	-0.16194	82
SPS	CUNNINGHAM 115KV	71	-0.16155		'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		JONES 230KV	486	-0.00223	-0.15932	84
SPS	CUNNINGHAM 115KV	71	-0.16155		'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		'MUSTG5 118.0 230KV'	210	0.15058	-0.1492	89
SPS	'NICHOLS 115KV'	131	0.00126		'MUSTG5 118.0 230KV'	210	0.15058	-0.14932	89
SPS	'NICHOLS 230KV'	244	0.00120		'MUSTG5 118.0 230KV'	210	0.15058	-0.14932	89
SPS	PLANTX 115KV		0.0013	000	'MUSTG5 118.0 230KV'		0.15058		90
		89.47412				210		-0.14838	
SPS	'TOLK 230KV'	52.01129	0.00375		'MUSTG5 118.0 230KV'	210	0.15058	-0.14683	91
SPS	'MADOX 115KV'	75	-0.16452		'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		'SAN JUAN 230KV'	119.9727	-0.01887	-0.14268	93
SPS	'MADOX 115KV'	75	-0.16452		'CUNNINGHAM 230KV'	196	-0.07301	-0.09151	146
SPS	CUNNINGHAM 115KV	71	-0.16155		'CUNNINGHAM 230KV'	196	-0.07301	-0.08854	151
SPS	CUNNINGHAM 115KV	110	-0.16155		CUNNINGHAM 230KV	196	-0.07301	-0.08854	151
SPS	CUNNINGHAM 230KV	110	-0.07301		'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		'PLANTX 115KV'	163.5259	0.0022	-0.07521	177
SPS	CUNNINGHAM 230KV	110	-0.07301		WILWIND 230KV	159.9636	0.00178	-0.07321	178
SPS	CUNNINGHAM 230KV	110	-0.07301		'HARRINGTON 230KV'	1066	0.00178	-0.07433	178
SPS	CUNNINGHAM 230KV	110	-0.07301		BLACKHAWK 115KV	220	0.00132	-0.07433	179
SPS	CUNNINGHAM 230KV	110	-0.07301		'NICHOLS 115KV'	82	0.00126	-0.07427	180
SPS	CUNNINGHAM 230KV	110	-0.07301		'STEER WATER 115KV'	79.98182	0.00122	-0.07423	180
SPS	'CUNNINGHAM 230KV'	110	-0.07301		'JONES 230KV'	486	-0.00223	-0.07078	188
SPS SPS	CUNNINGHAM 230KV'	110	-0.07301		'CAPROCK 115KV' 'SAN JUAN 230KV'	79.98182	-0.00267 -0.01887	-0.07034 -0.05414	190 246

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

Upgrade: Limiting Facility:	Mustang-San Andr-Amerada Hess 115KV Displac DENVER CITY INTERCHANGE N - MUSTANG S								
Direction:	To->From	TATION TISKY C	NI I						
Line Outage:	DENVER CITY INTERCHANGE S - MUSTANG S		× T 4						
		TATION TISKY C	KI 1						
Flowgate:	51960519661519625196811107SP								
Date Redispatch Needed:	6/1/07 - 10/1/07								
Season Flowgate Identified:	2007 Summer Peak		1						
Description	D-list Amount	Aggregate Relief							
Reservation 1090487	Relief Amount 7 23.8	Amount 23.8							
1090487	23.8	23.8		1				1	
				Sink Control					Aggrega
On the Original Area	0	Maximum	GSF		Sink	Maximum Decrement(MW)	GSF		Redispa
Source Control Area	Source								Amount
SPS SPS	CUNNINGHAM 115KV	50.00977			'MUSTG5 118.0 230KV'	360		-0.31213	
	'MADOX 115KV'	75			'MUSTG5 118.0 230KV'				
SPS	'MADOX 115KV'	75			'PLANTX 230KV'	189	0.00438	-0.1689	
SPS	'MADOX 115KV'	75			'TOLK 230KV'	1024.722		-0.16827	
SPS	'MADOX 115KV'	75			'PLANTX 115KV'	205	0.0022	-0.16672	
SPS	'MADOX 115KV'	75			'WILWIND 230KV'	159.9636	0.00178	-0.1663	
SPS	'CUNNINGHAM 115KV'	50.00977			'PLANTX 230KV'	189		-0.16593	
SPS	'CUNNINGHAM 115KV'	50.00977			'TOLK 230KV'	1024.722		-0.1653	
SPS	'MADOX 115KV'	75			'BLACKHAWK 115KV'	220		-0.16582	
SPS	'MADOX 115KV'	75			'HARRINGTON 230KV'	1066		-0.16584	
SPS	'MADOX 115KV'	75			'NICHOLS 115KV'	147	0.00126		
SPS	'MADOX 115KV'	75			'NICHOLS 230KV'	147	0.0013	-0.16582	
SPS	'MADOX 115KV'	75			'STEER WATER 115KV'	79.98182		-0.16574	
SPS	'CUNNINGHAM 115KV'	50.00977			'PLANTX 115KV'	205		-0.16375	
SPS	'CUNNINGHAM 115KV'	50.00977			'BLACKHAWK 115KV'	220	0.0013	-0.16285	
SPS	'CUNNINGHAM 115KV'	50.00977			'HARRINGTON 230KV'	1066	0.00132	-0.16287	
SPS	'CUNNINGHAM 115KV'	50.00977			'NICHOLS 115KV'	147	0.00126	-0.16281	
SPS	'CUNNINGHAM 115KV'	50.00977			'NICHOLS 230KV'	147	0.0013	-0.16285	
SPS	'CUNNINGHAM 115KV'	50.00977			'STEER WATER 115KV'	79.98182		-0.16277	
SPS	'CUNNINGHAM 115KV'	50.00977			'WILWIND 230KV'	159.9636		-0.16333	
SPS	'MADOX 115KV'	75			'CAPROCK 115KV'	79.98182		-0.16185	
SPS	'MADOX 115KV'	75			JONES 230KV	486		-0.16229	
SPS	'CUNNINGHAM 115KV'	50.00977		SPS	'CAPROCK 115KV'	79.98182	-0.00267	-0.15888	
SPS	'CUNNINGHAM 115KV'	50.00977	-0.16155	SPS	JONES 230KV	486	-0.00223	-0.15932	
SPS	'TOLK 230KV'	55.27795	0.00375	SPS	'MUSTG5 118.0 230KV'	360	0.15058	-0.14683	
SPS	'MADOX 115KV'	75	-0.16452	SPS	'SAN JUAN 230KV'	119.9727	-0.01887	-0.14565	

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

Upgrade: Limiting Facility: Direction: Line Outage:
 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

Reservation	Relief Amount	Aggregate Relief Amount							
109048									
103040	1.5	1.0					1	1	Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MV
SPS	CUNNINGHAM 115KV	71			'MUSTG5 118.0 230KV'	210			
SPS	'MADOX 115KV'	75			'MUSTG5 118.0 230KV'	210			
SPS	CARLSBAD 69KV	18			'MUSTG5 118.0 230KV'	210			
SPS	CUNNINGHAM 115KV	71			PLANTX 230KV	189	0.00438		
SPS	CUNNINGHAM 115KV	71			TOLK 230KV	1012.904	0.00374		
SPS	'MADOX 115KV'	75			'HARRINGTON 230KV'	706	0.00132		
SPS	'MADOX 115KV'	75			PLANTX 115KV	205	0.0022		
SPS	'MADOX 115KV'	75	-0.16452		'PLANTX 230KV'	189	0.00438		
SPS	'MADOX 115KV'	75			TOLK 230KV	1012.904	0.00374		
SPS	'MADOX 115KV'	75			WILWIND 230KV	72			
SPS	CUNNINGHAM 115KV	71			CAPROCK 115KV	36			
SPS	CUNNINGHAM 115KV	71			'HARRINGTON 230KV'	706	0.00132		
SPS	CUNNINGHAM 115KV	71			JONES 230KV	486	-0.00223		
SPS	CUNNINGHAM 115KV	71			'LP-BRND2 69KV'	80			
SPS	CUNNINGHAM 115KV	71			'PLANTX 115KV'	205			
SPS	CUNNINGHAM 115KV	71			'WILWIND 230KV'	72			
SPS	'LP-BRND2 69KV'	152			'MUSTG5 118.0 230KV'	210			
SPS	'MADOX 115KV'	75			CAPROCK 115KV	36			
SPS	'MADOX 115KV'	75			JONES 230KV	486			
SPS	'MADOX 115KV'	75			'LP-BRND2 69KV'	80			
SPS	TUCUMCARI 115KV	15			'MUSTG5 118.0 230KV'	210			
SPS	CUNNINGHAM 115KV	71			'SAN JUAN 230KV'	54		-0.14268	
SPS	'HARRINGTON 230KV'	360			'MUSTG5 118.0 230KV'	210			
SPS	'HUBRCO2 69KV'	6			'MUSTG5 118.0 230KV'	210			
SPS	'MADOX 115KV'	75			'SAN JUAN 230KV'	54		-0.14565	
SPS	'MOORE COUNTY 115KV'	48			'MUSTG5 118.0 230KV'	210			
SPS	'NICHOLS 115KV'	132.2241	0.00126		'MUSTG5 118.0 230KV'	210			
SPS	'NICHOLS 230KV'	244			'MUSTG5 118.0 230KV'	210			
SPS	'PLANTX 115KV'	48			'MUSTG5 118.0 230KV'	210			
SPS	'RIVERVIEW 69KV'	23			'MUSTG5 118.0 230KV'	210			
SPS	SIDRCH 69KV	6			'MUSTG5 118.0 230KV'	210			
SPS	TOLK 230KV	67.09586			'MUSTG5 118.0 230KV'	210			
SPS	CUNNINGHAM 115KV	71			CUNNINGHAM 230KV	306	-0.07301	-0.08854	
SPS	'MADOX 115KV'	75			CUNNINGHAM 230KV	306	-0.07301		
SPS	CARLSBAD 69KV	18			'PLANTX 230KV'	189			
SPS	'CARLSBAD 69KV'	18			'HARRINGTON 230KV'	706	0.00132		
SPS	'CARLSBAD 69KV'	18			'PLANTX 115KV'	205	0.0022		
SPS	'CARLSBAD 69KV'	18			TOLK 230KV	1012.904	0.00374		
iPS	'CARLSBAD 69KV'	18			WILWIND 230KV	72			
SPS	'CARLSBAD 69KV'	18			JONES 230KV	486	-0.00223		
SPS	CARLSBAD 69KV	18			CAPROCK 115KV	36	-0.00267	-0.07385	
SPS	CARLSBAD 69KV	18			LP-BRND2 69KV	80			
SPS	'CARLSBAD 69KV'	18			SAN JUAN 230KV	54			

Upgrade: Limiting Facility: Direction: Line Outage: Flowgate: Date Redispatch Needed: Season Flowgate Identified:	Mustang-San Andr-Amerada Hess 115KV Displa DENVER CITY INTERCHANGE 3 MUSTANG 5 To->From DENVER CITY INTERCHANGE N - MUSTANG 5 519625198615196051966111075H 6/1 - 10/1 Until EOC of Upgrade 2007 Summer Shoulder	STATION 115KV C							
Season Flowgate Identified.	2007 Summer Shoulder	Aggregate Relief	1						
Reservation	Relief Amount	Amount							
109048			1						
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Aggreg Redisp Amoun
SPS	'MADOX 115KV'	75			'MUSTG5 118.0 230KV'	210			
SPS	CUNNINGHAM 115KV	71			'MUSTG5 118.0 230KV'	210			
SPS	CUNNINGHAM 115KV	110			'MUSTG5 118.0 230KV'	210			
SPS	'CARLSBAD 69KV'	18			'MUSTG5 118.0 230KV'	210			
SPS	CUNNINGHAM 230KV	110	-0.07304	SPS	'MUSTG5 118.0 230KV'	210	0.14753		
SPS	'MADOX 115KV'	75			'PLANTX 230KV'	189	0.00419	-0.16802	2
SPS	'MADOX 115KV'	75			'BLACKHAWK 115KV'	220			
SPS	'MADOX 115KV'	75			'HARRINGTON 230KV'	1066			
SPS	'MADOX 115KV'	75			'NICHOLS 115KV'	82			
SPS	'MADOX 115KV'	75			'PLANTX 115KV'	163.5259			
SPS	'MADOX 115KV'	75			'STEER WATER 115KV'	79.98182			
SPS	'MADOX 115KV'	75			'TOLK 230KV'	1027.989			
SPS	'MADOX 115KV'	75			WILWIND 230KV	159.9636			
SPS SPS	CUNNINGHAM 115KV'	71		525	'PLANTX 115KV' 'PLANTX 115KV'	163.5259 163.5259	0.0021		
SPS	CUNNINGHAM 115KV	71			PLANTX 115KV 'PLANTX 230KV'	163.5259			
SPS	CUNNINGHAM 115KV	110	-0.16067		'PLANTX 230KV'	189			
SPS	CUNNINGHAM 115KV	71			TOLK 230KV	1027.989			
SPS	CUNNINGHAM 115KV	110			TOLK 230KV	1027.989			
SPS	CUNNINGHAM 115KV	71			WILWIND 230KV	159,9636			
SPS	CUNNINGHAM 115KV	110			WILWIND 230KV	159.9636			
SPS	CUNNINGHAM 115KV	71			'BLACKHAWK 115KV'	220			
SPS	CUNNINGHAM 115KV	110		SPS	'BLACKHAWK 115KV'	220			
SPS	CUNNINGHAM 115KV	71			'HARRINGTON 230KV'	1066	0.00125	-0.16192	2
SPS	CUNNINGHAM 115KV	110			'HARRINGTON 230KV'	1066	0.00125	-0.16192	2
SPS	CUNNINGHAM 115KV	71			'NICHOLS 115KV'	82			
SPS	CUNNINGHAM 115KV	110			'NICHOLS 115KV'	82			
SPS	CUNNINGHAM 115KV	71			'STEER WATER 115KV'	79.98182			
SPS	CUNNINGHAM 115KV	110			'STEER WATER 115KV'	79.98182	0.00116		
SPS	'MADOX 115KV'	75			'CAPROCK 115KV'	79.98182			
SPS	'MADOX 115KV'	75			JONES 230KV	486			
SPS	'MADOX 115KV'	75			LP-BRND2 69KV	80			
SPS	CUNNINGHAM 115KV'	71			'CAPROCK 115KV' 'CAPROCK 115KV'	79.98182	-0.00285		
SPS SPS	CUNNINGHAM 115KV CUNNINGHAM 115KV	110 71	-0.16067		JONES 230KV	79.98182			
SPS SPS	CUNNINGHAM 115KV	110			JONES 230KV	486			
SPS	CUNNINGHAM 115KV	71			'LP-BRND2 69KV'	400			
SPS	CUNNINGHAM 115KV	110			'LP-BRND2 69KV'	80			
SPS	LP-BRND2 69KV	152	-0.00242		'MUSTG5 118.0 230KV'	210			
SPS	'MADOX 115KV'	75			'SAN JUAN 230KV'	119.9727			
SPS	MOORE COUNTY 115KV	48			'MUSTG5 118.0 230KV'	210			
SPS	'NICHOLS 115KV'	131	0.0012		'MUSTG5 118.0 230KV'	210			
SPS	'NICHOLS 230KV'	244	0.00124		'MUSTG5 118.0 230KV'	210			
SPS	PLANTX 115KV	89.47412	0.0021		'MUSTG5 118.0 230KV'	210			
SPS	'RIVERVIEW 69KV'	23	0.00123		'MUSTG5 118.0 230KV'	210			
SPS	'TOLK 230KV'	52.01129			'MUSTG5 118.0 230KV'	210			

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	'MADOX 115KV'	75	-0.16383	SPS	'CUNNINGHAM 230KV'	196	-0.07304	-0.09079	104
SPS	CUNNINGHAM 115KV	71	-0.16067		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		'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'	163.5259	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 th	e study mode	els where limiting facility was identified.				
Factor = Source GSF - Sin	k GSF								
Redispatch Amount = Reli	ef Amount / Factor								

Jpgrade: imiting Facility:	Mustang-San Andr-Amerada Hess 115KV Displace DENVER CITY INTERCHANGE S - MUSTANG S		KT 1						
Direction:	To->From								
ine Outage:	DENVER CITY INTERCHANGE N - MUSTANG S	TATION 115KV C	KT 1						
lowgate:	51962519681519605196611107SP								
	6/1/07 - 10/1/07								
Season Flowgate Identified:	2007 Summer Peak								
boucont to trigato tuoritanou.	2007 Ballmort Balk	Aggregate Relief	1						
Reservation	Relief Amount	Amount							
1090487	23.3		1						
1000101	20.0	20.0							Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source		GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (M
SPS	'MADOX 115KV'	75			'MUSTG5 118.0 230KV'	360			
SPS	CUNNINGHAM 115KV	50.00977			'MUSTG5 118.0 230KV'	360			
SPS	'MADOX 115KV'	75			'PLANTX 230KV'	189			
SPS	'MADOX 115KV'	75			TOLK 230KV	1024.722			
SPS	CUNNINGHAM 115KV	50.00977			'PLANTX 230KV'	189			
SPS	MADOX 115KV	75			BLACKHAWK 115KV	220		-0.16507	
SPS	'MADOX 115KV'	75			HARRINGTON 230KV	1066			
SPS	'MADOX 115KV'	75			'NICHOLS 115KV'	147		-0.16503	
SPS	'MADOX 115KV'	75			'NICHOLS 230KV'	147		-0.16507	
SPS	'MADOX 115KV'	75			PLANTX 115KV	205		-0.16593	
SPS	'MADOX 115KV'	75			STEER WATER 115KV	79.98182			
SPS	'MADOX 115KV'	75			WILWIND 230KV	159.9636		-0.16552	
SPS	CUNNINGHAM 115KV	50.00977	-0.16067		TOLK 230KV	1024.722			
SPS	CUNNINGHAM 115KV	50.00977	-0.16067		PLANTX 115KV	205		-0.16277	
SPS	CUNNINGHAM 115KV	50.00977	-0.16067		'BLACKHAWK 115KV'	220		-0.16191	
SPS	CUNNINGHAM 115KV	50.00977			'HARRINGTON 230KV'	1066			
SPS	CUNNINGHAM 115KV	50.00977			NICHOLS 115KV	147		-0.16187	
SPS	CUNNINGHAM 115KV	50.00977	-0.16067		'NICHOLS 230KV'	147		-0.16191	
SPS	CUNNINGHAM 115KV	50.00977	-0.16067		STEER WATER 115KV	79.98182			
SPS	CUNNINGHAM 115KV	50.00977	-0.16067		WILWIND 230KV'	159.9636			
SPS	'MADOX 115KV'	75			JONES 230KV	486		-0.16175	
SPS	'MADOX 115KV'	75			CAPROCK 115KV	79.98182		-0.16098	
SPS	CUNNINGHAM 115KV	50.00977	-0.16067		JONES 230KV	486		-0.15859	
SPS	CUNNINGHAM 115KV	50.00977	-0.16067		CAPROCK 115KV	79.98182		-0.15782	
SPS	'MADOX 115KV'	75			'SAN JUAN 230KV'	119.9727			
SPS	TOLK 230KV	55.27795			'MUSTG5 118.0 230KV'	360			

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

Upgrade:	Seven Rivers to Pecos to Potash Junction 230kV								
Limiting Facility: Direction:	CARLSBAD PLANT - POTASH JUNCTION INTE	RCHANGE 115KV	CKII						
	To->From								
Line Outage:	CUNNINGHAM STATION - EDDY COUNTY INTE	ERCHANGE 230KV	CKI 1						
Flowgate:	52310522521522095218512407SP								
Date Redispatch Needed:	6/1/07 - 10/1/07								
Season Flowgate Identified:	2007 Summer Peak		n in the second s						
		Aggregate Relief							
Reservation	Relief Amount	Amount							
109048	3.3	3.3			i.				
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source		GSF	Area	Sink		GSF	Factor	Amount (MW)
SPS	'CARLSBAD 69KV'	18			'MUSTG5 118.0 230KV'	360	0.0485		1
SPS	'CARLSBAD 69KV'	18	-0.26531		'BLACKHAWK 115KV'	220	-0.00367		
SPS	'CARLSBAD 69KV'	18	-0.26531		'CZ 69KV'	39	-0.00335		
SPS	'CARLSBAD 69KV'	18	-0.26531		'HARRINGTON 230KV'	1066	-0.0037		1
SPS	'CARLSBAD 69KV'	18	-0.26531		'HUBRCO2 69KV'	11	-0.00367		
SPS	'CARLSBAD 69KV'	18	-0.26531		JONES 230KV	486	0.01395		
SPS	'CARLSBAD 69KV'	18	-0.26531		'LP-BRND2 69KV'	80	0.01302	-0.27833	
SPS	'CARLSBAD 69KV'	18	-0.26531		'MOORE COUNTY 115KV'	48	-0.00385	-0.26146	1
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'NICHOLS 115KV'	147	-0.00362	-0.26169	1
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'NICHOLS 230KV'	147	-0.00366	-0.26165	1
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'SIDRCH 69KV'	20	-0.00367	-0.26164	1
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'STEER WATER 115KV'	8	-0.00349	-0.26182	1
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'PLANTX 115KV'	205	-0.00587	-0.25944	1
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'PLANTX 230KV'	189	-0.00909	-0.25622	1
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'TOLK 230KV'	1018.154	-0.01292	-0.25239	1
SPS	'CARLSBAD 69KV'	18	-0.26531		WILWIND 230KV	16	-0.00514	-0.26017	1
SPS	'CARLSBAD 69KV'	18	-0.26531	SPS	'CAPROCK 115KV'	8	-0.02602	-0.23929	1
SPS	'CARLSBAD 69KV'	18	-0.26531		'SAN JUAN 230KV'	12	-0.06421	-0.2011	1
SPS	TUCUMCARI 115KV	15	-0.02602	SPS	'MUSTG5 118.0 230KV'	360	0.0485	-0.07452	4
SPS	'TOLK 230KV'	61.84583	-0.01292		'MUSTG5 118.0 230KV'	360	0.0485	-0.06142	
SPS	'PLANTX 115KV'	48	-0.00587	SPS	'MUSTG5 118.0 230KV'	360	0.0485	-0.05437	6
SPS	'RIVERVIEW 69KV'	23	-0.00367		'MUSTG5 118.0 230KV'	360	0.0485		6
SPS	'LP-BRND2 69KV'	152			'MUSTG5 118.0 230KV'	360	0.0485		

 [SPS
 [LP-BRND2 69KV'
 152
 0.01302[SPS
 [MUSTG5 118.0 230KV'

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

Upgrade:	WICHITA - RENO 345KV
Limiting Facility:	EXIDE JUNCTION - SUMMIT 115KV CKT 1
Direction:	To->From
Line Outage:	EAST MCPHERSON - SUMMIT 230KV CKT 1
Flowgate:	57368573811568725687312206WP
Date Redispatch Needed:	12/1/06 - 4/1/07
Season Flowgate Identified:	2006 Winter Peak

		Aggregate Relief	1						
Reservation 1086655	Relief Amount 1.5	Amount 2.6	-						
1086655			-						
1090965	0.3	2.6		1	1		1		Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area WERE	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW) 470	GSF 0.01746	Factor	Amount (MW)
WERE	'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV'	259 259	-0.29594 -0.29594		'JEFFREY ENERGY CENTER 230KV' 'JEFFREY ENERGY CENTER 345KV'	940	0.01746	-0.3134 -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			CHANUTE 69KV	35.344	0.00148		9
WERE	'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV'	259 259	-0.29594 -0.29594		CITY OF AUGUSTA 69KV' CITY OF BURLINGTON 69KV'	17.25201	0.00019 0.00281	-0.29613 -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 WERE	'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV'	259	-0.29594 -0.29594		'CITY OF MULVANE 69KV' 'CITY OF WELLINGTON 69KV'	3.694	-0.00102 -0.00179	-0.29492 -0.29415	9
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29594	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.97	0.00281		9
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			'EVANS ENERGY CENTER 138KV'	25.88745	0.00002	-0.29596	9
WERE WERE	'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV'	259 259	-0.29594 -0.29594		'WACO 138KV' 'COLBY 115KV'	17.953	-0.003 -0.03582		9
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423			JEFFREY ENERGY CENTER 230KV	470	0.01746		10
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.23852	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02327		10
WERE	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 69KV'	423		WERE	'LAWRENCE ENERGY CENTER 230KV' 'JEFFREY ENERGY CENTER 230KV'	130.0238	0.00966		10 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' 'HUTCHINSON ENERGY CENTER 115KV'	67 423	-0.23841 -0.23852	WERE	'LAWRENCE ENERGY CENTER 230KV' 'CHANUTE 69KV'	130.0238	0.00966	-0.24807	10
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.23852	WERE	'CITY OF AUGUSTA 69KV'	17.25201	0.00148	-0.23871	11
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.23852	WERE	'CITY OF BURLINGTON 69KV'	4.8	0.00281	-0.24133	11
WERE WERE	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 115KV'	423 423			'CITY OF IOLA 69KV' 'CITY OF MULVANE 69KV'	13.978 3.694	0.00175		11 11
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.23852	WERE	'CITY OF WELLINGTON 69KV'	24	-0.00179		11
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423			COFFEY COUNTY NO. 2 SHARPE 69KV	19.97	0.00281	-0.24133	11
WERE	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 115KV'	423	-0.23852 -0.23852		'EVANS ENERGY CENTER 138KV' 'WACO 138KV'	25.88745	0.00002	-0.23854 -0.23552	11
WERE	'HUTCHINSON ENERGY CENTER 69KV'	423			CHANUTE 69KV	35.344	0.00148		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' 'HUTCHINSON ENERGY CENTER 69KV'	67 67			'CITY OF BURLINGTON 69KV' 'CITY OF IOLA 69KV'	4.8	0.00281	-0.24122 -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 HUTCHINSON ENERGY CENTER 69KV	67			CITY OF WELLINGTON 69KV	24	-0.00179		11
WERE WERE	HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV	67	-0.23841 -0.23841		'COFFEY COUNTY NO. 2 SHARPE 69KV' 'EVANS ENERGY CENTER 138KV'	19.97 25.88745	0.00281 0.00002	-0.24122 -0.23843	11
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23841	WERE	'WACO 138KV'	17.953	-0.003	-0.23541	11
WERE WERE	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 69KV'	423	-0.23852 -0.23841		'COLBY 115KV' 'COLBY 115KV'	6.280901 6.280901	-0.03582 -0.03582	-0.2027 -0.20259	13 13
WERE	PAWNEE 115KV	999	-0.23641		JEFFREY ENERGY CENTER 345KV	0.280901	0.02327		13
WERE	'RICE 115KV'	999	-0.13502	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.02327	-0.15829	16
WERE WERE	'ST JOHN 115KV' 'PAWNEE 115KV'	7.5	-0.13502 -0.13502		JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 230KV'	940	0.02327 0.01746		16 17
WERE	'RICE 115KV'	999	-0.13502		JEFFREY ENERGY CENTER 230KV	470	0.01746		17
WERE	ST JOHN 115KV	7.5	-0.13502	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01746		17
WERE	'PAWNEE 115KV' 'RICE 115KV'	999	-0.13502 -0.13502	WERE	'LAWRENCE ENERGY CENTER 230KV' 'LAWRENCE ENERGY CENTER 230KV'	130.0238	0.00966		18 18
WERE	'ST JOHN 115KV'	7.5	-0.13502	WERE	'LAWRENCE ENERGY CENTER 230KV'	130.0238	0.00966		18
WERE WERE	'PAWNEE 115KV' 'PAWNEE 115KV'	999	-0.13502 -0.13502	WERE	'CHANUTE 69KV' 'CITY OF AUGUSTA 69KV'	35.344	0.00148		19 19
WERE	PAWNEE 115KV	999	-0.13502		CITY OF AUGUSTA 69KV	13.978	0.00019		19
WERE	'PAWNEE 115KV'	999	-0.13502	WERE	'CITY OF WELLINGTON 69KV'	24	-0.00179	-0.13323	19
WERE	'PAWNEE 115KV' 'PAWNEE 115KV'	999	-0.13502 -0.13502	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV' 'EVANS ENERGY CENTER 138KV'	19.97 25.88745	0.00281 0.00002		19 19
WERE	'RICE 115KV'	999	-0.13502	WERE	'CHANUTE 69KV'	35.344	0.00002	-0.13504	19
WERE	'RICE 115KV'	999	-0.13502	WERE	'CITY OF AUGUSTA 69KV'	17.25201	0.00019	-0.13521	19
WERE WERE	'RICE 115KV' 'RICE 115KV'	999	-0.13502 -0.13502		CITY OF IOLA 69KV'	13.978	0.00175		19 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 ST JOHN 115KV	7.5	-0.13502 -0.13502		CHANUTE 69KV' CITY OF AUGUSTA 69KV'	35.344	0.00148	-0.1365 -0.13521	19 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 ST JOHN 115KV	7.5			'CITY OF WELLINGTON 69KV' 'COFFEY COUNTY NO. 2 SHARPE 69KV'	24	-0.00179 0.00281	-0.13323 -0.13783	19 19
WERE	ST JOHN 115KV	7.5	-0.13502	WERE	'EVANS ENERGY CENTER 138KV'	25.88745	0.00281		19
WERE	'GREAT BEND PLANT 69KV'	10	-0.10743	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.02327	-0.1307	20
WERE WERE	'PAWNEE 115KV' 'RICE 115KV'	999 999			'WACO 138KV' 'WACO 138KV'	17.953 17.953	-0.003	-0.13202 -0.13202	20 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 WERE	'GREAT BEND PLANT 69KV' 'GREAT BEND PLANT 69KV'	10			'LAWRENCE ENERGY CENTER 230KV' 'COFFEY COUNTY NO. 2 SHARPE 69KV'	130.0238	0.00966 0.00281	-0.11709 -0.11024	22 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		WERE	CITY OF AUGUSTA 69KV	17.25201	0.00019	-0.10762	24
WERE	'GREAT BEND PLANT 69KV' 'GREAT BEND PLANT 69KV'	10		WERE	'CITY OF IOLA 69KV' 'CITY OF WELLINGTON 69KV'	13.978	0.00175	-0.10918	24 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. MULLERGREN GENERATOR 115KV	63	-0.12041	WEPL	'GRAY COUNTY WIND FARM 115KV'	73	-0.07564	-0.04477	58

 IVEPL
 I/A. M. MULLERGREN GENERATOR
 115kV
 63
 -0.12041
 WEPL
 IGRAY COUNTY WIND FARM 115kV

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

Upgrade: Limiting Facility: Direction: Line Outage: Flowgate: Date Redispatch Needed: Season Flowgate Identified:	WICHITA - RENO 345KV EXIDE JUNCTION - SUMMIT 115KV CKT 1 ToFrom EAST MCPHERSON - SUMMIT 230KV CKT 1 573685738115687256873122075H 6/1 - 10/1 Until EOC of Upgrade 2007 Summer Shoulder								
		Aggregate Relief							
	Relief Amount	Amount							
1086655									
1090817		5.0							
1090964									
1090965	0.3	5.0							
		Maximum		Sink Control		Maximum			Aggregate Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562	WERE	'JEFFREY ENERGY CENTER 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

VERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562	WERE	'CITY OF IOLA 69KV'	19.865	0.00174	-0.29736	1
VERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562	WERE	'CITY OF MULVANE 69KV'	6.189	-0.00086	-0.29476	1
VERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.00282	-0.29844	1
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562	WERE	'EVANS ENERGY CENTER 138KV'	305	0.00013	-0.29575	1
VERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562		'GILL ENERGY CENTER 138KV'	77	-0.00316		1
VERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29562		'LAWRENCE ENERGY CENTER 115KV'	60	0.0088		1
VERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29562		TECUMSEH ENERGY CENTER 115KV	108	0.00844		1
VERE	BPU - CITY OF MCPHERSON 115KV	259	-0.29562		WACO 138KV	17.947	-0.00282		
VERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794		JEFFREY ENERGY CENTER 345KV	940	0.02299		
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783		JEFFREY ENERGY CENTER 345KV	940	0.02299		
VERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.23783		JEFFREY ENERGY CENTER 230KV	940 470	0.02299		2
VERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794		'LAWRENCE ENERGY CENTER 115KV'	60	0.0088		
VERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794		'LAWRENCE ENERGY CENTER 230KV'	230.2191	0.00919		
VERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794		'TECUMSEH ENERGY CENTER 115KV'	108	0.00844		
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783		'JEFFREY ENERGY CENTER 230KV'	470	0.01718		
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783		'LAWRENCE ENERGY CENTER 115KV'	60	0.0088		
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783		'LAWRENCE ENERGY CENTER 230KV'	230.2191	0.00919		
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783		'TECUMSEH ENERGY CENTER 115KV'	108	0.00844		
VERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794		'CHANUTE 69KV'	46.617	0.00149		
VERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794		'CITY OF ERIE 69KV'	23.258	0.00149		
VERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.00282	-0.24076	
VERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794	WERE	'EVANS ENERGY CENTER 138KV'	305	0.00013	-0.23807	
VERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794	WERE	'GILL ENERGY CENTER 138KV'	77	-0.00316	-0.23478	
VERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.23794	WERE	'WACO 138KV'	17.947	-0.00282	-0.23512	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783	WERE	'CHANUTE 69KV'	46.617	0.00149	-0.23932	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783	WERE	'CITY OF ERIE 69KV'	23.258	0.00149	-0.23932	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.00282	-0.24065	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783		'EVANS ENERGY CENTER 138KV'	305	0.00013		
VERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.23783		GILL ENERGY CENTER 138KV	77	-0.00316		
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.23783		WACO 138KV	17.947	-0.00282		
VERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562		CLAY CENTER JUNCTION 115KV	11.825	-0.09835		
VERE	'PAWNEE 115KV'	999	-0.13182		JEFFREY ENERGY CENTER 345KV	940	0.02299		
VERE	'RICE 115KV'	999	-0.13182		JEFFREY ENERGY CENTER 345KV	940	0.02299		
VERE	'PAWNEE 115KV'	999	-0.13182			940 470	0.02299		
					'JEFFREY ENERGY CENTER 230KV'				
VERE	'RICE 115KV'	999	-0.13182		'JEFFREY ENERGY CENTER 230KV'	470	0.01718		
VERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.29562		'ABILENE ENERGY CENTER 115KV'	18.23438	-0.15727		
VERE	'PAWNEE 115KV'	999	-0.13182		'LAWRENCE ENERGY CENTER 115KV'	60	0.0088		
VERE	'PAWNEE 115KV'	999	-0.13182		'LAWRENCE ENERGY CENTER 230KV'	230.2191	0.00919		
VERE	'PAWNEE 115KV'	999	-0.13182		'TECUMSEH ENERGY CENTER 115KV'	108	0.00844		
/ERE	'RICE 115KV'	999	-0.13182		'LAWRENCE ENERGY CENTER 115KV'	60	0.0088		
/ERE	'RICE 115KV'	999	-0.13182		'LAWRENCE ENERGY CENTER 230KV'	230.2191	0.00919		
/ERE	'RICE 115KV'	999	-0.13182	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.00844	-0.14026	
/ERE	'PAWNEE 115KV'	999	-0.13182	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.00282	-0.13464	
/ERE	'RICE 115KV'	999	-0.13182	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.00282	-0.13464	
VERE	'PAWNEE 115KV'	999	-0.13182		'CITY OF ERIE 69KV'	23.258	0.00149		
/ERE	'PAWNEE 115KV'	999	-0.13182		'EVANS ENERGY CENTER 138KV'	305	0.00013		
/ERE	'RICE 115KV'	999	-0.13182		'CITY OF ERIE 69KV'	23.258	0.00149		
/ERE	'RICE 115KV'	999	-0.13182		'EVANS ENERGY CENTER 138KV'	305	0.00013		
/ERE	PAWNEE 115KV	999	-0.13182		'GILL ENERGY CENTER 138KV'	77	-0.00316		
/ERE	'PAWNEE 115KV'	999	-0.13182		WACO 138KV	17.947	-0.00282		
/ERE	'RICE 115KV'	999	-0.13182		GILL ENERGY CENTER 138KV	77	-0.00282		
/ERE	'RICE 115KV'	999	-0.13182		WACO 138KV	17.947	-0.00316	-0.12000	
VERE	BPU - CITY OF MCPHERSON 115KV		-0.13182		HUTCHINSON ENERGY CENTER 115KV	80.00001			
		259			dels where limiting facility was identified.	80.00001	-0.23794	-0.05768	

Maximum Decrement and Maximum Incre Factor = Source GSF - Sink GSF Redispatch Amount = Relief Amount / Fact Upgrade: WICHITA - I Limiting Facility: NORTH AM Direction: From->To Line Outage: FAST MCPI Flowgate: S73725737 Date Redispatch Needed: 2006 Winter Reservation Relief Amou 1090965 Source Control Area Source WERE IBPU - CITY WERE IBPU - CITY WERE IBPU - CITY WERE IBPU - CITY	Tor RENO 345KV ERICAN PHILIPS - NORTH AMERIC HERSON - SUMMIT 230KV CKT 1 1568725687312206WP 107 - Peak int 6.9 2.0 OF MCPHERSON 115KV' OF MCPHERSON 115KV'	AN PHILIPS JUNC Anount 8.9 Maximum Increment(WW)	TION (SOUT	e study mode		80.00001	-0.23794	-0.05768	
Maximum Decrement and Maximum Incre Factor = Source GSF - Sink GSF Redispatch Amount = Relief Amount / Fact Upgrade: WICHITA - I Limiting Facility: NORTH AM Direction: From->To Line Outage: EAST MCPI Flowgate: 573725737 Date Redispatch Needde: 2006 Winter Reservation Relief Amou 1090965 Source Control Area Source WERE IBPU - CITY WERE IBPU - CITY WERE IBPU - CITY	nent were determine from the Souce for RENO 345KV ERICAN PHILIPS - NORTH AMERIC HERSON - SUMMIT 230KV CKT 1 11568725687312206WP 1/07 Peak Int 6.9 2.0 COF MCPHERSON 115KV OF MCPHERSON 115KV	AN PHILIPS JUNC Anount 8.9 Maximum Increment(WW)	Points in the	e study mode	is where limiting facility was identified.				
Factor = Source GSF - Sink GSF Redispatch Amount = Relief Amount / Fact Upgrade: WICHITA - I Limiting Facility: NORTH AM Direction: From->To Line Outage: EAST MCP Flowgate: 573725737 Date Redispatch Needed: 12/1/06 - 4/ Season Flowgate Identified: 2006 Winter Reservation Relief Amou 1090965 Source Control Area Source WERE BPU - CITY WERE IPPU - CITY WERE IPPU - CITY WERE IPU - CITY	Tor RENO 345KV ERICAN PHILIPS - NORTH AMERIC HERSON - SUMMIT 230KV CKT 1 1568725687312206WP 107 - Peak int 6.9 2.0 OF MCPHERSON 115KV' OF MCPHERSON 115KV'	AN PHILIPS JUNC Anount 8.9 Maximum Increment(WW)	TION (SOUT	тн) 115KV С					
Redispatch Amount = Relief Amount / Fact Jpgrade: WICHTA - I imiting Facility: NORTH AM Direction: From->To ine Outage: EAST MCPI Jowgate: 5737253737 Jake Redispatch Needed: 12/1/06 - 4/ Beason Flowgate Identified: 2006 Winter Reservation Relief Amou 1090965 Source Control Area Source WERE IBPU - CITY WERE IBPU - CITY WERE IBPU - CITY	RENO 345KV ERICAN PHILIPS - NORTH AMERIC HERSON - SUMMIT 230KV CKT 1 1568725687312206WP //07 Peak int 6.9 2.0 OF MCPHERSON 115KV' OF MCPHERSON 115KV'	Aggregate Relief Amount 8.9 8.9 Maximum Increment(MW)	-		KT 1				
Jpgrade: WICHITA -1 imiting Facility: NORTH AM inre Outage: EAST MCPI ine Outage: EAST MCPI iowgate: 573/25737 basson Flowgate Identified: 2006 Winter Reservation Relief Amou 1090965 Source Source Control Area Source VERE 'BPU - CITY VERE 'BPU - CITY	RENO 345KV ERICAN PHILIPS - NORTH AMERIC HERSON - SUMMIT 230KV CKT 1 1568725687312206WP //07 Peak int 6.9 2.0 OF MCPHERSON 115KV' OF MCPHERSON 115KV'	Aggregate Relief Amount 8.9 8.9 Maximum Increment(MW)	-		кт 1				
Imiting Facility: NORTH AM Direction: From>To Ine Outage: EAST MCPI Towgate: 573725737 Jate Redispatch Needed: 12/1/06 - 4/ Season Flowgate Identified: 2006 Winter Reservation Relief Amou 1090965 Source Control Area Source WERE BPU - CITY WERE IBPU - CITY WERE IBPU - CITY WERE IBPU - CITY	ERICAN PHILIPS - NORTH AMERIC HERSON - SUMMIT 230KV CKT 1 11568725687312206WP /07 Peak int 6.9 2.0 OF MCPHERSON 115KV' OF MCPHERSON 115KV'	Aggregate Relief Amount 8.9 8.9 Maximum Increment(MW)	-		кт 1				
imiting facility: NORTH AM Direction: From-sTo ine Outage: EAST MCPI Tologate: 573/28737 Jate Redispatch Needed: 121/06 - 4/ Alar Redispatch Needed: 2006 Winter Reservation Relief Amou 1090965 Source VerRe BPU - CITY VerRe BPU - CITY VerRe BPU - CITY	ERICAN PHILIPS - NORTH AMERIC HERSON - SUMMIT 230KV CKT 1 11568725687312206WP /07 Peak int 6.9 2.0 OF MCPHERSON 115KV' OF MCPHERSON 115KV'	Aggregate Relief Amount 8.9 8.9 Maximum Increment(MW)	-		кт 1				
Initing Facility: NORTH AM Direction: From>50 ine Outage: EAST MCPI Towgate: 573725737 Jate Redispatch Needed: 12/106 - 4/4 Season Flowgate Identified: 2006 Winter Reservation Relief Amo. 1090965 1090965 Source Control Area Source WERE IBPU - CITY WERE IBPU - CITY	ERICAN PHILIPS - NORTH AMERIC HERSON - SUMMIT 230KV CKT 1 11568725687312206WP /07 Peak int 6.9 2.0 OF MCPHERSON 115KV' OF MCPHERSON 115KV'	Aggregate Relief Amount 8.9 8.9 Maximum Increment(MW)	-		кт 1				
Imiting Facility: NORTH AM Direction: From>To Ine Outage: EAST MCPI Towgate: 573725737 Jate Redispatch Needed: 12/1/06 - 4/ Season Flowgate Identified: 2006 Winter Reservation Relief Amou 1090965 Source Control Area Source WERE BPU - CITY WERE IBPU - CITY WERE IBPU - CITY WERE IBPU - CITY	ERICAN PHILIPS - NORTH AMERIC HERSON - SUMMIT 230KV CKT 1 11568725687312206WP /07 Peak int 6.9 2.0 OF MCPHERSON 115KV' OF MCPHERSON 115KV'	Aggregate Relief Amount 8.9 8.9 Maximum Increment(MW)	-		кт 1				
Direction: From->To Line Outage: EAST MCPI Drougate: EAST MCPI Towgate: 5737257372 Date Redispatch Needed: 12/1/06 - 4/ Season Flowgate Identified: 2006 Winter Reservation Relief Amou 1090964 1090964 Source Control Area Source WERE 18PU - CITY WERE 18PU - CITY WERE 18PU - CITY	HERSON - SUMMIT 230KV CKT 1 11568725687312206WP //07 Peak int 6.9 2.0 COF MCPHERSON 115KV' OF MCPHERSON 115KV'	Aggregate Relief Amount 8.9 8.9 Maximum Increment(MW)	-		KT 1				
ine Outage: EAST MCP rlowgate: 573726374 ake Redispatch Needed: 12/1/06 - 4/ zake Redispatch Needed: 2006 Winter Reservation Relief Amou 1090965 Source VERE 'BPU - CITY VERE 'BPU - CITY VERE 'BPU - CITY	11568725687312206WP 1/07 Peak int 6.9 2.0 OF MCPHERSON 115KV' OF MCPHERSON 115KV'	Amount 8.9 8.9 Maximum Increment(MW)							
Iowgate: 573725737 Date Redispatch Needed: 12/1/06 - 4// Season Flowgate Identified: 2008 Winter Reservation Relief Amou 1090964 1090964 Source Control Area Source VERE 'BPU - CITY VERE 'BPU - CITY VERE 'BPU - CITY	11568725687312206WP 1/07 Peak int 6.9 2.0 OF MCPHERSON 115KV' OF MCPHERSON 115KV'	Amount 8.9 8.9 Maximum Increment(MW)			1				
Iowgate: 573725737 Date Redispatch Needed: 12/1/06 - 4// Season Flowgate Identified: 2008 Winter Reservation Relief Amou 1090964 1090964 Source Control Area Source VERE 'BPU - CITY VERE 'BPU - CITY VERE 'BPU - CITY	11568725687312206WP 1/07 Peak int 6.9 2.0 OF MCPHERSON 115KV' OF MCPHERSON 115KV'	Amount 8.9 8.9 Maximum Increment(MW)							
Vate Redispatch Needed: 12/1/06 -4/ ieason Flowgate Identified: 2006 Winter Relief Amou 1090965 Source Control Area VERE 19PU - CITY VERE 19PU - CITY VERE 19PU - CITY	007 Peak int 6.9 2.0 OF MCPHERSON 115KV' OF MCPHERSON 115KV'	Amount 8.9 8.9 Maximum Increment(MW)			1				
Beason Flowgate Identified: 2006 Winter Reservation Relief Amou 1090965 1090965 Source Control Area Source VERE TBPU - CITY VERE TBPU - CITY VERE TBPU - CITY	Peak nt 6.9 2.0 OF MCPHERSON 115KV' OF MCPHERSON 115KV'	Amount 8.9 8.9 Maximum Increment(MW)							
Relief Amou 1090964 1090965 Source Control Area Source TBPU - CITY VERE TBPU - CITY VERE TBPU - CITY	OF MCPHERSON 115KV OF MCPHERSON 115KV	Amount 8.9 8.9 Maximum Increment(MW)			1				
Relief Amou 1090964 1090965 Source Control Area Source TBPU - CITY VERE TBPU - CITY VERE TBPU - CITY	OF MCPHERSON 115KV OF MCPHERSON 115KV	Amount 8.9 8.9 Maximum Increment(MW)							
1090964 1090965 Source Control Area Source WERE IBPU - CITY WERE IBPU - CITY WERE IBPU - CITY	6.9 2.0 OF MCPHERSON 115KV' OF MCPHERSON 115KV'	Amount 8.9 8.9 Maximum Increment(MW)							
1090964 1090965 Source Control Area Source WERE IBPU - CITY WERE IBPU - CITY WERE IBPU - CITY	6.9 2.0 OF MCPHERSON 115KV' OF MCPHERSON 115KV'	8.9 8.9 Maximum Increment(MW)			T				
1090965 Source Control Area Source WERE 'BPU - CITY WERE 'BPU - CITY WERE 'BPU - CITY WERE 'BPU - CITY	2.0 OF MCPHERSON 115KV OF MCPHERSON 115KV	8.9 Maximum Increment(MW)			1				
Source Control Area Source WERE 'BPU - CITY WERE 'BPU - CITY WERE 'BPU - CITY	OF MCPHERSON 115KV OF MCPHERSON 115KV	Maximum Increment(MW)			1				
Source Control Area Source WERE 'BPU - CITY WERE 'BPU - CITY WERE 'BPU - CITY	OF MCPHERSON 115KV	Maximum Increment(MW)							
WERE 'BPU - CITY NERE 'BPU - CITY NERE 'BPU - CITY	OF MCPHERSON 115KV	Increment(MW)				-		1	A
WERE 'BPU - CITY NERE 'BPU - CITY WERE 'BPU - CITY	OF MCPHERSON 115KV	Increment(MW)				Maria dana sana			100
WERE 'BPU - CITY WERE 'BPU - CITY WERE 'BPU - CITY	OF MCPHERSON 115KV			Sink Control		Maximum			R
WERE 'BPU - CITY WERE 'BPU - CITY	OF MCPHERSON 115KV		GSF	Area	Sink	Decrement(MW)	GSF	Factor	A
WERE 'BPU - CITY WERE 'BPU - CITY	OF MCPHERSON 115KV	259	-0.52229		JEFFREY ENERGY CENTER 230KV	470	0.03388	-0.55617	Г
WERE 'BPU - CITY		259	-0.52229		JEFFREY ENERGY CENTER 345KV	940	0.0352	-0.55749	
	OF MODUEDOON AAFION								
VERE BPU - CITY	OF MCPHERSON 115KV	259	-0.52229		'LAWRENCE ENERGY CENTER 230KV'	130.0238	0.02211	-0.5444	+
	OF MCPHERSON 115KV	259	-0.52229		'CHANUTE 69KV'	35.344	0.00308		1
WERE 'BPU - CITY	OF MCPHERSON 115KV	259	-0.52229	WERE	'CITY OF AUGUSTA 69KV'	17.25201	0.00096	-0.52325	
	OF MCPHERSON 115KV	259	-0.52229		CITY OF IOLA 69KV	13.978	0.00357		
			-0.32229	WERE					
	OF MCPHERSON 115KV	259	-0.52229		'CITY OF WELLINGTON 69KV'	24	-0.00277		
VERE 'BPU - CITY	OF MCPHERSON 115KV	259	-0.52229	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00573	-0.52802	
VERE 'BPU - CITY	OF MCPHERSON 115KV	259	-0.52229	WERE	'EVANS ENERGY CENTER 138KV'	25.88745	0.00069	-0.52298	
	OF MCPHERSON 115KV	259	-0.52229		WACO 138KV	17.953	-0.00487		
	ON ENERGY CENTER 115KV	423	-0.42301		'JEFFREY ENERGY CENTER 230KV'	470	0.03388		
VERE 'HUTCHINS	ON ENERGY CENTER 115KV	423	-0.42301	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.0352	-0.45821	
WERE 'HUTCHINS	ON ENERGY CENTER 69KV'	67	-0.42282	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03388	-0.4567	T
		67	-0.42282			940	0.0352		+
	ON ENERGY CENTER 69KV				'JEFFREY ENERGY CENTER 345KV'				
	ON ENERGY CENTER 115KV	423	-0.42301		'LAWRENCE ENERGY CENTER 230KV'	130.0238	0.02211		
VERE HUTCHINS	ON ENERGY CENTER 69KV	67	-0.42282	WERE	'LAWRENCE ENERGY CENTER 230KV'	130.0238	0.02211	-0.44493	
	ON ENERGY CENTER 115KV	423	-0.42301	WERE	'CHANUTE 69KV'	35.344	0.00308	-0.42609	t i
							0.00096		
	ON ENERGY CENTER 115KV	423	-0.42301		'CITY OF AUGUSTA 69KV'	17.25201			
WERE 'HUTCHINS	ON ENERGY CENTER 115KV	423	-0.42301	WERE	'CITY OF IOLA 69KV'	13.978	0.00357	-0.42658	
VERE 'HUTCHINS	ON ENERGY CENTER 115KV	423	-0.42301	WERE	'CITY OF WELLINGTON 69KV'	24	-0.00277	-0.42024	Г
	ON ENERGY CENTER 115KV	423	-0.42301		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00573		
	ON ENERGY CENTER 115KV	423	-0.42301		'EVANS ENERGY CENTER 138KV'	25.88745	0.00069		
	ON ENERGY CENTER 115KV	423	-0.42301		'WACO 138KV'	17.953	-0.00487		
VERE 'HUTCHINS	ON ENERGY CENTER 69KV'	67	-0.42282	WERE	'CHANUTE 69KV'	35.344	0.00308	-0.4259	
	ON ENERGY CENTER 69KV	67	-0.42282		CITY OF AUGUSTA 69KV'	17.25201	0.00096		
		67					0.00357		
	ON ENERGY CENTER 69KV		-0.42282		CITY OF IOLA 69KV	13.978		-0.42639	
WERE 'HUTCHINS	ON ENERGY CENTER 69KV	67	-0.42282	WERE	'CITY OF WELLINGTON 69KV'	24	-0.00277	-0.42005	1
VERE 'HUTCHINS	ON ENERGY CENTER 69KV	67	-0.42282	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00573	-0.42855	Г
	ON ENERGY CENTER 69KV'	67	-0.42282		'EVANS ENERGY CENTER 138KV'	25.88745	0.00069		
	ON ENERGY CENTER 69KV	67	-0.42282		'WACO 138KV'	17.953	-0.00487		
VERE 'PAWNEE 1	15KV'	999	-0.24493	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.03388	-0.27881	1
VERE 'PAWNEE 1		999	-0.24493		JEFFREY ENERGY CENTER 345KV'	940	0.0352		
VERE 'RICE 115K		999	-0.24493		JEFFREY ENERGY CENTER 230KV	470	0.03388		$t \rightarrow t$
									+
VERE 'RICE 115K'		999	-0.24493		'JEFFREY ENERGY CENTER 345KV'	940	0.0352		
VERE 'PAWNEE 1	15KV'	999	-0.24493	WERE	'LAWRENCE ENERGY CENTER 230KV'	130.0238	0.02211	-0.26704	1
VERE 'RICE 115K'		999	-0.24493		'LAWRENCE ENERGY CENTER 230KV'	130.0238	0.02211	-0.26704	1
VERE 'PAWNEE 1		999	-0.24493		COFFEY COUNTY NO. 2 SHARPE 69KV	19.97	0.00573		
VERE 'RICE 115K'		999	-0.24493		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00573		
VERE 'PAWNEE 1	15KV'	999	-0.24493	WERE	'CITY OF AUGUSTA 69KV'	17.25201	0.00096	-0.24589	1
VERE PAWNEE 1		999	-0.24493		'EVANS ENERGY CENTER 138KV'	25.88745	0.00069		
VERE 'RICE 115K'		999	-0.24493		'CITY OF AUGUSTA 69KV'	17.25201	0.00096		
WERE 'RICE 115K'	V'	999	-0.24493	WERE	'EVANS ENERGY CENTER 138KV'	25.88745	0.00069	-0.24562	1
									<u>ــــــــــــــــــــــــــــــــــــ</u>

Aggregate Redispatch Amount (MW)

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		'WACO 138KV'	17.953	-0.00487	-0.24006	37
WEPL	'A. M. MULLERGREN 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
NERE	'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 Decreme	ent and Maximum Increment were determine from the Souce a	and Sink Operating	Points in th	e study mod	lels where limiting facility was identified.				
Factor = Source G	SF - Sink GSF								
Redispatch Amoun	t = Relief Amount / Factor								

	WICHITA - RENO 345KV								
	NORTH AMERICAN PHILIPS - NORTH AMERICA	AN PHILIPS JUNC	TION (SOU	TH) 115KV CI	KT 1				
	From->To EAST MCPHERSON - SUMMIT 230KV CKT 1								
Flowgate:	57372573741568725687312207FA								
Date Redispatch Needed:	Starting 2007 10/1 - 12/1 Until EOC of Upgrade 2007 Fall Peak								
Season Flowgate Identified:	2007 Fall Peak	Aggregate Relief							
	Relief Amount	Amount							
1090817	1.9								
1090964 1090965	2.6								
1000000	0.0	0.0							Aggregate
		Maximum		Sink Control		Maximum			Redispatch
	Source 'BPU - CITY OF MCPHERSON 115KV'	Increment(MW) 259	-0.50621	Area	Sink 'CHANUTE 69KV'	Decrement(MW)	GSF 0.00259	Factor	Amount (MW) 10
	BPU - CITY OF MCPHERSON 115KV BPU - CITY OF MCPHERSON 115KV	259	-0.50621		CHANUTE 69KV	56.296	0.00259	-0.5088	10
	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50621		'CITY OF BURLINGTON 69KV'	4.8	0.00472	-0.51093	10
	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50621	WERE	'CITY OF IOLA 69KV'	24.256	0.00297	-0.50918	
	'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV'	259 259			CITY OF MULVANE 69KV'	4.891	-0.00107 -0.00235	-0.50514	10
	'BPU - CITY OF MCPHERSON 115KV'	259			COFFEY COUNTY NO. 2 SHARPE 69KV	19.96	0.00233	-0.51093	10
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50621	WERE	'EVANS ENERGY CENTER 138KV'	187.8892	0.0005	-0.50671	10
	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50621		JEFFREY ENERGY CENTER 230KV	470	0.02831	-0.53452	10
	'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV'	259 259			'JEFFREY ENERGY CENTER 345KV' 'LAWRENCE ENERGY CENTER 230KV'	940 230.3248	0.02952 0.01814	-0.53573	10
	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50621		'TECUMSEH ENERGY CENTER 115KV'	108	0.01953	-0.52574	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50621	WERE	'WACO 138KV'	17.946	-0.00425	-0.50196	11
	BPU - CITY OF MCPHERSON 115KV	259			COLBY 115KV	6.36216	-0.07624	-0.42997	12
	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 115KV'	343 343	-0.40086 -0.40086		JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 345KV'	470	0.02831	-0.42917	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40067		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
	HUTCHINSON ENERGY CENTER 115KV	343 343	-0.40086		CHANUTE 69KV' CITY OF AUGUSTA 69KV'	56.296	0.00259	-0.40345	13
WERE	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086 -0.40086	WERE	CITY OF AUGUSTA BARV	19.63601	0.00123 0.00472	-0.40209	13
	'HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086		'CITY OF IOLA 69KV'	24.256	0.00297	-0.40383	13
	'HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086		'CITY OF MULVANE 69KV'	4.891	-0.00107	-0.39979	13
	HUTCHINSON ENERGY CENTER 115KV	343	-0.40086		CITY OF WELLINGTON 69KV	20	-0.00235	-0.39851	13 13
	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 115KV'	343 343	-0.40086 -0.40086		COFFEY COUNTY NO. 2 SHARPE 69KV' 'EVANS ENERGY CENTER 138KV'	19.96	0.00472	-0.40558	
	'HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086		'LAWRENCE ENERGY CENTER 230KV'	230.3248	0.01814	-0.419	
	'HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086		'TECUMSEH ENERGY CENTER 115KV'	108	0.01953	-0.42039	13
	HUTCHINSON ENERGY CENTER 115KV	343	-0.40086 -0.40067		WACO 138KV' 'CHANUTE 69KV'	17.946	-0.00425 0.00259	-0.39661	13
WERE	'HUTCHINSON ENERGY CENTER 69KV' 'HUTCHINSON ENERGY CENTER 69KV'	67 67			CHANDTE 69KV	56.296 19.63601	0.00259	-0.40326	13
	'HUTCHINSON ENERGY CENTER 69KV'	67			'CITY OF BURLINGTON 69KV'	4.8	0.00472	-0.40539	13
	'HUTCHINSON ENERGY CENTER 69KV'	67			'CITY OF IOLA 69KV'	24.256	0.00297	-0.40364	
WERE	'HUTCHINSON ENERGY CENTER 69KV' 'HUTCHINSON ENERGY CENTER 69KV'	67 67	-0.40067 -0.40067		CITY OF MULVANE 69KV'	4.891	-0.00107 -0.00235	-0.3996	13
	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40067		COFFEY COUNTY NO. 2 SHARPE 69KV	19.96	0.00235	-0.39632	13
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40067	WERE	'EVANS ENERGY CENTER 138KV'	187.8892	0.0005	-0.40117	13
	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40067		'LAWRENCE ENERGY CENTER 230KV'	230.3248	0.01814	-0.41881	13
	'HUTCHINSON ENERGY CENTER 69KV' 'HUTCHINSON ENERGY CENTER 69KV'	67 67			'TECUMSEH ENERGY CENTER 115KV' 'WACO 138KV'	108	0.01953	-0.4202	13
	'HUTCHINSON ENERGY CENTER 115KV'	343	-0.40086	WERE	COLBY 115KV	6.36216		-0.32462	16
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40067	WERE	'COLBY 115KV'	6.36216	-0.07624	-0.32443	16
	'PAWNEE 115KV'	999	-0.21561		JEFFREY ENERGY CENTER 230KV	470	0.02831	-0.24392	22
	'PAWNEE 115KV' 'PAWNEE 115KV'	999 999	-0.21561 -0.21561		'JEFFREY ENERGY CENTER 345KV' TECUMSEH ENERGY CENTER 115KV'	940	0.02952 0.01953	-0.24513 -0.23514	22
WERE	'RICE 115KV'	999			'JEFFREY ENERGY CENTER 230KV'	470	0.02831	-0.24392	22
	'RICE 115KV'	999			'JEFFREY ENERGY CENTER 345KV'	940	0.02952	-0.24513	22
	'RICE 115KV' 'ST JOHN 115KV'	999 7.5			'JEFFREY ENERGY CENTER 115KV' 'JEFFREY ENERGY CENTER 230KV'	108	0.01953 0.02831	-0.23514 -0.24392	22
	ST JOHN 115KV	7.5	-0.21561		JEFFREY ENERGY CENTER 345KV	940	0.02851	-0.24592	
WERE	'ST JOHN 115KV'	7.5	-0.21561	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.01953	-0.23514	22
	'PAWNEE 115KV'	999	-0.21561		LAWRENCE ENERGY CENTER 230KV	230.3248	0.01814	-0.23375	23
	'RICE 115KV' 'PAWNEE 115KV'	999 999	-0.21561 -0.21561		'LAWRENCE ENERGY CENTER 230KV' 'CHANUTE 69KV'	230.3248 56.296	0.01814 0.00259	-0.23375	23
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
	PAWNEE 115KV	999 999	-0.21561		COFFEY COUNTY NO. 2 SHARPE 69KV	19.96	0.00472	-0.22033	24
	'PAWNEE 115KV' 'RICE 115KV'	999	-0.21561 -0.21561		'EVANS ENERGY CENTER 138KV' 'CHANUTE 69KV'	187.8892 56.296	0.0005	-0.21611 -0.2182	24
WERE	'RICE 115KV'	999	-0.21561	WERE	'CITY OF AUGUSTA 69KV'	19.63601	0.00123	-0.21684	24
	'RICE 115KV'	999	-0.21561		CITY OF IOLA 69KV	24.256	0.00297	-0.21858	24
	'RICE 115KV' 'RICE 115KV'	999 999	-0.21561 -0.21561		'COFFEY COUNTY NO. 2 SHARPE 69KV' 'EVANS ENERGY CENTER 138KV'	19.96	0.00472	-0.22033	24
	'GREAT BEND PLANT 69KV'	999	-0.21561		JEFFREY ENERGY CENTER 138KV	187.8892			
WERE	'GREAT BEND PLANT 69KV'	10	-0.17964	WERE	JEFFREY ENERGY CENTER 345KV	940	0.02952	-0.20916	25
	'PAWNEE 115KV'	999			CITY OF WELLINGTON 69KV	20		-0.21326	
WERE	'PAWNEE 115KV' 'RICE 115KV'	999	-0.21561 -0.21561		'WACO 138KV' 'CITY OF WELLINGTON 69KV'	17.946	-0.00425 -0.00235	-0.21136 -0.21326	
	RICE 115KV	999			WACO 138KV	17.946	-0.00235	-0.21326	
WERE	'GREAT BEND PLANT 69KV'	10	-0.17964	WERE	'TECUMSEH ENERGY CENTER 115KV'	108	0.01953	-0.19917	26
WERE	'GREAT BEND PLANT 69KV'	10	-0.17964	WERE	'LAWRENCE ENERGY CENTER 230KV'	230.3248	0.01814	-0.19778	27
	'GREAT BEND PLANT 69KV' 'GREAT BEND PLANT 69KV'	10			CHANUTE 69KV' CITY OF AUGUSTA 69KV'	56.296 19.63601	0.00259	-0.18223	
	'GREAT BEND PLANT 69KV'	10		WERE	CITY OF AUGUSTA 69KV	24.256		-0.18087	
				-			0.00472	-0.18436	
WERE	'GREAT BEND PLANT 69KV'	10		WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96			
WERE	'GREAT BEND PLANT 69KV' 'GREAT BEND PLANT 69KV' 'GREAT BEND PLANT 69KV'	10 10 10	-0.17964	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV EVANS ENERGY CENTER 138KV CITY OF WELLINGTON 69KV	19.96 187.8892 20	0.0005	-0.18014	29

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'	40	-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. MULLERGREN 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 Degramont and Ma	vimum Incroment were determine from the Source	and Sink Operating	Pointe in th	o ctudy mode	le whore limiting facility was identified				

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

Maximum Decrement and Maximum Increment Factor = Source GSF - Sink GSF Redispatch Amount = Relief Amount / Factor

Upgrade:	WICHITA - RENO 345KV								
	NORTH AMERICAN PHILIPS - NORTH AMERIC From->To	AN PHILIPS JUNC	TION (SOU	TH) 115KV CI	KT 1				
	EAST MCPHERSON - SUMMIT 230KV CKT 1								
	57372573741568725687312207SH								
	6/1 - 10/1 Until EOC of Upgrade 2007 Summer Shoulder								
	Relief Amount	Aggregate Relief Amount]						
1090817 1090964	2.9	8.1							
1090965	4.0								
									Aggregate
Source Control Area	Source	Maximum Increment(MW)	GSF	Sink Control Area	Sink	Maximum Decrement(MW)	GSF	Factor	Redispatch Amount (MW)
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.52215		'ABILENE ENERGY CENTER 115KV'	18.23438	0.12191	-0.64406	6 1:
	'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV'	259 259	-0.52215 -0.52215		CLAY CENTER JUNCTION 115KV CHANUTE 69KV	11.825	0.09097		
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.52215	WERE	'CITY OF ERIE 69KV'	23.258	0.0031	-0.52525	5 1
	'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV'	259 259	-0.52215 -0.52215		'CITY OF IOLA 69KV' 'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.865			
	BPU - CITY OF MCPHERSON 115KV	259	-0.52215		'EVANS ENERGY CENTER 138KV'	305	0.00086		
	'BPU - CITY OF MCPHERSON 115KV'	259	-0.52215		JEFFREY ENERGY CENTER 230KV	470	0.033		
	'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV'	259 259	-0.52215 -0.52215		'JEFFREY ENERGY CENTER 345KV' 'LAWRENCE ENERGY CENTER 115KV'	940			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.52215	WERE	'LAWRENCE ENERGY CENTER 230KV'	230.2191	0.02119	-0.54334	1 1
WERE	'BPU - CITY OF MCPHERSON 115KV' 'HUTCHINSON ENERGY CENTER 115KV'	259 303	-0.52215 -0.42248		'TECUMSEH ENERGY CENTER 115KV' 'ABILENE ENERGY CENTER 115KV'	108			5 1:
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.42229	WERE	'ABILENE ENERGY CENTER 115KV'	18.23438	0.12191	-0.5442	2 1
	BPU - CITY OF MCPHERSON 115KV	259	-0.52215		CITY OF MULVANE 69KV	6.189			
	'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV'	259 259	-0.52215 -0.52215		CITY OF WELLINGTON 69KV GILL ENERGY CENTER 138KV	31.07001			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.52215	WERE	'WACO 138KV'	17.947	-0.00458	-0.51757	7 10
	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 69KV'	303 67	-0.42248 -0.42229		CLAY CENTER JUNCTION 115KV CLAY CENTER JUNCTION 115KV	11.825	0.09097		
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.42248	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.033	-0.45548	3 1
	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 115KV'	303 303	-0.42248 -0.42248		JEFFREY ENERGY CENTER 345KV	940			
WERE	HUTCHINSON ENERGY CENTER 115KV 'HUTCHINSON ENERGY CENTER 115KV'	303	-0.42248		'LAWRENCE ENERGY CENTER 115KV' 'LAWRENCE ENERGY CENTER 230KV'	230.2191			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.42248		'TECUMSEH ENERGY CENTER 115KV'	108	0.0228		3 1
WERE	'HUTCHINSON ENERGY CENTER 69KV' 'HUTCHINSON ENERGY CENTER 69KV'	67 67	-0.42229 -0.42229		'JEFFREY ENERGY CENTER 230KV' 'JEFFREY ENERGY CENTER 345KV'	470			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.42229		'LAWRENCE ENERGY CENTER 115KV'	60	0.02019		
	HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV	67	-0.42229		LAWRENCE ENERGY CENTER 230KV	230.2191			
	HUTCHINSON ENERGY CENTER 1980	67 303			'TECUMSEH ENERGY CENTER 115KV' 'CHANUTE 69KV'	46.617			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.42248	WERE	'CITY OF ERIE 69KV'	23.258	0.0031	-0.42558	3 1!
	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 115KV'	303 303	-0.42248 -0.42248		CITY OF IOLA 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV'	19.865			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	303	-0.42248	WERE	'EVANS ENERGY CENTER 138KV'	305	0.00086	-0.42334	1 1
	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 115KV'	303 303	-0.42248 -0.42248		'GILL ENERGY CENTER 138KV' 'WACO 138KV'	17.947	-0.00519		
	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.422240		CHANUTE 69KV	46.617			
	HUTCHINSON ENERGY CENTER 69KV	67	-0.42229		CITY OF ERIE 69KV	23.258			
	'HUTCHINSON ENERGY CENTER 69KV' 'HUTCHINSON ENERGY CENTER 69KV'	67			CITY OF IOLA 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV'	19.865			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.42229	WERE	'EVANS ENERGY CENTER 138KV'	305	0.00086	-0.42315	5 1
	'HUTCHINSON ENERGY CENTER 69KV' 'HUTCHINSON ENERGY CENTER 69KV'	67 67	-0.42229 -0.42229		'GILL ENERGY CENTER 138KV' 'WACO 138KV'	17.947	-0.00519		
WERE	'PAWNEE 115KV'	999	-0.24056	WERE	'ABILENE ENERGY CENTER 115KV'	18.23438	0.12191	-0.36247	2
	'RICE 115KV' 'ST JOHN 115KV'	999 7.5	-0.24056 -0.24056		ABILENE ENERGY CENTER 115KV ABILENE ENERGY CENTER 115KV	18.23438	0.12191		
	'PAWNEE 115KV'	999	-0.24056		CLAY CENTER JUNCTION 115KV	11.825			
	'RICE 115KV'	999			CLAY CENTER JUNCTION 115KV	11.825			
	'GREAT BEND PLANT 69KV' 'PAWNEE 115KV'	10 999	-0.20969 -0.24056		CLAY CENTER JUNCTION 115KV JEFFREY ENERGY CENTER 345KV	11.825	0.09097		
WERE	'RICE 115KV'	999	-0.24056	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03435	-0.27491	1 2
	'PAWNEE 115KV' 'RICE 115KV'	999 999	-0.24056 -0.24056		'JEFFREY ENERGY CENTER 230KV' 'JEFFREY ENERGY CENTER 230KV'	470	0.033	-0.27356 -0.27356	
WERE	'PAWNEE 115KV'	999	-0.24056	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.02019	-0.26075	5 3
	'PAWNEE 115KV' 'PAWNEE 115KV'	999 999	-0.24056 -0.24056		'LAWRENCE ENERGY CENTER 230KV' 'TECUMSEH ENERGY CENTER 115KV'	230.2191			
	'RICE 115KV'	999	-0.24056		LAWRENCE ENERGY CENTER 115KV	60			
	'RICE 115KV'	999	-0.24056	WERE	'LAWRENCE ENERGY CENTER 230KV'	230.2191	0.02119		
	'RICE 115KV' 'PAWNEE 115KV'	999 999	-0.24056 -0.24056		'TECUMSEH ENERGY CENTER 115KV' 'CITY OF ERIE 69KV'	23.258	0.0228		
WERE	'PAWNEE 115KV'	999	-0.24056	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.96	0.00569	-0.24625	5 3:
	'RICE 115KV' 'RICE 115KV'	999	-0.24056 -0.24056		CITY OF ERIE 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV'	23.258			
WERE	'PAWNEE 115KV'	999	-0.24056	WERE	'EVANS ENERGY CENTER 138KV'	305	0.00086	-0.24142	2 34
	'PAWNEE 115KV'	999	-0.24056	WERE	'GILL ENERGY CENTER 138KV'	77	-0.00519	-0.23537	7 3-
	'PAWNEE 115KV' 'RICE 115KV'	999 999	-0.24056 -0.24056	WERE	'WACO 138KV' 'EVANS ENERGY CENTER 138KV'	17.947		-0.23598 -0.24142	
WERE	'RICE 115KV'	999	-0.24056	WERE	'GILL ENERGY CENTER 138KV'	77	-0.00519	-0.23537	7 34
	'RICE 115KV' 'BPU - CITY OF MCPHERSON 115KV'	999 259	-0.24056 -0.52215	WERE	WACO 138KV' HUTCHINSON ENERGY CENTER 115KV'	17.947 80.00001			
WERE	'KNOLL 3 115 115KV'	75			JEFFREY ENERGY CENTER 345KV	940		-0.07812	2 10-
	'KNOLL 3 115 115KV'	75			'JEFFREY ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 115KV'	470			
	'KNOLL 3 115 115KV' 'KNOLL 3 115 115KV'	75 75			LAWRENCE ENERGY CENTER 115KV	230.2191			
WERE	'KNOLL 3 115 115KV'	75	-0.04377	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.02019	-0.06396	5 12
WERE WERE	'KNOLL 3 115 115KV' 'GILL ENERGY CENTER 138KV'	75 118	-0.04377 -0.00519		'EVANS ENERGY CENTER 138KV' 'JEFFREY ENERGY CENTER 345KV'	305			
WERE	'KNOLL 3 115 115KV'	75	-0.04377	WERE	'GILL ENERGY CENTER 138KV'	77	-0.00519	-0.03858	3 21
WERE	'GILL ENERGY CENTER 138KV'	118	-0.00519	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.033	-0.03819	21:
WERE	'GILL ENERGY CENTER 69KV'	118	-0.00364	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.03435	-0.03799	21:

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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 Souce and Sink Operating Points in the study models where limiting facility was identified.										
Eactor - Source CS	E Sink GSE									

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

	NORTH AMERICAN PHILIPS - NORTH AMERIC	AN PHILIPS JUNC	TION (SOU	FH) 115KV C	KT 1				
	From->To								
	EAST MCPHERSON - SUMMIT 230KV CKT 1								
Flowgate:	57372573741568725687312207WP								
	12/1/07 - 4/1/08								
Season Flowgate Identified:	2007 Winter Peak		1						
		Aggregate Relief							
Reservation	Relief Amount	Amount							
1090817 1090964	5.0	14.1							
1090964	2.0								
1090965	2.0	14.1					1		Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	BPU - CITY OF MCPHERSON 115KV	259	-0.50615		JEFFREY ENERGY CENTER 230KV	470			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50615		JEFFREY ENERGY CENTER 345KV	940			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50615		LAWRENCE ENERGY CENTER 230KV	169.36			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50615		CHANUTE 69KV	34.818			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50615		CHANGTE BERV	14.628			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50615		CITY OF AUGUSTA 69KV	14.565			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50615		CITY OF WELLINGTON 69KV	14.503		-0.50384	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50615		COFFEY COUNTY NO. 2 SHARPE 69KV	19.95			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50615		'EVANS ENERGY CENTER 138KV'	55			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.50615		WACO 138KV	17.93			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.40081		JEFFREY ENERGY CENTER 230KV	470			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.40081		JEFFREY ENERGY CENTER 345KV	940			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	423	-0.40061		JEFFREY ENERGY CENTER 230KV	470			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40061		JEFFREY ENERGY CENTER 345KV	940			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.40081		LAWRENCE ENERGY CENTER 230KV	169.36			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	423	-0.40061		'LAWRENCE ENERGY CENTER 230KV'	169.36			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.40081		CITY OF AUGUSTA 69KV	14.628			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.40081		CITY OF WELLINGTON 69KV'	20	-0.00231		
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.40081		COFFEY COUNTY NO. 2 SHARPE 69KV	19.95			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.40081		'EVANS ENERGY CENTER 138KV'	55		-0.40135	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40061		CITY OF AUGUSTA 69KV	14.628	0.00127		
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40061		CITY OF WELLINGTON 69KV	20			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40061		COFFEY COUNTY NO. 2 SHARPE 69KV	19.95			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40061		'EVANS ENERGY CENTER 138KV'	55			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.40081		WACO 138KV	17.93	-0.00421	-0.3966	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.40061	WERE	'WACO 138KV'	17.93	-0.00421		
WERE	'PAWNEE 115KV'	999	-0.21556		JEFFREY ENERGY CENTER 345KV	940			
WERE	'RICE 115KV'	999	-0.21556		JEFFREY ENERGY CENTER 345KV	940			
WERE	'PAWNEE 115KV'	999	-0.21556		'JEFFREY ENERGY CENTER 230KV'	470	0.02836	-0.24392	
WERE	'RICE 115KV'	999	-0.21556		'JEFFREY ENERGY CENTER 230KV'	470			
WERE	'PAWNEE 115KV'	999	-0.21556		'LAWRENCE ENERGY CENTER 230KV'	169.36	0.01819		
WERE	'RICE 115KV'	999	-0.21556		'LAWRENCE ENERGY CENTER 230KV'	169.36			
WERE	'PAWNEE 115KV'	999	-0.21556		'EVANS ENERGY CENTER 138KV'	55			
WERE	'RICE 115KV'	999	-0.21556		'EVANS ENERGY CENTER 138KV'	55			
WERE	'KNOLL 3 115 115KV'	75	-0.09262		'JEFFREY ENERGY CENTER 345KV'	940		-0.12219	9 11
WERE	'KNOLL 3 115 115KV'	75	-0.09262	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.02836	-0.12098	3 11
WERE	'KNOLL 3 115 115KV'	75	-0.09262	WERE	'LAWRENCE ENERGY CENTER 230KV'	169.36	0.01819	-0.11081	1 12
WERE	'KNOLL 3 115 115KV'	75	-0.09262		'EVANS ENERGY CENTER 138KV'	55		-0.09316	6 15
WERE	'GILL ENERGY CENTER 138KV'	218	-0.00475	WERE	'JEFFREY ENERGY CENTER 345KV'	940			
WERE	'GILL ENERGY CENTER 138KV'	218	-0.00475		JEFFREY ENERGY CENTER 230KV	470	0.02836	-0.03311	42

Upgrade:	WICHITA - RENO 345KV								
	NORTH AMERICAN PHILIPS - NORTH AMERIC			TH) 115KV C	KT 1				
	From->To		011011 (000						
	EAST MCPHERSON - SUMMIT 230KV CKT 1								
	57372573741568725687314208WP								
	Starting 2008 12/1 - 4/1 Until EOC								
	2008 Winter Peak								
ocason nowgate identified.	2000 Willer Feak	Aggregate Relie							
Reservation	Relief Amount	Amount							
1090817	3.0		4						
1090829	0.6								
1090917	0.4	4. 4.	4						
1090919	0.1	4.	4						
1090920	0.6	δ 4.	4						
1090921	0.2								
1090964	1.1								
1090965	0.4								
1091057	0.4	4. 4.	4						
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
	Source	Increment(MW)	GSF	Area	Sink		GSF	Factor	Amount (MW)
	'BPU - CITY OF MCPHERSON 115KV'	25			'CLAY CENTER JUNCTION 115KV'	6.7			
	'BPU - CITY OF MCPHERSON 115KV'	25			'JEFFREY ENERGY CENTER 230KV'	470			
WERE	'BPU - CITY OF MCPHERSON 115KV'	25			'JEFFREY ENERGY CENTER 345KV'	940			
	'BPU - CITY OF MCPHERSON 115KV'	25			'LAWRENCE ENERGY CENTER 230KV'	193.727	0.01813		
WERE	'BPU - CITY OF MCPHERSON 115KV'	25			'TECUMSEH ENERGY CENTER 115KV'	48			
	'BPU - CITY OF MCPHERSON 115KV'	25			'CHANUTE 69KV'	34.903	0.00262		
	'BPU - CITY OF MCPHERSON 115KV'	25			'CITY OF AUGUSTA 69KV'	15.285	0.0012		
	'BPU - CITY OF MCPHERSON 115KV'	25			'CITY OF BURLINGTON 69KV'	4.8			
	'BPU - CITY OF MCPHERSON 115KV'	25			'CITY OF IOLA 69KV'	19.902			
	'BPU - CITY OF MCPHERSON 115KV'	25			'CITY OF MULVANE 69KV'	3.921	-0.0011		
	'BPU - CITY OF MCPHERSON 115KV'	25			'CITY OF WELLINGTON 69KV'	20			
	'BPU - CITY OF MCPHERSON 115KV'	25			'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.61	0.00467		
	'BPU - CITY OF MCPHERSON 115KV'	25			'EVANS ENERGY CENTER 138KV'	110			
WERE	'BPU - CITY OF MCPHERSON 115KV'	25			'WACO 138KV'	17.414			
	'HUTCHINSON ENERGY CENTER 115KV'	38		WERE	'CLAY CENTER JUNCTION 115KV'	6.7	0.08529		
	'HUTCHINSON ENERGY CENTER 69KV'	6			CLAY CENTER JUNCTION 115KV	6.7			
	'BPU - CITY OF MCPHERSON 115KV'	25			'COLBY 115KV'	5.652049			
WERE	'BPU - CITY OF MCPHERSON 115KV'	25			'KNOLL 3 115 115KV'	75			
	'HUTCHINSON ENERGY CENTER 115KV'	38		WERE	'JEFFREY ENERGY CENTER 230KV'	470			
	'HUTCHINSON ENERGY CENTER 115KV'	38		WERE	'JEFFREY ENERGY CENTER 345KV'	940			
	'HUTCHINSON ENERGY CENTER 115KV'	38		WERE	'LAWRENCE ENERGY CENTER 230KV'	193.727	0.01813		
	'HUTCHINSON ENERGY CENTER 115KV'	38		WERE	'TECUMSEH ENERGY CENTER 115KV'	48			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	6	7 -0.4004		'JEFFREY ENERGY CENTER 230KV'	470	0.02825	-0.42866	10

WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.4	0041	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.02949	-0.4299	10
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			NERE	'LAWRENCE ENERGY CENTER 230KV'	193.727	0.01813	-0.41854	11
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			WERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.01951	-0.41992	11
WERE	'HUTCHINSON ENERGY CENTER 115KV'	383			WERE	'CHANUTE 69KV'	34,903	0.00262	-0.40342	11
WERE	'HUTCHINSON ENERGY CENTER 115KV'	383			WERE	CITY OF AUGUSTA 69KV	15.285	0.0012	-0.402	11
WERE	'HUTCHINSON ENERGY CENTER 115KV'	383			WERE	CITY OF BURLINGTON 69KV	4.8	0.00467	-0.40547	11
WERE	'HUTCHINSON ENERGY CENTER 115KV'	383			NERE	CITY OF IOLA 69KV	19.902	0.00302	-0.40382	11
WERE	'HUTCHINSON ENERGY CENTER 115KV'	383			NERE	CITY OF MULVANE 69KV	3.921	-0.0011	-0.3997	11
WERE	'HUTCHINSON ENERGY CENTER 115KV'	383			NERE	CITY OF WELLINGTON 69KV	20	-0.00237	-0.39843	11
WERE	'HUTCHINSON ENERGY CENTER 115KV'	383			NERE	COFFEY COUNTY NO. 2 SHARPE 69KV	19.61	0.00257	-0.40547	11
WERE	HUTCHINSON ENERGY CENTER 115KV	383			NERE	'EVANS ENERGY CENTER 138KV'	110	0.00467	-0.40547	11
WERE	HUTCHINSON ENERGY CENTER 115KV	383			NERE	WACO 138KV	17.414	-0.00428	-0.39652	11
										11
WERE	HUTCHINSON ENERGY CENTER 69KV	67			NERE	CHANUTE 69KV	34.903	0.00262	-0.40303	
WERE	HUTCHINSON ENERGY CENTER 69KV	67			NERE	CITY OF AUGUSTA 69KV	15.285	0.0012	-0.40161	11
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			NERE	'CITY OF BURLINGTON 69KV'	4.8	0.00467	-0.40508	11
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67		0041 \		CITY OF IOLA 69KV	19.902	0.00302	-0.40343	11
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67		0041 \		CITY OF MULVANE 69KV	3.921	-0.0011	-0.39931	11
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67		0041 \		CITY OF WELLINGTON 69KV	20	-0.00237	-0.39804	11
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			NERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.61	0.00467	-0.40508	11
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			NERE	'EVANS ENERGY CENTER 138KV'	110	0.00047	-0.40088	11
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			NERE	'WACO 138KV'	17.414	-0.00428	-0.39613	11
WERE	'HUTCHINSON ENERGY CENTER 115KV'	383			NERE	'COLBY 115KV'	5.652049	-0.07459	-0.32621	14
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			NERE	'COLBY 115KV'	5.652049	-0.07459	-0.32582	14
WERE	'HUTCHINSON ENERGY CENTER 115KV'	383	-0.	4008	NERE	'KNOLL 3 115 115KV'	75	-0.0925	-0.3083	14
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.4	0041	WERE	'KNOLL 3 115 115KV'	75	-0.0925	-0.30791	14
WERE	'PAWNEE 115KV'	999		2156		CLAY CENTER JUNCTION 115KV	6.7	0.08529	-0.30089	15
WERE	'RICE 115KV'	999		2156		CLAY CENTER JUNCTION 115KV	6.7	0.08529	-0.30089	15
WERE	'ST JOHN 115KV'	7.5		2156		CLAY CENTER JUNCTION 115KV	6.7	0.08529	-0.30089	15
WERE	'GREAT BEND PLANT 69KV'	1.5		7956		CLAY CENTER JUNCTION 115KV	6.7	0.08529	-0.26485	17
WERE	'PAWNEE 115KV'	999		2156		JEFFREY ENERGY CENTER 230KV	470	0.08529	-0.26485	17
WERE	PAWNEE 115KV PAWNEE 115KV	999		2156		JEFFREY ENERGY CENTER 230KV	940	0.02825	-0.24385	18
WERE	'RICE 115KV'	999		2156		JEFFREY ENERGY CENTER 230KV	470	0.02825	-0.24385	18
WERE	'RICE 115KV'	999		2156		'JEFFREY ENERGY CENTER 345KV'	940	0.02949	-0.24509	18
WERE	'ST JOHN 115KV'	7.5		2156 \		'JEFFREY ENERGY CENTER 230KV'	470	0.02825	-0.24385	18
WERE	'ST JOHN 115KV'	7.5		2156		'JEFFREY ENERGY CENTER 345KV'	940	0.02949	-0.24509	18
WERE	'PAWNEE 115KV'	999		2156		'LAWRENCE ENERGY CENTER 230KV'	193.727	0.01813	-0.23373	19
WERE	'PAWNEE 115KV'	999	-0.	2156	NERE	'TECUMSEH ENERGY CENTER 115KV'	48	0.01951	-0.23511	19
WERE	'RICE 115KV'	999	-0.	2156 \	NERE	'LAWRENCE ENERGY CENTER 230KV'	193.727	0.01813	-0.23373	19
WERE	'RICE 115KV'	999		2156		'TECUMSEH ENERGY CENTER 115KV'	48	0.01951	-0.23511	19
WERE	'ST JOHN 115KV'	7.5		2156		'LAWRENCE ENERGY CENTER 230KV'	193.727	0.01813	-0.23373	19
WERE	'ST JOHN 115KV'	7.5		2156		'TECUMSEH ENERGY CENTER 115KV'	48	0.01951	-0.23511	19
WERE	'PAWNEE 115KV'	999		2156		CHANUTE 69KV	34.903	0.00262	-0.21822	20
WERE	'PAWNEE 115KV'	999		2156		CITY OF AUGUSTA 69KV	15.285	0.0012	-0.2168	21
WERE	'PAWNEE 115KV'	999		2156		CITY OF IOLA 69KV	19.902		-0.21862	20
WERE	'PAWNEE 115KV'	999			NERE	CITY OF WELLINGTON 69KV	20		-0.21323	20
WERE	'PAWNEE 115KV'	999		2156		COFFEY COUNTY NO. 2 SHARPE 69KV	19.61	0.00237	-0.22027	20
WERE	PAWNEE 115KV	999		2156		'EVANS ENERGY CENTER 138KV'	110		-0.22027	20
										21
WERE	PAWNEE 115KV	999		2156		WACO 138KV	17.414	-0.00428	-0.21132	
WERE	'RICE 115KV'	999		2156		'CHANUTE 69KV'	34.903	0.00262	-0.21822	20
WERE	'RICE 115KV'	999		2156		CITY OF AUGUSTA 69KV	15.285	0.0012	-0.2168	21
WERE	'RICE 115KV'	999		2156		'CITY OF IOLA 69KV'	19.902	0.00302	-0.21862	20
WERE	'RICE 115KV'	999		2156 \		'CITY OF WELLINGTON 69KV'	20		-0.21323	21
WERE	'RICE 115KV'	999		2156 \		COFFEY COUNTY NO. 2 SHARPE 69KV	19.61	0.00467	-0.22027	20
WERE	'RICE 115KV'	999		2156		'EVANS ENERGY CENTER 138KV'	110	0.00047	-0.21607	21
WERE	'RICE 115KV'	999		2156		'WACO 138KV'	17.414	-0.00428	-0.21132	21
WERE	'ST JOHN 115KV'	7.5	-0.	2156 \	NERE	'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	NERE	'CITY OF IOLA 69KV'	19.902	0.00302	-0.21862	20
WERE	'ST JOHN 115KV'	7.5		2156		'CITY OF WELLINGTON 69KV'	20	-0.00237	-0.21323	21
WERE	'ST JOHN 115KV'	7.5		2156		COFFEY COUNTY NO. 2 SHARPE 69KV	19.61	0.00467	-0.22027	20
WERE	'ST JOHN 115KV'	7.5			NERE	'EVANS ENERGY CENTER 138KV'	110	0.00047	-0.21607	21
WERE	ST JOHN 115KV	7.5		2156		WACO 138KV	17,414	-0.00428	-0.21132	21
WERE	'GREAT BEND PLANT 69KV'	10			NERE	JEFFREY ENERGY CENTER 230KV	470	0.02825	-0.20781	21
WERE	'GREAT BEND PLANT 69KV'	10			NERE	JEFFREY ENERGY CENTER 345KV	940	0.02825	-0.20781	21
WERE	'GREAT BEND PLANT 69KV'	10			NERE	'LAWRENCE ENERGY CENTER 230KV'	193.727	0.01813	-0.19769	23
WERE	'GREAT BEND PLANT 69KV'	10		7956		'TECUMSEH ENERGY CENTER 115KV'	48	0.01951	-0.19907	22
WERE	'GREAT BEND PLANT 69KV'	10		7956 \		'CHANUTE 69KV'	34.903	0.00262	-0.18218	24
WERE	'GREAT BEND PLANT 69KV'	10		7956		'CITY OF AUGUSTA 69KV'	15.285	0.0012	-0.18076	25
WERE	'GREAT BEND PLANT 69KV'	10		7956		'CITY OF IOLA 69KV'	19.902	0.00302	-0.18258	24
WERE	'GREAT BEND PLANT 69KV'	10		7956	NERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.61	0.00467	-0.18423	24
WERE	'GREAT BEND PLANT 69KV'	10	-0.1	7956 \	NERE	'CITY OF WELLINGTON 69KV'	20	-0.00237	-0.17719	25
WERE	'GREAT BEND PLANT 69KV'	10		7956	NERE	'EVANS ENERGY CENTER 138KV'	110	0.00047	-0.18003	25
WERE	'GREAT BEND PLANT 69KV'	10	-0.1		WERE	'WACO 138KV'	17.414	-0.00428	-0.17528	25
WERE	'PAWNEE 115KV'	999		2156		'KNOLL 3 115 115KV'	75	-0.0925	-0.1231	36
	'RICE 115KV'	999		2156		'KNOLL 3 115 115KV'	75	-0.0925	-0.1231	36
	ximum Increment were determine from the Souce a						15	0.0020	0.1201	50

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

Direction: Line Outage: Flowgate:	WICHITA - RENO 345KV NORTH AMERICAN PHILIPS JUNCTION (SOUT From-5To EAST MCPHERSON - SUMMIT 230KV CKT 1 57374574381568725687312206WP 12/106 - 4/107	H) - WEST MCPHI	ERSON 115	KV CKT 1					
	2006 Winter Peak								
		Aggregate Relief	1						
Reservation	Relief Amount	Amount							
1090964	3.2	4.1	1						
1090965	0.9	4.1	1						
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
	Source		GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24288		'JEFFREY ENERGY CENTER 230KV'	470			16
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			'JEFFREY ENERGY CENTER 345KV'	940		-0.25925	16
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24288		'LAWRENCE ENERGY CENTER 230KV'	130.0238			16
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24288		'CHANUTE 69KV'	35.344	0.00143	-0.24431	17
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			'CITY OF AUGUSTA 69KV'	17.25201	0.00045	-0.24333	17
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			'CITY OF IOLA 69KV'	13.978		-0.24454	17
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			'CITY OF WELLINGTON 69KV'	24	-0.00129	-0.24159	17
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24288		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00266	-0.24554	17
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24288		'EVANS ENERGY CENTER 138KV'	25.88745	0.00032	-0.2432	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24288		'WACO 138KV'	17.953	-0.00227	-0.24061	17
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.19671		'JEFFREY ENERGY CENTER 230KV'	470	0.01575	-0.21246	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.19671		'JEFFREY ENERGY CENTER 345KV'	940		-0.21308	19
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.19662		'JEFFREY ENERGY CENTER 230KV'	470		-0.21237	19
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.19662		'JEFFREY ENERGY CENTER 345KV'	940	0.01637	-0.21299	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.19671		'LAWRENCE ENERGY CENTER 230KV'	130.0238	0.01028	-0.20699	20
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.19662		'LAWRENCE ENERGY CENTER 230KV'	130.0238		-0.2069	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.19671		'CHANUTE 69KV'	35.344	0.00143		21
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.19671	WERE	'CITY OF AUGUSTA 69KV'	17.25201	0.00045	-0.19716	
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

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WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.19671		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00266	-0.19937	21
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.19671		'EVANS ENERGY CENTER 138KV'	25.88745	0.00032	-0.19703	21
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.19671		'WACO 138KV'	17.953	-0.00227	-0.19444	21
NERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.19662		'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		'CITY OF IOLA 69KV'	13.978	0.00166	-0.19828	21
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.19662		'CITY OF WELLINGTON 69KV'	24	-0.00129	-0.19533	21
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.19662		'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		'JEFFREY ENERGY CENTER 230KV'	470	0.01575	-0.12965	32
WERE	'PAWNEE 115KV'	999	-0.1139		'JEFFREY ENERGY CENTER 345KV'	940	0.01637	-0.13027	32
WERE	'RICE 115KV'	999	-0.1139		'JEFFREY ENERGY CENTER 230KV'	470	0.01575	-0.12965	32
WERE	'RICE 115KV'	999	-0.1139		'JEFFREY ENERGY CENTER 345KV'	940	0.01637	-0.13027	32
WERE	'PAWNEE 115KV'	999	-0.1139		'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		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00266	-0.11656	35
WERE	'RICE 115KV'	999	-0.1139		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00266	-0.11656	35
WERE	'PAWNEE 115KV'	999	-0.1139		'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		'CITY OF AUGUSTA 69KV'	17.25201	0.00045	-0.11435	36
WERE	'RICE 115KV'	999	-0.1139		'EVANS ENERGY CENTER 138KV'	25.88745	0.00032	-0.11422	36
WERE	'PAWNEE 115KV'	999	-0.1139		'CITY OF WELLINGTON 69KV'	24	-0.00129	-0.11261	37
WERE	'PAWNEE 115KV'	999	-0.1139		'WACO 138KV'	17.953	-0.00227	-0.11163	37
WERE	'RICE 115KV'	999	-0.1139		'CITY OF WELLINGTON 69KV'	24	-0.00129	-0.11261	37
WERE	'RICE 115KV'	999	-0.1139		'WACO 138KV'	17.953	-0.00227	-0.11163	37
WEPL	'A. M. MULLERGREN GENERATOR 115KV'	63	-0.10301		'GRAY COUNTY WIND FARM 115KV'	73	-0.06549	-0.03752	110
WERE	'KNOLL 3 115 115KV'	75	-0.01862		'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

_imiting Facility: Direction:	NORTH AMERICAN PHILIPS JUNCTION (SOUT From->To								
ine Outage:	EAST MCPHERSON - SUMMIT 230KV CKT 1								
lowgate:	57374574381568725687312207FA								
Date Redispatch Needed:	Starting 2007 10/1 - 12/1 Until EOC of Upgrade 2007 Fall Peak								
Season Flowgate Identified:	2007 Fall Peak	Aggregate Relief	٦						
Reservation	Relief Amount	Amount							
109081									
109096									
109096	5 0.9	6.1							
									Aggregate
	_	Maximum		Sink Control		Maximum		_	Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW
NERE	BPU - CITY OF MCPHERSON 115KV	259			JEFFREY ENERGY CENTER 230KV	470			·
NERE	BPU - CITY OF MCPHERSON 115KV	259			JEFFREY ENERGY CENTER 345KV	940			
WERE	BPU - CITY OF MCPHERSON 115KV	259 259			LAWRENCE ENERGY CENTER 230KV				
WERE	'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV'	259			'TECUMSEH ENERGY CENTER 115KV' 'CHANUTE 69KV'	108			
WERE	BPU - CITY OF MCPHERSON 115KV BPU - CITY OF MCPHERSON 115KV	259			CHANDTE 69KV	19.63601			
WERE	BPU - CITY OF MCPHERSON 115KV	259			CITY OF AUGUSTA 69KV	24.256			
WERE	BPU - CITY OF MCPHERSON 115KV	259			CITY OF WELLINGTON 69KV	24.230			
WERE	BPU - CITY OF MCPHERSON 115KV	259			COFFEY COUNTY NO. 2 SHARPE 69KV	19.96			
WERE	BPU - CITY OF MCPHERSON 115KV	259			'EVANS ENERGY CENTER 138KV'	187.8892			
WERE	'BPU - CITY OF MCPHERSON 115KV'	259			'WACO 138KV'	17.946			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	343			JEFFREY ENERGY CENTER 230KV	470			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	343	-0.18641	WERE	JEFFREY ENERGY CENTER 345KV	940	0.01373	-0.20014	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	343	-0.18641	WERE	'LAWRENCE ENERGY CENTER 230KV'	230.3248	0.00844	-0.19485	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	343			'TECUMSEH ENERGY CENTER 115KV'	108			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67		WERE	'JEFFREY ENERGY CENTER 230KV'	470			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'JEFFREY ENERGY CENTER 345KV'	940			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'LAWRENCE ENERGY CENTER 230KV'	230.3248			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'TECUMSEH ENERGY CENTER 115KV'	108			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	343			'CITY OF AUGUSTA 69KV'	19.63601			
WERE	'HUTCHINSON ENERGY CENTER 115KV'	343			CITY OF IOLA 69KV	24.256			
WERE	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 115KV'	343 343			CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV'	20			
WERE	HUTCHINSON ENERGY CENTER 115KV	343			'EVANS ENERGY CENTER 138KV'	19.96			
WERE	HUTCHINSON ENERGY CENTER 115KV	343			WACO 138KV	17.946			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'CITY OF AUGUSTA 69KV'	19.63601			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			CITY OF IOLA 69KV	24.256			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			CITY OF WELLINGTON 69KV	20			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			COFFEY COUNTY NO. 2 SHARPE 69KV	19.96			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'EVANS ENERGY CENTER 138KV'	187.8892			
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'WACO 138KV'	17.946	-0.00198	-0.18434	1
WERE	'PAWNEE 115KV'	999			'JEFFREY ENERGY CENTER 230KV'	470			
WERE	'PAWNEE 115KV'	999			JEFFREY ENERGY CENTER 345KV	940			
WERE	'RICE 115KV'	999			'JEFFREY ENERGY CENTER 230KV'	470			
WERE	'RICE 115KV'	999			'JEFFREY ENERGY CENTER 345KV'	940			
WERE	'PAWNEE 115KV'	999			'LAWRENCE ENERGY CENTER 230KV'	230.3248		-0.10871	
VERE	'PAWNEE 115KV'	999			TECUMSEH ENERGY CENTER 115KV	108			
NERE	'RICE 115KV'	999			LAWRENCE ENERGY CENTER 230KV	230.3248			
WERE	RICE 115KV	999		WERE	TECUMSEH ENERGY CENTER 115KV	108			
WERE	'PAWNEE 115KV' 'RICE 115KV'	999			'EVANS ENERGY CENTER 138KV' 'EVANS ENERGY CENTER 138KV'	187.8892			
WERE	KNOLL 3 115 115KV	999			JEFFREY ENERGY CENTER 345KV	187.8892			
WERE	'KNOLL 3 115 115KV'	75			JEFFREY ENERGY CENTER 345KV	470			
WERE	'KNOLL 3 115 115KV'	75			TECUMSEH ENERGY CENTER 115KV	108			
WERE	'KNOLL 3 115 115KV'	75			'LAWRENCE ENERGY CENTER 230KV'	230.3248			
WERE	'KNOLL 3 115 115KV'	75			'EVANS ENERGY CENTER 138KV'	187.8892			
	aximum Increment were determine from the Souce					101.0002	0.00020	0.0.000	1

Upgrade:	WICHITA - RENO 345KV		
Limiting Facility:	NORTH AMERICAN PHILIPS JUNCTION (SOUT	H) - WEST MCPH	ERSON 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		
		Aggregate Relief	
Reservation	Relief Amount	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
VERE	BPU - CITY OF MCPHERSON 115KV	259			ABILENE ENERGY CENTER 115KV	18.23438		-0.2995	
VERE	'BPU - CITY OF MCPHERSON 115KV'	259			'CLAY CENTER JUNCTION 115KV'	11.825	0.0423	-0.28511	
VERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24281		JEFFREY ENERGY CENTER 230KV	470		-0.25815	
/ERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24281		JEFFREY ENERGY CENTER 345KV	940		-0.25878	
/ERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24281	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.00939	-0.2522	
/ERE	'BPU - CITY OF MCPHERSON 115KV'	259			'LAWRENCE ENERGY CENTER 230KV'	230.2191		-0.25267	
VERE	'BPU - CITY OF MCPHERSON 115KV'	259			'TECUMSEH ENERGY CENTER 115KV'	108		-0.25341	
VERE	'HUTCHINSON ENERGY CENTER 115KV'	303			'ABILENE ENERGY CENTER 115KV'	18.23438		-0.25316	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'ABILENE ENERGY CENTER 115KV'	18.23438		-0.25307	
VERE	'BPU - CITY OF MCPHERSON 115KV'	259			'CHANUTE 69KV'	46.617		-0.24425	
VERE	'BPU - CITY OF MCPHERSON 115KV'	259			'CITY OF ERIE 69KV'	23.258		-0.24425	
VERE	'BPU - CITY OF MCPHERSON 115KV'	259			COFFEY COUNTY NO. 2 SHARPE 69KV	19.96		-0.24545	
VERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.24281		'EVANS ENERGY CENTER 138KV'	305		-0.24321	
VERE	BPU - CITY OF MCPHERSON 115KV	259			GILL ENERGY CENTER 138KV	77		-0.2404	
VERE	BPU - CITY OF MCPHERSON 115KV	259			WACO 138KV	17.947	-0.00213	-0.24068	
VERE	HUTCHINSON ENERGY CENTER 115KV	303			CLAY CENTER JUNCTION 115KV	11.825		-0.23877	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67			CLAY CENTER JUNCTION 115KV	11.825	0.0423	-0.23868	
/ERE	HUTCHINSON ENERGY CENTER 115KV	303			JEFFREY ENERGY CENTER 345KV	940		-0.21244	
VERE	HUTCHINSON ENERGY CENTER 69KV	67			JEFFREY ENERGY CENTER 345KV	940		-0.21235	
/ERE	HUTCHINSON ENERGY CENTER 115KV	303			JEFFREY ENERGY CENTER 230KV	470		-0.21233	
VERE	HUTCHINSON ENERGY CENTER 115KV	303			TECUMSEH ENERGY CENTER 115KV	108		-0.20707	+
VERE	HUTCHINSON ENERGY CENTER 69KV	67			JEFFREY ENERGY CENTER 230KV	470		-0.20707	1
VERE	HUTCHINSON ENERGY CENTER 69KV	67			TECUMSEH ENERGY CENTER 115KV	108		-0.20698	
VERE	HUTCHINSON ENERGY CENTER 115KV	303			'LAWRENCE ENERGY CENTER 115KV'	60		-0.20586	
VERE	HUTCHINSON ENERGY CENTER 115KV	303			'LAWRENCE ENERGY CENTER 230KV'	230.2191	0.00935	-0.20580	
/ERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.19638		'LAWRENCE ENERGY CENTER 115KV'	230.2191		-0.20033	
/ERE	HUTCHINSON ENERGY CENTER 69KV	67			'LAWRENCE ENERGY CENTER 230KV'	230.2191		-0.20577	
/ERE	HUTCHINSON ENERGY CENTER 115KV	303			CITY OF ERIE 69KV	230.2191		-0.20624	
VERE	HUTCHINSON ENERGY CENTER 115KV	303			COFFEY COUNTY NO. 2 SHARPE 69KV	23.230		-0.19791	
VERE	HUTCHINSON ENERGY CENTER 115KV	303	-0.19647		'EVANS ENERGY CENTER 138KV'	305		-0.19911	
VERE	HUTCHINSON ENERGY CENTER 115KV	67			CITY OF ERIE 69KV	23.258		-0.19687	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67			COFFEY COUNTY NO. 2 SHARPE 69KV	19.96		-0.19902	
VERE	HUTCHINSON ENERGY CENTER 69KV	67			'EVANS ENERGY CENTER 138KV'	305		-0.19678	
VERE	HUTCHINSON ENERGY CENTER 115KV				'GILL ENERGY CENTER 138KV'	77		-0.19406	
VERE	'HUTCHINSON ENERGY CENTER 115KV'	303			WACO 138KV	17.947		-0.19434	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67			'GILL ENERGY CENTER 138KV'	77		-0.19397	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67			WACO 138KV	17.947		-0.19425	
VERE	'PAWNEE 115KV'	999			ABILENE ENERGY CENTER 115KV	18.23438		-0.16856	
VERE	'RICE 115KV'	999			ABILENE ENERGY CENTER 115KV	18.23438		-0.16856	
VERE	'PAWNEE 115KV'	999			JEFFREY ENERGY CENTER 230KV	470		-0.12721	
VERE	'PAWNEE 115KV'	999			JEFFREY ENERGY CENTER 345KV	940		-0.12784	
VERE	'RICE 115KV'	999			JEFFREY ENERGY CENTER 230KV	470		-0.12721	
VERE	'RICE 115KV'	999			JEFFREY ENERGY CENTER 345KV	940		-0.12784	
VERE	'PAWNEE 115KV'	999			'TECUMSEH ENERGY CENTER 115KV'	108		-0.12247	
VERE	'RICE 115KV'	999			'TECUMSEH ENERGY CENTER 115KV'	108		-0.12247	
VERE	'PAWNEE 115KV'	999			'LAWRENCE ENERGY CENTER 115KV'	60		-0.12126	
VERE	'PAWNEE 115KV'	999	-0.11187		'LAWRENCE ENERGY CENTER 230KV'	230.2191	0.00986	-0.12173	
VERE	'RICE 115KV'	999			'LAWRENCE ENERGY CENTER 115KV'	60		-0.12126	
VERE	'RICE 115KV'	999			'LAWRENCE ENERGY CENTER 230KV'	230.2191	0.00986	-0.12173	
VERE	'PAWNEE 115KV'	999			'CITY OF ERIE 69KV'	23.258		-0.11331	
VERE	'RICE 115KV'	999	-0.11187		'CITY OF ERIE 69KV'	23.258		-0.11331	1
/ERE	'PAWNEE 115KV'	999			'EVANS ENERGY CENTER 138KV'	305		-0.11227	
/ERE	'RICE 115KV'	999			'EVANS ENERGY CENTER 138KV'	305		-0.11227	
/ERE	'PAWNEE 115KV'	999			'GILL ENERGY CENTER 138KV'	77		-0.10946	
/ERE	'RICE 115KV'	999			'GILL ENERGY CENTER 138KV'	77		-0.10946	
/ERE	'BPU - CITY OF MCPHERSON 115KV'	259			'HUTCHINSON ENERGY CENTER 115KV'	80.00001	-0.19647	-0.04634	
VERE	'KNOLL 3 115 115KV'	75			'JEFFREY ENERGY CENTER 345KV'	940		-0.03632	
VERE	'KNOLL 3 115 115KV'	75			'JEFFREY ENERGY CENTER 230KV'	470		-0.03569	
VERE	'KNOLL 3 115 115KV'	75	-0.02035		'TECUMSEH ENERGY CENTER 115KV'	108	0.0106	-0.03095	

Upgrade:	WICHITA - RENO 345KV								
Limiting Facility:	NORTH AMERICAN PHILIPS JUNCTION (SOUT	H) - WEST MCPH	RSON 115	KV CKT 1					
Direction:	From->To								
Line Outage:	FAST MCPHERSON - SUMMIT 230KV CKT 1								
Flowgate:	57374574381568725687312207WP								
Date Redispatch Needed:	12/1/07 - 4/1/08								
Season Flowgate Identified:	2007 Winter Peak								
		Aggregate Relief	1						
Reservation	Relief Amount	Amount							
1090817									
1090964									
1090965	i 0.9	6.5							
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source		GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538		'JEFFREY ENERGY CENTER 230KV'	470	0.01319	-0.24857	26
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538		'JEFFREY ENERGY CENTER 345KV'	940	0.01375	-0.24913	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538		'LAWRENCE ENERGY CENTER 230KV'	169.36		-0.24384	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538		'CHANUTE 69KV'	34.818		-0.2366	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538		'CITY OF AUGUSTA 69KV'	14.628		-0.23597	28
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538		'CITY OF IOLA 69KV'	14.565		-0.23678	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538		'CITY OF WELLINGTON 69KV'	20		-0.2343	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.95		-0.2376	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538		'EVANS ENERGY CENTER 138KV'	55	0.00025	-0.23563	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538		'WACO 138KV'	17.93		-0.23342	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.18639		'JEFFREY ENERGY CENTER 230KV'	470	0.01319	-0.19958	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.18639		'JEFFREY ENERGY CENTER 345KV'	940	0.01375	-0.20014	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.1863		JEFFREY ENERGY CENTER 230KV	470	0.01319	-0.19949	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67		WERE	JEFFREY ENERGY CENTER 345KV	940	0.01375	-0.20005	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.18639		'LAWRENCE ENERGY CENTER 230KV'	169.36	0.00846	-0.19485	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67		WERE	'LAWRENCE ENERGY CENTER 230KV'	169.36		-0.19476	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.18639		'CITY OF AUGUSTA 69KV'	14.628		-0.18698	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.18639		CITY OF WELLINGTON 69KV'	20		-0.18531	35
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.18639		COFFEY COUNTY NO. 2 SHARPE 69KV	19.95		-0.18861	35
WERE WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.18639		'EVANS ENERGY CENTER 138KV'	55	0.00025	-0.18664	
	'HUTCHINSON ENERGY CENTER 69KV'	67		WERE	CITY OF AUGUSTA 69KV	14.628	0.00059	-0.18689	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67			CITY OF WELLINGTON 69KV	20	-0.00108	-0.18522	
WERE WERE	'HUTCHINSON ENERGY CENTER 69KV'	67 67		WERE	COFFEY COUNTY NO. 2 SHARPE 69KV 'EVANS ENERGY CENTER 138KV'	19.95	0.00222	-0.18852	
WERE	'HUTCHINSON ENERGY CENTER 69KV'		-0.1863			55			
WERE	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 69KV'	423 67		WERE	'WACO 138KV' 'WACO 138KV'	17.93	-0.00196	-0.18443 -0.18434	
WERE	PAWNEE 115KV	999	-0.1863		JEFFREY ENERGY CENTER 345KV	940	-0.00196	-0.18434	
WERE	'RICE 115KV'	999	-0.10024		JEFFREY ENERGY CENTER 345KV	940	0.01375	-0.11399	
WERE	'PAWNEE 115KV'	999	-0.10024		JEFFREY ENERGY CENTER 230KV	470		-0.11343	
	'RICE 115KV' 'PAWNEE 115KV'	999			JEFFREY ENERGY CENTER 230KV	470		-0.11343	
WERE		999	-0.10024		LAWRENCE ENERGY CENTER 230KV	169.36		-0.1087	
WERE	'RICE 115KV'	999	-0.10024	WERE	'LAWRENCE ENERGY CENTER 230KV'	169.36	0.00846	-0.1087	60

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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	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												
Dedianatah Amount	Delief Amount / Faster											

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

Upgrade: Limiting Facility:	WICHITA - RENO 345KV NORTH AMERICAN PHILIPS JUNCTION (SOUT			KV CKT 4					
Direction:	From->To	n) - WEST MCPH	LKSON 115	KV CKI I					
Line Outage: Flowgate:	EAST MCPHERSON - SUMMIT 230KV CKT 1 57374574381568725687314207G								
Date Redispatch Needed:	Starting 2007 4/1 - 6/1 Until EOC of Upgrade 2007 Spring Peak								
Reservation	Relief Amount	Aggregate Relief Amount							
1090964 1090965		2.4 2.4			-				
		Maximum		Sink Control		Maximum			Aggregate Redispatch
Source Control Area WERE	Source 'BPU - CITY OF MCPHERSON 115KV'	Increment(MW) 259	GSF -0.2428	Area	Sink 'ABILENE ENERGY CENTER 115KV'	Decrement(MW) 40	GSF 0.05672	Factor -0.29952	Amount (MW) 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' 'BPU - CITY OF MCPHERSON 115KV'	259 259	-0.2428 -0.2428		JEFFREY ENERGY CENTER 345KV' TECUMSEH ENERGY CENTER 115KV'	940 68.00001	0.016		
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' 'BPU - CITY OF MCPHERSON 115KV'	67 259	-0.19636 -0.2428		ABILENE ENERGY CENTER 115KV CHANUTE 69KV	40 40.39	0.05672		
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2428		'CITY OF AUGUSTA 69KV'	20.02	0.0008		
WERE	'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV'	259 259	-0.2428 -0.2428	WERE	'CITY OF BURLINGTON 69KV' 'CITY OF IOLA 69KV'	4.8	0.00267		
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' 'BPU - CITY OF MCPHERSON 115KV'	259 259	-0.2428 -0.2428	WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV'	40.503 20.09	-0.00115		
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' 'BPU - CITY OF MCPHERSON 115KV'	259 259	-0.2428 -0.2428		GILL ENERGY CENTER 138KV LAWRENCE ENERGY CENTER 115KV	155	-0.00239 0.00942		
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' 'HUTCHINSON ENERGY CENTER 115KV'	259 300.5205	-0.2428 -0.19645		'WACO 138KV' 'JEFFREY ENERGY CENTER 230KV'	18 470	-0.00211 0.01537		
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 HUTCHINSON ENERGY CENTER 69KV	67 67	-0.19636 -0.19636		JEFFREY ENERGY CENTER 230KV JEFFREY ENERGY CENTER 345KV	470 940	0.01537		
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.2428	WERE	'COLBY 115KV'	6.130238	-0.03655	-0.20625	12
WERE	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 115KV'	300.5205 300.5205	-0.19645 -0.19645		'CHANUTE 69KV' 'CITY OF AUGUSTA 69KV'	40.39 20.02	0.00148		
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' 'HUTCHINSON ENERGY CENTER 115KV'	300.5205 300.5205	-0.19645 -0.19645		'CITY OF IOLA 69KV' 'CITY OF MULVANE 69KV'	17.08	0.00168		
WERE	'HUTCHINSON ENERGY CENTER 115KV'	300.5205	-0.19645		'CITY OF WELLINGTON 69KV'	40.503	-0.00042		12
WERE	'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 115KV'	300.5205 300.5205	-0.19645 -0.19645		'COFFEY COUNTY NO. 2 SHARPE 69KV' 'EVANS ENERGY CENTER 138KV'	20.09	0.00267		
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' 'HUTCHINSON ENERGY CENTER 115KV'	300.5205 300.5205	-0.19645 -0.19645		'LAWRENCE ENERGY CENTER 115KV' 'LAWRENCE ENERGY CENTER 230KV'	60 227.1991	0.00942		
WERE	'HUTCHINSON ENERGY CENTER 115KV'	300.5205	-0.19645		'TECUMSEH ENERGY CENTER 115KV'	68.00001	0.01063		
WERE	HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV	300.5205 67	-0.19645 -0.19636		'WACO 138KV' 'CHANUTE 69KV'	18 40.39	-0.00211		
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.19636		'CITY OF AUGUSTA 69KV'	20.02	0.00148		12
WERE	'HUTCHINSON ENERGY CENTER 69KV' 'HUTCHINSON ENERGY CENTER 69KV'	67 67	-0.19636		'CITY OF BURLINGTON 69KV' 'CITY OF IOLA 69KV'	4.8	0.00267		
WERE	HUTCHINSON ENERGY CENTER 69KV	67	-0.19636 -0.19636		CITY OF MULVANE 69KV	4.922	-0.00042		
WERE	'HUTCHINSON ENERGY CENTER 69KV' 'HUTCHINSON ENERGY CENTER 69KV'	67 67	-0.19636 -0.19636		CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV'	40.503 20.09	-0.00115		
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.19636	WERE	'EVANS ENERGY CENTER 138KV'	305	0.00042	-0.19678	12
WERE	'HUTCHINSON ENERGY CENTER 69KV' 'HUTCHINSON ENERGY CENTER 69KV'	67 67	-0.19636 -0.19636		'GILL ENERGY CENTER 138KV' 'LAWRENCE ENERGY CENTER 115KV'	155	-0.00239		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 HUTCHINSON ENERGY CENTER 69KV	67 67	-0.19636 -0.19636		'TECUMSEH ENERGY CENTER 115KV' 'WACO 138KV'	68.00001	0.01063		
WERE	'PAWNEE 115KV'	999	-0.11186		ABILENE ENERGY CENTER 115KV	40	0.05672		14
WERE	'RICE 115KV' 'ST JOHN 115KV'	999 7.5	-0.11186 -0.11186		ABILENE ENERGY CENTER 115KV ABILENE ENERGY CENTER 115KV	40	0.05672		
WERE	'HUTCHINSON ENERGY CENTER 115KV'	300.5205	-0.19645	WERE	'COLBY 115KV'	6.130238	-0.03655	-0.1599	15
WERE	'HUTCHINSON ENERGY CENTER 69KV' 'GREAT BEND PLANT 69KV'	67 10	-0.19636 -0.0975		COLBY 115KV ABILENE ENERGY CENTER 115KV	6.130238	-0.03655		
WERE	'PAWNEE 115KV'	999	-0.11186	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01537	-0.12723	19
WERE	'PAWNEE 115KV' 'RICE 115KV'	999 999	-0.11186 -0.11186		JEFFREY ENERGY CENTER 345KV JEFFREY ENERGY CENTER 230KV	940	0.016		
WERE	'RICE 115KV'	999	-0.11186	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.016	-0.12786	19
WERE	ST JOHN 115KV ST JOHN 115KV	7.5	-0.11186 -0.11186		JEFFREY ENERGY CENTER 230KV JEFFREY ENERGY CENTER 345KV	470	0.01537		
WERE	'PAWNEE 115KV'	999	-0.11186	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.00942	-0.12128	20
WERE	'PAWNEE 115KV' 'PAWNEE 115KV'	999 999	-0.11186 -0.11186		'LAWRENCE ENERGY CENTER 230KV' 'TECUMSEH ENERGY CENTER 115KV'	227.1991 68.00001	0.00988		
WERE	'RICE 115KV'	999	-0.11186	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.00942	-0.12128	20
WERE	'RICE 115KV' 'RICE 115KV'	999 999	-0.11186 -0.11186		'LAWRENCE ENERGY CENTER 230KV' 'TECUMSEH ENERGY CENTER 115KV'	227.1991 68.00001	0.00988		
WERE	'ST JOHN 115KV'	7.5	-0.11186	WERE	'LAWRENCE ENERGY CENTER 115KV'	60	0.00942	-0.12128	20
WERE	ST JOHN 115KV ST JOHN 115KV	7.5 7.5	-0.11186 -0.11186		'LAWRENCE ENERGY CENTER 230KV' 'TECUMSEH ENERGY CENTER 115KV'	227.1991 68.00001	0.00988		
WERE	'GREAT BEND PLANT 69KV'	10	-0.0975	WERE	JEFFREY ENERGY CENTER 230KV	470	0.01537	-0.11287	21
WERE	'GREAT BEND PLANT 69KV' 'PAWNEE 115KV'	10	-0.0975 -0.11186		'JEFFREY ENERGY CENTER 345KV' 'CHANUTE 69KV'	940 40.39	0.016		21
WERE	'PAWNEE 115KV'	999	-0.11186	WERE	'CITY OF AUGUSTA 69KV'	20.02	0.0008	-0.11266	21
WERE	'PAWNEE 115KV' 'PAWNEE 115KV'	999 999	-0.11186 -0.11186		'CITY OF IOLA 69KV' 'COFFEY COUNTY NO. 2 SHARPE 69KV'	17.08 20.09	0.00168		
WERE	'PAWNEE 115KV'	999	-0.11186	WERE	'EVANS ENERGY CENTER 138KV'	305	0.00042	-0.11228	21
WERE	'RICE 115KV' 'RICE 115KV'	999 999	-0.11186 -0.11186		'CHANUTE 69KV' 'CITY OF AUGUSTA 69KV'	40.39 20.02	0.00148		
WERE	'RICE 115KV'	999	-0.11186	WERE	'CITY OF IOLA 69KV'	17.08	0.00168	-0.11354	21
WERE	'RICE 115KV' 'RICE 115KV'	999 999	-0.11186 -0.11186	WERE	COFFEY COUNTY NO. 2 SHARPE 69KV 'EVANS ENERGY CENTER 138KV'	20.09	0.00267		
WERE	'ST JOHN 115KV'	7.5	-0.11186	WERE	'CHANUTE 69KV'	40.39	0.00148	-0.11334	21
WERE	ST JOHN 115KV ST JOHN 115KV	7.5 7.5	-0.11186 -0.11186	WERE	'CITY OF AUGUSTA 69KV' 'CITY OF IOLA 69KV'	20.02	0.0008		
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' 'LAWRENCE ENERGY CENTER 115KV'	305	0.00042	-0.11228	21
WERE	'GREAT BEND PLANT 69KV'	10	-0.0975			60			

VERE	'GREAT BEND PLANT 69KV'	10			'TECUMSEH ENERGY CENTER 115KV'	68.00001			
¥LIKE	'PAWNEE 115KV'	999		WERE	'GILL ENERGY CENTER 138KV'	155			
ERE	'PAWNEE 115KV'	999	-0.11186		'WACO 138KV'	18			
ERE	'RICE 115KV'	999	-0.11186		'GILL ENERGY CENTER 138KV'	155	-0.00239	-0.10947	
ERE	'RICE 115KV'	999	-0.11186	WERE	'WACO 138KV'	18	-0.00211	-0.10975	
ERE	'ST JOHN 115KV'	7.5	-0.11186	WERE	'CITY OF WELLINGTON 69KV'	40.503	-0.00115	-0.11071	
ERE	'ST JOHN 115KV'	7.5			'GILL ENERGY CENTER 138KV'	155		-0.10947	
ERE	'ST JOHN 115KV'	7.5			'WACO 138KV'	18		-0.10975	
ERE	'GREAT BEND PLANT 69KV'	10			'CHANUTE 69KV'	40.39			
/ERE	'GREAT BEND PLANT 69KV'	10			CITY OF AUGUSTA 69KV	20.02			
/FRF	'GREAT BEND PLANT 69KV'	10			CITY OF IOLA 69KV	17.08	0.00168		
	kimum Increment were determine from the Souce a					11.00	0.00100	0.00010	1
imiting Facility: irrection: ine Outage: lowgate: ate Redispatch Needed: eason Flowgate Identified: eservation 1090817 1090829 1090917	0.9	Aggregate Relief Amount 8.0 8.0 8.0		KV CKT 1					
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							
ourse Control Area	Sauraa	Maximum Increment(MW)	GSE	Sink Control	Sink	Maximum Decrement(MW)	GSE	Factor	Aggregat Redispate Amount (
ERE	Source 'BPU - CITY OF MCPHERSON 115KV'	259	GSF -0.23538	Area	JEFFREY ENERGY CENTER 230KV	470	GSF 0.01314	Factor -0.24852	Amount (
ERE	'BPU - CITY OF MCPHERSON 115KV'	259			JEFFREY ENERGY CENTER 345KV	940	0.01314		+
ERE	'BPU - CITY OF MCPHERSON 115KV'	259			LAWRENCE ENERGY CENTER 230KV	193.727	0.01371	-0.24909	
ERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23338	WERE	TECUMSEH ENERGY CENTER 115KV				
ERE	'BPU - CITY OF MCPHERSON 115KV'			WERE	CHANUTE 69KV	48 34.903	0.00907	-0.24445	
LINE	'BPU - CITY OF MCPHERSON 115KV'	259			CHANUTE 69KV CITY OF AUGUSTA 69KV	34.903	0.00122		
			I -U.∠3538		GILL OF AUGUSTA DUKY	15.285			
ERE					CITY OF IOLA CORV/	10 000			
ERE ERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.23538		CITY OF IOLA 69KV	19.902	0.00141		
ERE ERE ERE	'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV'	259 259	-0.23538 -0.23538	WERE	'CITY OF WELLINGTON 69KV'	20	-0.0011	-0.23428	
ERE ERE ERE ERE	'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV'	259 259 259	-0.23538 -0.23538 -0.23538	WERE WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV'	20 19.61	-0.0011 0.00217	-0.23428 -0.23755	
ERE ERE ERE ERE ERE	'BPU - CITY OF MCPHERSON 115KV'	259 259 259 259 259	-0.23538 -0.23538 -0.23538 -0.23538	WERE WERE WERE	CITY OF WELLINGTON 69KV COFFEY COUNTY NO. 2 SHARPE 69KV VEVANS ENERGY CENTER 138KV	20 19.61 110	-0.0011 0.00217 0.00022	-0.23428 -0.23755 -0.2356	
ERE ERE ERE ERE ERE ERE	'BPU - CITY OF MCPHERSON 115KV'	259 259 259 259 259 259	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.23538	WERE WERE WERE WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV' EVANS ENERGY CENTER 138KV' WACO 138KV'	20 19.61 110 17.414	-0.0011 0.00217 0.00022 -0.00199	-0.23428 -0.23755 -0.2356 -0.23339	
ERE ERE ERE ERE ERE ERE ERE ERE	BPU - CITY OF MCPHERSON 115KV	259 259 259 259 259 259 259 383	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638	WERE WERE WERE WERE WERE	CITY OF WELLINGTON 69KV' 'COFFEY COUNTY NO. 2 SHARPE 69KV' 'EVANS ENERGY CENTER 138KV' 'WACO 138KV' JEFFREY ENERGY CENTER 345KV'	20 19.61 110 17.414 940	-0.0011 0.00217 0.00022 -0.00199 0.01371	-0.23428 -0.23755 -0.2356 -0.23339 -0.20009	
ERE ERE ERE ERE ERE ERE ERE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 115KV	259 259 259 259 259 259 383 383	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638	WERE WERE WERE WERE WERE WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV' EVANS ENERGY CENTER 138KV' WACO 138KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 230KV'	20 19.61 110 17.414 940 470	-0.0011 0.00217 0.00022 -0.00199 0.01371 0.01314	-0.23428 -0.23755 -0.2356 -0.23339 -0.20009 -0.19952	
ERE	'BPU - CITY OF MCPHERSON 115KV' 'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 115KV' 'HUTCHINSON ENERGY CENTER 115KV'	259 259 259 259 259 259 383 383 383	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638	WERE WERE WERE WERE WERE WERE WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 29 HAPPE 69KV' EVANS ENERGY CENTER 138KV' WACO 139KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV'	20 19.61 110 17.414 940 470 193.727	-0.0011 0.00217 0.00022 -0.00199 0.01371 0.01314 0.00843	-0.23428 -0.23755 -0.2356 -0.23339 -0.20009 -0.19952 -0.19481	
ERE ERE ERE ERE ERE ERE ERE ERE	BPU - CITY OF MCPHERSON 115KV BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV	259 259 259 259 259 383 383 383 383 383	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.18638	WERE WERE WERE WERE WERE WERE WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV' EVANS ENERGY CENTER 138KV' WACO 138KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 115KV'	20 19.61 110 17.414 940 470 193.727 48	-0.0011 0.00217 0.00022 -0.00199 0.01371 0.01314 0.00843 0.00907	-0.23428 -0.23755 -0.2356 -0.23339 -0.20009 -0.19952 -0.19481 -0.19545	
ERE	'BPU - CITY OF MCPHERSON 115KV' 'HUTCHINSON ENERGY CENTER 115KV'	259 259 259 259 259 259 383 383 383 383 383 383 67	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.18638 -0.1862	WERE WERE WERE WERE WERE WERE WERE WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 29 HAPPE 69KV EVANS ENERGY CENTER 138KV' WACO 138KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 115KV' TECUMSEH ENERGY CENTER 230KV'	20 19.61 110 17.414 940 470 193.727 48 470	-0.0011 0.00217 0.00022 -0.00199 0.01371 0.01314 0.00843 0.00907 0.01314	-0.23428 -0.23755 -0.2356 -0.23339 -0.20009 -0.19952 -0.19481 -0.19545 -0.19934	
ERE	BPU - CITY OF MCPHERSON 115KV BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 69KV	259 259 259 259 383 383 383 383 383 67 67	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.18638 -0.18628 -0.18628 -0.18628	WERE WERE WERE WERE WERE WERE WERE WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV' EVANS ENERGY CENTER 138KV' WACO 138KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 115KV' JEFFREY ENERGY CENTER 115KV' JEFFREY ENERGY CENTER 236KV'	20 19.61 110 17.414 940 470 193.727 48 470 470 940	-0.0011 0.00217 0.00022 -0.00199 0.01371 0.01314 0.00843 0.00907 0.01314 0.01371	-0.23428 -0.23755 -0.2356 -0.23309 -0.20009 -0.19952 -0.199545 -0.19934 -0.19934 -0.19991	
RE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV	259 259 259 259 259 383 383 383 383 383 67 67 67	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.18638 -0.18632 -0.18622 -0.18622 -0.18622	WERE WERE WERE WERE WERE WERE WERE WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV' EVANS ENERGY CENTER 138KV' VACO 139KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 345KV' LAWRENCE ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 345KV' LAWRENCE ENERGY CENTER 345KV'	20 19.61 110 17.414 940 470 193.727 48 470 940 940 193.727	-0.0011 0.00217 0.00022 -0.00199 0.01371 0.01314 0.00843 0.00907 0.01314 0.01371	-0.23428 -0.23755 -0.2356 -0.2339 -0.20009 -0.19952 -0.19481 -0.19545 -0.19934 -0.199463	
RE	BPU - CITY OF MCPHERSON 115KV BPU - CITY OF MCPHERSON 115KV BPU - CITY OF MCPHERSON 115KV BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV	259 259 259 259 383 383 383 383 383 383 67 67 67 67	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.18638 -0.18628 -0.18622 -0.18622 -0.1862	WERE WERE WERE WERE WERE WERE WERE WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV' EVANS ENERGY CENTER 138KV' WACO 138KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 115KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 345KV LAWRENCE ENERGY CENTER 345KV' LAWRENCE ENERGY CENTER 115KV'	202 19.61 110 17.414 940 193.727 48 470 940 193.727 940	-0.0011 0.00217 0.00022 -0.00199 0.01371 0.01314 0.00843 0.00907 0.00843 0.00907	-0.23428 -0.23755 -0.2356 -0.23369 -0.20009 -0.19952 -0.19952 -0.199481 -0.19954 -0.19931 -0.19931 -0.199463 -0.19463 -0.19527	
RE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 69KV	259 259 259 259 383 383 383 383 67 67 67 67 67	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.18638 -0.18638 -0.18638 -0.1862 -0.	WERE WERE WERE WERE WERE WERE WERE WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV' EVANS ENERGY CENTER 138KV' VACO 139KV' JEFFREY ENERGY CENTER 346KV' JEFFREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 215KV' KNOLL 3115 115KV'	200 19.61 110 17.414 940 470 193.727 48 470 940 193.727 48 75	-0.0011 0.00217 0.00022 -0.00199 0.01371 0.01314 0.00843 0.00907 0.01314 0.01371 0.00843 0.00907 -0.04301	-0.23428 -0.23755 -0.2356 -0.23369 -0.20009 -0.19952 -0.19952 -0.199545 -0.19934 -0.19934 -0.19937 -0.19967 -0.19927 -0.19237	
RE	BPU - CITY OF MCPHERSON 115KV' HUTCHINSON ENERGY CENTER 69KV'	259 259 259 363 383 383 383 383 383 67 67 67 67 67 9 383	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.18638 -0.1862 -0.1862 -0.1862 -0.1862 -0.1862 -0.23538 -0.18638	WERE WERE WERE WERE WERE WERE WERE WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV EVANS ENERGY CENTER 138KV' WACO 139KV' JEFFREY ENERGY CENTER 236KV' JEFFREY ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 115KV' KNOLL 3 115 115KV' CITY OF AUGUSTA 69KV'	200 19.61 110 17.414 940 470 193.727 488 470 940 193.727 488 755 15.285	-0.0011 0.00217 0.00022 -0.00199 0.01371 0.01314 0.00843 0.00907 0.01314 0.00843 0.00907 -0.04301 0.00905	-0.23428 -0.23755 -0.2356 -0.23309 -0.20009 -0.19952 3-0.19481 -0.19934 -0.19934 -0.19934 -0.19934 -0.19937 -0.19463 -0.19237 -0.19237 -0.19237	
ERE ERE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV	259 259 259 259 383 383 383 383 383 383 67 67 67 67 259 383 383 383	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.1862 -0.1862 -0.1862 -0.1862 -0.1862 -0.1862 -0.18638 -0.18638 -0.18638	WERE WERE WERE WERE WERE WERE WERE WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV' EVANS ENERGY CENTER 138KV' WACO 138KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 345KV' LAWRENCE ENERGY CENTER 345KV' LAWRENCE ENERGY CENTER 345KV' TECUMSEH 545KV' CITY OF AUGUSTA 69KV'	200 19.61 110 17.414 940 470 193.727 48 470 940 193.727 48 755 15.285 20	-0.0011 0.00217 0.00022 -0.00199 0.01371 0.01314 0.00843 0.00907 -0.01314 0.00843 0.00907 -0.04301 0.00056 -0.0011	-0.23428 -0.23755 -0.2356 -0.2330 -0.20009 -0.19952 -0.19954 -0.19954 -0.19934 -0.19934 -0.19934 -0.19934 -0.199463 -0.19463 -0.19463 -0.198528 -0.18694 -0.18528	
RE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV	259 259 259 259 333 383 383 383 383 383 67 67 67 67 67 67 259 383 383 383 383 383	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.18638 -0.1862 -0.1862 -0.1862 -0.1862 -0.1862 -0.18638 -0.18638 -0.18638 -0.18638	WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 29 HAPPE 69KV EVANS ENERGY CENTER 138KV' WACO 138KV JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 345KV' LAWRENCE ENERGY CENTER 130KV' TECUMSEH ENERGY CENTER 35KV' JEFFREY ENERGY CENTER 35KV' JEFFREY ENERGY CENTER 35KV' TECUMSEH ENERGY CENTER 35KV' TECUMSEH ENERGY CENTER 115KV' KNOLL 3 115 115KV' CITY OF AUGUSTA 69KV' CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 25 KHAPE 69KV'	200 19.61 17.414 940 47.414 940 193.727 48 470 940 193.727 5.15.265 200 19.61	-0.0011 0.00217 0.00022 -0.00199 0.01311 0.00843 0.00907 0.01314 0.00843 0.00907 -0.04301 0.00056 -0.0011 0.00217	-0.23428 -0.23755 -0.2356 -0.23309 -0.20009 -0.19952 -0.19954 -0.19934 -0.19934 -0.19934 -0.19937 -0.19463 -0.19463 -0.19463 -0.18628 -0.18628 -0.18855	
ERE ERE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 15KV HUTCHINSON ENERGY CENTER 115KV	259 259 259 289 289 383 383 383 383 383 383 383 383 383 3	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.18628 -0.18628 -0.18628 -0.18628 -0.18638 -0.	WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV' EVANS ENERGY CENTER 138KV' WACO 138KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' COTY OF AUGUSTA 69KV' CITY OF AUGUSTA 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV' EVANS ENERGY CENTER 138KV'	200 19.61 110 17.414 940 470 193.727 48 470 940 193.727 48 470 940 193.727 20 940 193.727 20 940 19.5285 20 19.61 110	-0.0011 0.00217 0.00022 -0.00199 0.01371 0.00843 0.00907 0.01314 0.00843 0.00907 -0.04301 0.00943 0.00905 -0.0011 0.00056 -0.0011 0.000217 0.00022	-0.23428 -0.23755 -0.2356 -0.2339 -0.2009 -0.19952 -0.19954 -0.19954 -0.19954 -0.19954 -0.19954 -0.19954 -0.19955 -0.19954 -0.19955 -0.18568 -0.18528 -0.18568 -0.18664	
RE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV	259 259 259 259 333 333 333 333 333 333 333 333 333 3	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18638 -0.18638 -0.18638 -0.18638 -0.18638	WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV EVANS ENERGY CENTER 138KV' WACO 138KV UACO 138KV JEFFREY ENERGY CENTER 138KV' JEFFREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 130KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 151KV' KNOLL 315 115KV' CITY OF AUGUSTA 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV' EVANS ENERGY CENTER 138KV' LOTY OF AUGUSTA 69KV'	200 19.61 17.414 940 47.414 940 193.727 48 470 940 193.727 5.15.265 200 19.61	-0.0011 0.00217 0.00022 -0.00199 0.01371 0.01314 0.00843 0.00907 -0.01314 0.00843 0.00907 -0.04301 0.000843 0.00907 -0.04301 0.00022 0.00022	-0.23428 -0.23755 -0.23755 -0.23359 -0.2009 -0.19952 -0.199545 -0.199545 -0.199545 -0.199547 -0.199547 -0.199547 -0.19954 -0.19954 -0.18558 -0.18558 -0.186576 -0.186576	
ERE ERE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV	259 259 259 259 259 259 259 333 333 333 333 333 367 67 67 259 383 333 333 333 333 333 367 67 67	0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18638 -0.1	WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV' EVANS ENERGY CENTER 138KV' WACO 138KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' COFFEY COUNTY NO. 2 SHARPE 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV' CVANS ENERGY CENTER 138KV' CITY OF AUGUSTA 69KV' CITY OF AUGUSTA 69KV'	200 19.61 17.414 940 470 193.727 48 470 940 193.727 48 75 515.285 200 19.61 110 15.285 202 202 202 202 202 202 202 202 202 20	-0.0011 0.00217 0.000222 -0.00199 0.01371 0.00843 0.00907 -0.04314 0.00843 0.00907 -0.04301 0.00086 -0.00111 0.000227 0.00022 0.00056	0.23428 0.23755 0.23755 0.23755 0.23369 0.20009 0.19948 0.19948 0.19948 0.19948 0.19948 0.19948 0.19948 0.19848 0.19848 0.18694 0.18656 0.18666 0.18676 0.1	
RE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV	259 259 259 259 333 333 333 333 333 333 333 333 333 3	0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18638 -0.18638 -0.18628 -0.18628 -0.18629 -0.1	WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV EVANS ENERGY CENTER 138KV' JEFFREY ENERGY CENTER 138KV' JEFFREY ENERGY CENTER 230KV JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' COTYOF AUGUSTA 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV' EVANS ENERGY CENTER 138KV' CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV'	200 19.61 110 17.414 940 470 193727 48 470 940 193.727 19.3727 19.3727 19.3727 19.528 200 19.61 110 15.285 200 19.61	-0.0011 0.00217 0.00022 -0.00199 0.01371 0.01314 0.00843 0.00907 -0.04301 0.00907 -0.04301 0.00907 -0.04301 0.00907 -0.04301 0.00907 -0.0011 0.000217 0.00022 0.00056 -0.0011	0.23428 -0.23755 -0.2365 -0.2365 -0.2309 -0.199481 -0.199481 -0.19948 -0.19948 -0.19948 -0.19948 -0.19948 -0.19934 -0.199527 -0.18528 -0.18656 -0.18676 -0.1861 -0.1867	
ERE ERE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV	259 259 259 259 259 259 259 333 333 333 333 333 333 333 367 67 67 67 67 67 67 67 67 67 67	0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18638 -0.18628 -0.1	WERE WWERE WWERE WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV EVANS ENERGY CENTER 138KV' WACO 139KV' JEFFREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' ILAWRENCE ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' TCUTY OF AUGUSTA 69KV' CITY OF AUGUSTA 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV' EVANS ENERGY CENTER 138KV' COTFY OF WELLINGTON 69KV' COTFY OF WELLINGTON 69KV' EVANS ENERGY CENTER 138KV' EVANS ENERGY CENTER 138KV' COTFY OF WELLINGTON 69KV' EVANS ENERGY CENTER 138KV' COFFEY COUNTY NO. 2 SHAPPE 69KV'	200 19.61 17.414 940 470 193.727 940 193.727 48 755 15.285 200 19.61 110 15.285 200 19.61 110 15.285 200 19.61 110	-0.0011 0.00217 0.00022 -0.00199 0.01371 0.01374 0.00843 0.00907 -0.04301 0.00843 0.00907 -0.04301 0.00056 -0.0011 0.00022 0.00056 -0.0011 0.00022 0.00025 -0.0011 0.00022 -0.0011 0.00022 -0.0011 0.00022 -0.00012 -0.0011 -0.00022 -0.00022 -0.00022 -0.00012 -0.0002 -0.00022 -0.00022 -0.00022 -0.0002 -0.0002 -0.0002 -0.0002 -0.0002 -0.0002 -0.0002 -0.0002 -0.0002 -0.0002 -0.0002 -0.0002 -0.0002 -0.0002 -0.0	0.23428 -0.23755 -0.2366 -0.23369 -0.23339 -0.19952 -0.19481 -0.19948 -0.19948 -0.19948 -0.19948 -0.19948 -0.19948 -0.19527 -0.18694 -0.18528 -0.18669 -0.18667 -0.18667 -0.18678 -0.18678 -0.18678 -0.18678 -0.186799 -0.186799 -0.186799 -0.186799 -0.186799	
ERE ERE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV	259 259 259 259 259 259 333 333 333 333 333 333 333 333 333 3	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.18628 -0.18628 -0.18628 -0.18628 -0.18638 -0.18638 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18629 -0.	WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV' EVANS ENERGY CENTER 138KV' JEFFREY ENERGY CENTER 348KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 115KV' KNOLL 3115 115KV' CITY OF AUGUSTA 69KV' COFFY COUNTY NO. 2 SHARPE 69KV' EVANS ENERGY CENTER 138KV' CITY OF WELLINGTON 69KV' COFFY COUNTY NO. 2 SHARPE 69KV EVANS ENERGY CENTER 138KV' COFFY COUNTY NO. 2 SHARPE 69KV EVANS ENERGY CENTER 138KV' EVANS ENERGY CENTER 138KV'	200 19.61 110 17.414 440 193.727 48 470 940 193.727 48 775 15.285 200 19.61 110 15.285 200 19.61 110 15.285 200 19.61	-0.0011 0.00217 0.00022 -0.00199 0.01314 0.00843 0.00907 0.01314 0.01371 0.00843 0.00907 -0.04301 0.00843 0.00907 -0.04301 0.00022	0.23428 -0.23755 -0.2365 -0.2365 -0.2339 -0.19952 -0.199481 -0.199481 -0.199481 -0.19948 -0.19948 -0.19952 -0.19545 -0.19652 -0.18628 -0.18676 -0.18677 -0.18837 -0.18842 -0.1	
RE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV	259 259 259 259 333 333 333 333 333 333 333 333 333 3	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.18638 -0.18628 -0.18628 -0.18628 -0.18638 -0.18638 -0.18638 -0.18628 -0.	WERE WWERE WWERE WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV EVANS ENERGY CENTER 138KV' WACO 139KV' JEFFREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' CITY OF AUGUSTA 69KV' CITY OF AUGUSTA 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV' COTY OF WELLINGTON 69KV' COTY OF AUGUSTA 69KV' COTY OF AUGUSTA 69KV' COTY OF MELLINGTON 69KV' COTY OF WELLINGTON 69KV' COTY OF AUGUSTA 69KV' COTY OF MELLINGTON 69KV' COTY OF MELLINGTON 69KV' COTY OF MELLINGTON 69KV' COTY OF AUGUSTA 69KV' COTY OF MELLINGTON 69KV' COTY OF MELLINGTON 69KV' COTY OF AUGUSTA 69KV' COTY OF MELLINGTON 69KV'	200 19.61 19.61 17.414 9.40 470 193.727 48 470 9.40 193.727 48 75 15.285 200 19.61 110 15.285 20 19.61 110 15.285 20 19.61 110 17.414	-0.0011 0.00217 0.00022 -0.00199 0.01371 0.01314 0.00843 0.00907 -0.01314 0.00843 0.00907 -0.04301 0.00907 -0.04301 0.00022 0.00056 -0.00111 0.00022 -0.00011 0.00022 -0.00019	0.23428 -0.23755 -0.2366 -0.2336 -0.23339 -0.19952 -0.19952 -0.19952 -0.19948 -0.19948 -0.19948 -0.19948 -0.19952 -0.18694 -0.18652 -0.18655 -0.18655 -0.18655 -0.18655 -0.18643 -0.188439 -0.188449 -0.188439 -0.188449 -0.188439 -0.188449 -0.188439 -0.188449 -0.188449 -0.188449 -0.188449 -0.18849 -0	
RE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV	259 259 259 259 259 259 259 333 333 333 333 333 333 333 333 333 3	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.18638 -0.18628 -0.18628 -0.18628 -0.18628 -0.18638 -0.18638 -0.18638 -0.18628 -0.	WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV' EVANS ENERGY CENTER 138KV' JEFFREY ENERGY CENTER 348KV' JEFFREY ENERGY CENTER 348KV' JEFFREY ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 115KV' KNOLL 3115 115KV' CITY OF AUGUSTA 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV' EVANS ENERGY CENTER 138KV' UCITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV' EVANS ENERGY CENTER 138KV' WACO 138KV' WACO 138KV'	200 19.61 110 17.414 470 193.727 48 470 940 193.727 48 775 15.285 200 19.61 110 15.285 200 19.61 1110 15.285 200 19.61 110 15.7414 17.414	-0.0011 0.00217 0.00022 -0.00199 0.01314 0.00843 0.00907 0.01314 0.00843 0.00907 0.01314 0.00907 0.01314 0.00907 0.00317 0.00056 -0.0011 0.00022 0.00056 -0.0011 0.00022 -0.00012 -0.00022 -0.00019 -0.00027 -0.0019	0.23428 0.23428 0.2356 0.2356 0.2333 0.2000 0.199525 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.18952 0.18855 0.18676 0.18857 0.18857 0.18876 0.18873 0.188421 0.18429	
RE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV	259 259 259 259 383 383 383 383 383 383 383 383 383 38	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18628 -0.18638 -0.18638 -0.18638 -0.18638 -0.18658 -0.	WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV EVANS ENERGY CENTER 138KV' WACO 138KV JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 345KV' LAWRENCE ENERGY CENTER 345KV' TECUMSEH ENERGY CENTER 115KV' KNOLL 3 115 115KV' CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV' EVANS ENERGY CENTER 138KV' COFFEY COUNTY NO. 2 SHAPE 69KV' EVANS ENERGY CENTER 138KV' WACO 138KV' KNOLL 3115 115KV' KNOLL 3115 115KV'	200 19.61 19.61 17.414 9.40 470 193.727 4.82 470 9.40 193.727 5.15.285 2.00 19.61 15.285 2.00 19.61 110 15.285 2.00 19.61 110 17.414 17.7414 75 5 75	-0.0011 0.00217 0.00227 -0.00199 0.01374 0.00843 0.00907 -0.01314 0.00843 0.00907 -0.04301 0.00027 -0.004301 0.00027 0.00022	0.23428 -0.23428 -0.23755 -0.2356 -0.2339 -0.19952 -0.19952 -0.19952 -0.19954 -0.19954 -0.19954 -0.19954 -0.19954 -0.19954 -0.19954 -0.19954 -0.19954 -0.19954 -0.19954 -0.19954 -0.19954 -0.19954 -0.19954 -0.19954 -0.19954 -0.19954 -0.19955 -0.18654 -0.18614 -0.18644 -0.18643 -0.18644	
RE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 11	259 259 259 259 259 259 333 333 333 333 333 333 367 67 67 67 67 67 67 67 67 67 67 67 67 6	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18628 -0.	WERE	'CITY OF WELLINGTON 69KV' 'COFFEY COUNTY NO. 2 SHARPE 69KV' EVANS ENERGY CENTER 138KV' 'JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 230KV' COFFEY COUNSEN 69KV' 'CITY OF AUGUSTA 69KV' 'CITY OF AUGUSTA 69KV' 'CITY OF AUGUSTA 69KV' 'COFFEY COUNTY NO. 2 SHARPE 69KV' 'EVANS ENERGY CENTER 138KV' 'VACO 138KV' 'WACO 138KV'	200 19.61 19.61 10.17.414 940 470 193.727 48 470 940 193.727 48 75 15.285 200 19.61 110 15.285 200 19.61 110 15.285 200 19.61 110 15.285 200 19.61 110 15.285 200 19.61 110 15.285 200 19.61 110 15.285 200 19.61 110 15.285 200 19.61 100 100 100 100 100 100 100 1	-0.0011 0.00217 0.00217 0.00199 0.01371 0.01314 0.00843 0.00907 -0.04301 0.00843 0.00967 -0.00843 0.00967 -0.00843 0.00967 -0.00119 0.00022 0.000217 0.00022 0.000217 0.00022 -0.00199 -0.04301 -0.04301 -0.04301 -0.04301	0.23428 0.23428 0.2356 0.2356 0.2333 0.2000 0.19952 0.19952 0.19952 0.19954 0.19954 0.19954 0.19954 0.19954 0.19954 0.19952 0.19952 0.19952 0.18555 0.18676 0.18676 0.18676 0.18677 0.18837 0.18642 0.18439 0.18439 0.18439	
RE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV </td <td>259 259 259 259 333 333 333 333 333 333 333 333 333 3</td> <td>-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.18638 -0.18628 -0.18628 -0.18628 -0.18628 -0.18638 -0.18638 -0.18638 -0.18628 -0.</td> <td>WERE WERE WERE</td> <td>CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV EVANS ENERGY CENTER 138KV' WACO 138KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 345KV' LAWRENCE ENERGY CENTER 115KV' KNOLL 3115 115KV' CITY OF AUGUSTA 69KV' CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV' EVANS ENERGY CENTER 138KV' VACO 138KV' WACO 138KV' KNOLL 3115 115KV' KNOLL 3115 115KV' KNOLL 3115 115KV' KNOLL 3115 115KV' KNOLL 3115 115KV' SMACU 50KV'</td> <td>200 19.61 19.61 17.414 9.40 470 1937.727 4.82 4700 1937.727 4.84 775 15.285 2.00 19.61 110.01 15.285 2.00 19.61 110.01 17.414 17.414 17.414 17.414 9.40 9.40 9.40 9.40 9.40 9.40 9.40</td> <td>-0.0011 0.0022 -0.0019 0.01371 0.01314 0.00843 0.00907 -0.01314 0.00843 0.00907 -0.04301 0.00843 0.00907 -0.04301 0.00056 -0.0011 0.00022 0.00056 -0.0011 0.00021 -0.0019 -0.00019 -0.0013 -0.0019 -0.0013 -0.0019 -0.0013 -0.0019 -0.0013 -0.0019 -0.0013 -0.0019 -0.0013 -0.0013 -0.0013 -0.0019 -0.0013</td> <td>0.23428 0.23428 0.2356 0.2356 0.2368 0.2309 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.19527 0.18528 0.18652 0.18655</td> <td></td>	259 259 259 259 333 333 333 333 333 333 333 333 333 3	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.18638 -0.18628 -0.18628 -0.18628 -0.18628 -0.18638 -0.18638 -0.18638 -0.18628 -0.	WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV EVANS ENERGY CENTER 138KV' WACO 138KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 345KV' LAWRENCE ENERGY CENTER 115KV' KNOLL 3115 115KV' CITY OF AUGUSTA 69KV' CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV' EVANS ENERGY CENTER 138KV' VACO 138KV' WACO 138KV' KNOLL 3115 115KV' KNOLL 3115 115KV' KNOLL 3115 115KV' KNOLL 3115 115KV' KNOLL 3115 115KV' SMACU 50KV'	200 19.61 19.61 17.414 9.40 470 1937.727 4.82 4700 1937.727 4.84 775 15.285 2.00 19.61 110.01 15.285 2.00 19.61 110.01 17.414 17.414 17.414 17.414 9.40 9.40 9.40 9.40 9.40 9.40 9.40	-0.0011 0.0022 -0.0019 0.01371 0.01314 0.00843 0.00907 -0.01314 0.00843 0.00907 -0.04301 0.00843 0.00907 -0.04301 0.00056 -0.0011 0.00022 0.00056 -0.0011 0.00021 -0.0019 -0.00019 -0.0013 -0.0019 -0.0013 -0.0019 -0.0013 -0.0019 -0.0013 -0.0019 -0.0013 -0.0019 -0.0013 -0.0013 -0.0013 -0.0019 -0.0013	0.23428 0.23428 0.2356 0.2356 0.2368 0.2309 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.19527 0.18528 0.18652 0.18655	
RE	BPU - CITY OF MCPHERSON 115KV BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV	259 259 259 259 259 259 259 333 333 333 333 333 333 367 67 67 67 67 67 67 67 67 67 67 67 67 6	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18628 -0.10026 -0.	WERE WERE	'CITY OF WELLINGTON 69KV' 'COFFEY COUNTY NO. 2 SHAPPE 69KV' EVANS ENERGY CENTER 138KV' 'JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 230KV' IGUNSEH ENERGY CENTER 230KV' IGUNSEH ENERGY CENTER 230KV' CUMSEH ENERGY CENTER 230KV' CUTY OF AUGUSTA 69KV' CITY OF AUGUSTA 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV' EVANS ENERGY CENTER 138KV' COTFY OF WELLINGTON 69KV' 'COFFEY COUNTY NO. 2 SHAPPE 69KV' 'EVANS ENERGY CENTER 138KV' 'QONTY NO. 2 SHAPPE 69KV' 'EVANS ENERGY CENTER 138KV' 'WACO 138KV' 'WACO 138KV' 'KNOLL 3 115 115KV' 'KNOLL 3 115 115KV' 'QAFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 345KV' JEFFREY	200 19.61 19.61 10.17.414 940 470 193.727 48 4770 940 193.727 48 755 15.285 200 19.61 110 15.285 200 19.61 110 15.285 200 19.61 110 15.285 200 19.61 117.414 17.4	-0.0011 0.00217 0.00217 0.00199 0.01371 0.01314 0.00843 0.00907 -0.04301 0.001371 0.00843 0.00907 -0.04301 0.00056 -0.0011 0.000227 0.000227 0.000227 0.000217 0.000227 0.000217 0.00011 0.000217 0.00011 0.000217 0.00011 0.000217 0.00011 0.000217 0.000217 0.00011 0.000217 0.00011 0.000217 0.000110 0.000110 0.000110 0.000110 0.000110 0.0001100000000	0.23428 0.23428 0.2356 0.2356 0.2339 0.2005 0.19952 0.19952 0.19954 0.19954 0.19954 0.19954 0.19954 0.19954 0.19954 0.19954 0.19954 0.19955 0.19955 0.19955 0.19955 0.19955 0.19955 0.18528 0.18528 0.18676 0.18637 0.18643 0.18643 0.18643 0.18439 0.1844900000000000000000000000000000000000	
RE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 15KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV	259 259 259 259 333 333 333 333 333 333 333 333 333 3	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.18638 -0.18638 -0.18628 -0.100268 -0.100268 -0.100268 -0.100268 -0.100268 -0.100268 -0.10028 -0.100	WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV EVANS ENERGY CENTER 138KV' WACO 138KV' JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' CITY OF AUGUSTA 69KV' CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV EVANS ENERGY CENTER 138KV' UNACO 138KV' KNOLL 3 115 115KV' KNOLL 3 115 115KV' SKNOL 3 315 115KV' SKNOL	200 19.61 19.61 17.414 9.40 4700 193.727 4.82 4700 9.940 193.727 19.42 19.61 110.01 15.285 200 19.61 110.01 15.285 200 19.61 110.01 12.285 200 19.61 110.01 17.414	-0.0011 0.0022 -0.0019 0.01371 0.01314 0.00843 0.00907 -0.01314 0.00843 0.00907 -0.04301 0.00843 0.00907 -0.04301 0.00056 -0.0011 0.00022 0.00056 -0.0011 0.00021 -0.0019 -0.00019 -0.0013 -0.0019 -0.0013 -0.0019 -0.0013 -0.0019 -0.0013 -0.0019 -0.0013 -0.0019 -0.0013 -0.0013 -0.0013 -0.0019 -0.0013	0.23428 0.23428 0.2356 0.2356 0.2339 0.2005 0.19952 0.19952 0.19954 0.19954 0.19954 0.19954 0.19954 0.19954 0.19954 0.19954 0.19954 0.19955 0.19955 0.19955 0.19955 0.19955 0.19955 0.18528 0.18528 0.18676 0.18637 0.18643 0.18643 0.18643 0.18439 0.1844900000000000000000000000000000000000	
RE	BPU - CITY OF MCPHERSON 115KV BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV	259 259 259 259 259 259 259 333 333 333 333 333 333 367 67 67 67 67 67 67 67 67 67 67 67 67 6	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18628 -0.10026 -0.	WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV EVANS ENERGY CENTER 138KV' WACO 138KV' JEFFREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' IEFFREY ENERGY CENTER 230KV' IECUMSEH ENERGY CENTER 230KV' COTTY OF AUGUSTA 69KV' CITY OF AUGUSTA 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV' EVANS ENERGY CENTER 138KV' COFFEY COUNTY NO. 2 SHAPE 69KV' EVANS ENERGY CENTER 138KV' WACO 138KV' WACO 138KV' KNOLL 3 115 115KV' KNOLL 3 115 115KV' KNOL	200 19.61 19.61 10.17.414 940 470 193.727 48 4770 940 193.727 48 755 15.285 200 19.61 110 15.285 200 19.61 110 15.285 200 19.61 110 15.285 200 19.61 117.414 17.4	-0.0011 0.00217 0.00217 0.00199 0.01371 0.01314 0.00843 0.00907 -0.04301 0.001371 0.00843 0.00907 -0.04301 0.00056 -0.0011 0.000227 0.000227 0.000227 0.000217 0.000227 0.000217 0.00011 0.000217 0.00011 0.000217 0.00011 0.000217 0.00011 0.000217 0.000217 0.00011 0.000217 0.00011 0.000217 0.000110 0.000110 0.000110 0.000110 0.000110 0.0001100000000	0.23428 0.23428 0.2356 0.2356 0.2368 0.2368 0.2339 0.2339 0.2339 0.19852 0.19852 0.19854 0.19954 0.19954 0.19954 0.19852 0.18694 0.18528 0.18628 0.18628 0.18628 0.18628 0.18642 0	
RE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 15KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 69KV	259 259 259 259 259 259 259 259 259 259	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.18638 -0.18638 -0.18628 -0.100268 -0.100268 -0.100268 -0.100268 -0.100268 -0.100268 -0.10028 -0.100	WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV EVANS ENERGY CENTER 138KV' WACO 138KV' JEFFREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' IEFFREY ENERGY CENTER 230KV' IECUMSEH ENERGY CENTER 230KV' COTTY OF AUGUSTA 69KV' CITY OF AUGUSTA 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV' EVANS ENERGY CENTER 138KV' COFFEY COUNTY NO. 2 SHAPE 69KV' EVANS ENERGY CENTER 138KV' WACO 138KV' WACO 138KV' KNOLL 3 115 115KV' KNOLL 3 115 115KV' KNOL	200 19.61 19.61 17.414 9.40 4700 193.727 4.82 4700 9.940 193.727 19.42 19.61 110.01 15.285 200 19.61 110.01 15.285 200 19.61 110.01 12.285 200 19.61 110.01 17.414	-0.0011 0.00217 -0.0019 0.01371 0.01314 0.00843 0.00907 -0.04301 0.00843 0.00907 -0.04301 0.00843 0.00907 -0.04301 0.00943 0.00907 -0.04301 0.000227 0.000227 0.000227 0.000227 0.000217 0.000217 0.000217 0.000217 0.00019 0.001371 0.01371 0.01371 0.01314 0.00022 0.01314 0.00022 0.01314 0.00022 0.01314 0.00022 0.01314 0.00022 0.01314 0.00022 0.01314 0.00022 0.01314 0.00022 0.01314 0.00022 0.01314 0.0002200000000	0.23428 0.23428 0.2356 0.2356 0.2339 0.19952 0.19952 0.19952 0.19954 0.19954 0.19954 0.19954 0.19954 0.19954 0.19954 0.19952 0.19952 0.19952 0.19527 0.18528 0.18652 0.18652 0.18652 0.18652 0.18652 0.18652 0.18653000000000000000000000000000000000000	
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ERE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 115KY HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 105KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 105KV PAVINEE 115KV RIGE 116KV RIGE 115KV PAVINEE 115KV RIGE 115KV RIGE 115KV R	259 259 259 259 259 259 259 259 333 333 333 333 333 333 333 333 333 3	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.18628 -0.10026 -0.	WERE WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV EVANS ENERGY CENTER 138KV' WACO 138KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 345KV' TECUMSEH ENERGY CENTER 345KV' TECUMSEH ENERGY CENTER 115KV' KNOLL 3 115 115KV' COFFEY COUNTY NO. 2 SHAPPE 69KV' COFFEY COUNTY NO. 2 SHAPE 69KV' UACO 138KV' WACO 138KV' KNOLL 3115 115KV' KNOLL 3115 115KV' KNOLL 3115 115KV' LAWRENCE ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 345KV' LAWRENCE ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' TEVANSE HENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' TEVANSE HENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' TEVANSE HENERGY CENTER 138KV' TEVANSENERGY CENTER 138KV'	200 19.61 19.61 1101 17.414 940 4700 193.727 48 470 940 193.727 5 15.285 200 19.61 15.285 200 19.61 1101 15.285 200 19.61 1102 15.285 200 19.61 117.414 755 9400 9400 4707 193.727 438 202 19.61 10.724 10.724 10.724 10.724 10.724 10.725 10.755 1	-0.0011 -0.00217 -0.00277 -0.00139 -0.0139 -0.01314 -0.00843 -0.00907 -0.04301 -0.00843 -0.00907 -0.04301 -0.00843 -0.00012 -0.0019 -0.01314 -0.0019 -0.01314 -0.0019 -0.01314 -0.0019 -0.01314 -0.00907 -0.00907 -0.0019 -0.0019 -0.01314 -0.0019 -0.00022 -0.0019 -	0.23428 0.23428 0.2356 0.2356 0.2356 0.2339 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.19952 0.19527 0.18528 0.18528 0.18528 0.186520 0.186520 0.18652000000000000000000000000000000000000	
ERE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 69KV	259 259 259 259 259 259 259 259 333 333 333 333 333 333 333 333 333 3	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18628 -0.10026 -0.	WERE WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV EVANS ENERGY CENTER 138KV' JAEFREY ENERGY CENTER 138KV' JEFFREY ENERGY CENTER 345KV JEFFREY ENERGY CENTER 345KV JEFFREY ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' COTYO F AUGUSTA 69KV' COTYO F AUGUSTA 69KV' COTYO F AUGUSTA 69KV' COTYO F AUGUSTA 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV' EVANS ENERGY CENTER 138KV' UTYO F AUGUSTA 69KV' COFFEY COUNTY NO. 2 SHARPE 69KV' EVANS ENERGY CENTER 138KV' WACO 138KV' WACO 138KV' WACO 138KV' WACO 138KV' WACO 138KV' IEFFREY ENERGY CENTER 345KV JEFFREY ENERGY CENTER 345KV JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 135KV' JEFKREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 15KV' LAWRENCE ENERGY CENTER 135KV' JEFKREY ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 135KV' JEVANS ENERGY CENTER 135KV' EVANS ENERGY CENTER 135KV' EVANS ENERGY CENTER 135KV' EVANS ENERGY CENTER 135KV' EVANS ENERGY CENTER 135KV'	200 19.61 11.01 17.414 940 193.727 48 470 940 193.727 15.285 200 19.61 1100 15.285 200 19.61 1100 15.285 200 19.61 1100 17.414 17.414 17.414 17.414 17.414 17.414 17.414 17.414 17.414 17.414 17.414 17.414 17.414 17.414 17.414 17.414 17.414 11.01 193.727 48 193.7277 193.727 193.7277 193.7277 193.7277 1	-0.0011 -0.00217 -0.00227 -0.001371 -0.01371 -0.01314 -0.0084 -0.00907 -0.00907 -0.00907 -0.00907 -0.0011 -0.0084 -0.0011 -0.00227 -0.0019 -0.0019 -0.0019 -0.0019 -0.001371 -0.00227 -0.0019 -0.0019 -0.001371 -0.00227 -0.0019 -0.001371 -0.00227 -0.0019 -0.001371 -0.00227 -0.0019 -0.001371 -0.00227 -0.001371 -0.00227 -0.0019 -0.001371 -0.00371 -0.	0.23428 0.23428 0.2356 0.2356 0.2356 0.2356 0.2356 0.2356 0.2356 0.2356 0.2356 0.1942 0.1942 0.19452 0.19452 0.19527 0.19624 0.19527 0.18694 0.19527 0.18694 0.18652 0.18652 0.18642 0.18642 0.18421 0.18422 0.18422 0.18424 0.18422 0.1842 0.18422 0.1842 0.18422 0.1944 0.19444 0.19444 0.1944	
ERE	BPU - CITY OF MCPHERSON 115KV HUTCHINSON ENERGY CENTER 115KY HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 105KV HUTCHINSON ENERGY CENTER 115KV HUTCHINSON ENERGY CENTER 105KV PAVINEE 115KV RIGE 116KV RIGE 115KV PAVINEE 115KV RIGE 115KV RIGE 115KV R	259 259 259 259 259 259 259 259 333 333 333 333 333 333 333 333 333 3	-0.23538 -0.23538 -0.23538 -0.23538 -0.23538 -0.18638 -0.18638 -0.18638 -0.18628 -0.10026 -0.	WERE WERE	CITY OF WELLINGTON 69KV' COFFEY COUNTY NO. 2 SHAPPE 69KV EVANS ENERGY CENTER 138KV' WACO 138KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 230KV' TECUMSEH ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 345KV' TECUMSEH ENERGY CENTER 345KV' TECUMSEH ENERGY CENTER 115KV' KNOLL 3 115 115KV' COFFEY COUNTY NO. 2 SHAPPE 69KV' COFFEY COUNTY NO. 2 SHAPE 69KV' UACO 138KV' WACO 138KV' KNOLL 3115 115KV' KNOLL 3115 115KV' KNOLL 3115 115KV' LAWRENCE ENERGY CENTER 345KV' JEFFREY ENERGY CENTER 345KV' LAWRENCE ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' TEVANSE HENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' TEVANSE HENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' LAWRENCE ENERGY CENTER 230KV' TEVANSE HENERGY CENTER 138KV' TEVANSENERGY CENTER 138KV'	200 19.61 19.61 1101 17.414 940 4700 193.727 48 4700 940 193.727 5.15.285 2.00 193.727 15.285 2.00 19.61 1101 15.285 2.00 19.61 1102 19.61 1102	-0.0011 -0.00217 -0.00227 -0.00137 -0.00137 -0.01371 -0.01314 -0.00843 -0.00907 -0.04301 -0.00843 -0.00917 -0.00137 -0.00137 -0.0022 -0.0019 -0.0022 -0.0019 -0.0022 -0.0019 -0.0022 -0.0009 -0.0009 -0.00022 -0.000	0.23428 0.23428 0.2356 0.2356 0.2356 0.2339 0.199525 0.199525 0.19952 0.199545 0.199545 0.199545 0.19954 0.19954 0.19954 0.19954 0.19954 0.19954 0.19954 0.19954 0.19957 0.18654 0.18652 0.	

Upgrade: Limiting Facility: Direction: Line Outage: Flowgate: Date Redispatch Needed: Season Flowgate Identified:	WICHITA - RENO 345KV NORTH AMERICAN PHILIPS JUNCTION (SOUT From-STo EAST MCPHERSON - SUMMIT 230KV CKT 1 57374574382568725687312206WP 12/1/06 - 4/1/07 2006 Winter Peak	H) - WEST MCPHE	ERSON 115	KV CKT 2					
Deservation	Dellef Amount	Aggregate Relief							
Reservation	Relief Amount	Amount							
1090964		4.8							
1090965	1.1	4.8		1					Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source			Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)
WERE	BPU - CITY OF MCPHERSON 115KV	259		WERE	JEFFREY ENERGY CENTER 230KV	470	0.01812	-0.29753	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27941	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01883	-0.29824	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27941	WERE	'LAWRENCE ENERGY CENTER 230KV'	130.0238	0.01183	-0.29124	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27941	WERE	'CHANUTE 69KV'	35.344	0.00165	-0.28106	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27941	WERE	'CITY OF AUGUSTA 69KV'	17.25201	0.00051	-0.27992	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27941	WERE	'CITY OF IOLA 69KV'	13.978	0.00191	-0.28132	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27941	WERE	'CITY OF WELLINGTON 69KV'	24	-0.00148	-0.27793	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27941	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00306	-0.28247	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27941	WERE	'EVANS ENERGY CENTER 138KV'	25.88745	0.00037	-0.27978	
WERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27941		'WACO 138KV'	17.953	-0.00261	-0.2768	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.2263	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01812	-0.24442	
WERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.2263	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01883	-0.24513	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.2262		'JEFFREY ENERGY CENTER 230KV'	470	0.01812	-0.24432	
WERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.2262	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01883	-0.24503	19

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WERE 'HI	UTCHINSON ENERGY CENTER 115KV	423	-0.2263	WERE	'LAWRENCE ENERGY CENTER 230KV'	130.0238	0.01183	-0.23813	20
WERE 'HI	UTCHINSON ENERGY CENTER 69KV'	67	-0.2262	WERE	'LAWRENCE ENERGY CENTER 230KV'	130.0238	0.01183	-0.23803	20
WERE 'HI	UTCHINSON ENERGY CENTER 115KV	423	-0.2263	WERE	'CHANUTE 69KV'	35.344	0.00165	-0.22795	21
WERE 'HU	UTCHINSON ENERGY CENTER 115KV	423	-0.2263	WERE	'CITY OF AUGUSTA 69KV'	17.25201	0.00051	-0.22681	21
WERE 'HU	UTCHINSON ENERGY CENTER 115KV	423	-0.2263	WERE	'CITY OF IOLA 69KV'	13.978	0.00191	-0.22821	21
WERE 'HU	UTCHINSON ENERGY CENTER 115KV	423	-0.2263	WERE	'CITY OF WELLINGTON 69KV'	24	-0.00148	-0.22482	21
WERE 'HU	UTCHINSON ENERGY CENTER 115KV	423	-0.2263	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00306	-0.22936	21
WERE 'HU	UTCHINSON ENERGY CENTER 115KV	423	-0.2263	WERE	'EVANS ENERGY CENTER 138KV'	25.88745	0.00037	-0.22667	21
WERE 'HU	UTCHINSON ENERGY CENTER 115KV	423	-0.2263	WERE	'WACO 138KV'	17.953	-0.00261	-0.22369	21
WERE 'HI	UTCHINSON ENERGY CENTER 69KV'	67	-0.2262	WERE	'CHANUTE 69KV'	35.344	0.00165	-0.22785	21
WERE 'HI	UTCHINSON ENERGY CENTER 69KV'	67	-0.2262	WERE	'CITY OF AUGUSTA 69KV'	17.25201	0.00051	-0.22671	21
WERE 'HI	UTCHINSON ENERGY CENTER 69KV'	67	-0.2262	WERE	'CITY OF IOLA 69KV'	13.978	0.00191	-0.22811	21
WERE 'HI	UTCHINSON ENERGY CENTER 69KV'	67	-0.2262	WERE	'CITY OF WELLINGTON 69KV'	24	-0.00148	-0.22472	21
WERE 'HI	UTCHINSON ENERGY CENTER 69KV'	67	-0.2262	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00306	-0.22926	21
WERE 'HI	UTCHINSON ENERGY CENTER 69KV'	67	-0.2262	WERE	'EVANS ENERGY CENTER 138KV'	25.88745	0.00037	-0.22657	21
WERE 'HU	UTCHINSON ENERGY CENTER 69KV'	67	-0.2262	WERE	'WACO 138KV'	17.953	-0.00261	-0.22359	21
WERE 'PA	AWNEE 115KV	999	-0.13103	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01812	-0.14915	32
WERE 'PA	AWNEE 115KV	999	-0.13103	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01883	-0.14986	32
WERE 'RI	ICE 115KV'	999	-0.13103	WERE	'JEFFREY ENERGY CENTER 230KV'	470	0.01812	-0.14915	32
WERE 'RI	ICE 115KV'	999	-0.13103	WERE	'JEFFREY ENERGY CENTER 345KV'	940	0.01883	-0.14986	32
WERE 'PA	AWNEE 115KV	999	-0.13103	WERE	'LAWRENCE ENERGY CENTER 230KV'	130.0238	0.01183	-0.14286	33
WERE 'RI	ICE 115KV'	999	-0.13103	WERE	'LAWRENCE ENERGY CENTER 230KV'	130.0238	0.01183	-0.14286	33
WERE 'PA	AWNEE 115KV	999	-0.13103	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00306	-0.13409	35
WERE 'RI	ICE 115KV'	999	-0.13103	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.97	0.00306	-0.13409	35
WERE 'PA	AWNEE 115KV'	999	-0.13103	WERE	'CITY OF AUGUSTA 69KV'	17.25201	0.00051	-0.13154	36
WERE 'PA	AWNEE 115KV'	999	-0.13103	WERE	'EVANS ENERGY CENTER 138KV'	25.88745	0.00037	-0.1314	36
WERE 'RI	ICE 115KV'	999	-0.13103	WERE	'CITY OF AUGUSTA 69KV'	17.25201	0.00051	-0.13154	36

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. MULLERGREN 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 Ma	ximum Increment were determine from the Souce a	and Sink Operating	Points in th	e study mode	Is where limiting facility was identified.				
Factor = Source GSF - Sink C	SF								

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

Direction:	From->To								
ine Outage:	EAST MCPHERSON - SUMMIT 230KV CKT 1								
owgate:	57374574382568725687312207WP								
ate Redispatch Needed: eason Flowgate Identified:	12/1/07 - 4/1/08 2007 Winter Peak								
eason Flowgate Identified.	2007 Williel Peak	Aggregate Relief							
Reservation	Relief Amount	Amount							
1090817	1.3	3.6							
1090964	1.7	3.6							
1090965	0.5	3.6							
									Aggregate
		Maximum		Sink Control		Maximum			Redispatch
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF		Amount (M
VERE	BPU - CITY OF MCPHERSON 115KV	259 259	-0.27078		CLAY CENTER JUNCTION 115KV	6.7		-0.31646	
VERE	'BPU - CITY OF MCPHERSON 115KV' 'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078 -0.27078		'JEFFREY ENERGY CENTER 230KV' 'JEFFREY ENERGY CENTER 345KV'	940		-0.28595 -0.2866	
/ERE	BPU - CITY OF MCPHERSON 115KV	259	-0.27078		CHANUTE 69KV	34.818		-0.2000	
/ERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078		CITANOTE USKV	14.628		-0.27215	
/ERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078	WERE	CITY OF BURLINGTON 69KV	4.8		-0.27333	
/ERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078	WERE	'CITY OF IOLA 69KV'	14.565		-0.27239	
/ERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078		CITY OF WELLINGTON 69KV'	20		-0.26954	
VERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.95		-0.27333	
VERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078	WERE	'EVANS ENERGY CENTER 138KV'	55	0.00029	-0.27107	
VERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078	WERE	'LAWRENCE ENERGY CENTER 230KV'	169.36	0.00973	-0.28051	
VERE	'BPU - CITY OF MCPHERSON 115KV'	259	-0.27078		'WACO 138KV'	17.93		-0.26853	
VERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.21442		CLAY CENTER JUNCTION 115KV	6.7		-0.2601	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.21432		CLAY CENTER JUNCTION 115KV	6.7		-0.26	
VERE	BPU - CITY OF MCPHERSON 115KV	259	-0.27078		COLBY 115KV	6.247878		-0.23004	
VERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.21442	WERE	JEFFREY ENERGY CENTER 230KV	470		-0.22959	
VERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.21442		JEFFREY ENERGY CENTER 345KV	940		-0.23024 -0.22949	
/ERE /ERE	HUTCHINSON ENERGY CENTER 69KV HUTCHINSON ENERGY CENTER 69KV	67	-0.21432 -0.21432		JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 345KV'	940			
/ERE	HUTCHINSON ENERGY CENTER 19KV	67 423	-0.21432		CHANUTE 69KV	34.818		-0.23014 -0.21583	
/ERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.21442		CHANDLE BARV	14.565	0.00141	-0.21563	
/ERE	HUTCHINSON ENERGY CENTER 115KV	423	-0.21442		COFFEY COUNTY NO. 2 SHARPE 69KV	19.95		-0.21697	
/ERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.21442		'LAWRENCE ENERGY CENTER 230KV'	169.36		-0.22415	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.21432		CHANUTE 69KV	34.818	0.00141	-0.21573	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.21432		'CITY OF IOLA 69KV'	14.565	0.00161	-0.21593	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.21432		'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.95		-0.21687	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.21432		'LAWRENCE ENERGY CENTER 230KV'	169.36		-0.22405	
VERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.21442		'CITY OF AUGUSTA 69KV'	14.628		-0.2151	
VERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.21442		CITY OF WELLINGTON 69KV	20		-0.21318	
VERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.21442		'EVANS ENERGY CENTER 138KV'	55		-0.21471	
VERE	'HUTCHINSON ENERGY CENTER 115KV'	423	-0.21442		'WACO 138KV'	17.93		-0.21217	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.21432		'CITY OF AUGUSTA 69KV'	14.628		-0.215	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.21432	WERE	'CITY OF WELLINGTON 69KV'	20		-0.21308	
/ERE	'HUTCHINSON ENERGY CENTER 69KV'	67	-0.21432		'EVANS ENERGY CENTER 138KV'	55		-0.21461	
VERE	'HUTCHINSON ENERGY CENTER 69KV'	67 999	-0.21432		WACO 138KV	17.93		-0.21207 -0.13049	
VERE	'PAWNEE 115KV'	999	-0.11532 -0.11532	WERE	JEFFREY ENERGY CENTER 230KV' JEFFREY ENERGY CENTER 345KV'	940			
/ERE	'PAWNEE 115KV' 'RICE 115KV'	999	-0.11532	WERE	JEFFREY ENERGY CENTER 345KV	940		-0.13114 -0.13049	
VERE	'RICE 115KV'	999	-0.11532		JEFFREY ENERGY CENTER 345KV	940		-0.13049	
VERE	'PAWNEE 115KV'	999	-0.11532		'LAWRENCE ENERGY CENTER 230KV'	169.36		-0.12505	
/ERE	'RICE 115KV'	999	-0.11532	WERE	'LAWRENCE ENERGY CENTER 230KV'	169.36		-0.12505	
/ERE	'PAWNEE 115KV'	999	-0.11532	WERE	'CHANUTE 69KV'	34.818		-0.11673	
/ERE	'PAWNEE 115KV'	999	-0.11532		'CITY OF IOLA 69KV'	14.565	0.00161	-0.11693	
/ERE	'PAWNEE 115KV'	999	-0.11532	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.95	0.00255	-0.11787	· · · · · · · · · · · · · · · · · · ·
/ERE	'RICE 115KV'	999	-0.11532	WERE	'CHANUTE 69KV'	34.818	0.00141	-0.11673	
/ERE	'RICE 115KV'	999	-0.11532		'CITY OF IOLA 69KV'	14.565	0.00161	-0.11693	
/ERE	'RICE 115KV'	999	-0.11532	WERE	'COFFEY COUNTY NO. 2 SHARPE 69KV'	19.95		-0.11787	
/ERE	'PAWNEE 115KV'	999	-0.11532		CITY OF AUGUSTA 69KV	14.628		-0.116	
/ERE	PAWNEE 115KV	999	-0.11532		CITY OF WELLINGTON 69KV	20		-0.11408	
/ERE	'PAWNEE 115KV'	999	-0.11532		'EVANS ENERGY CENTER 138KV'	55		-0.11561	
ERE	'PAWNEE 115KV' 'RICE 115KV'	999	-0.11532		'WACO 138KV' 'CITY OF AUGUSTA 69KV'	17.93		-0.11307 -0.116	
ERE	'RICE 115KV'	999	-0.11532		CITY OF AUGUSTA 69KV	14.628		-0.116	
/ERE	'RICE 115KV'	999	-0.11532		'EVANS ENERGY CENTER 138KV'	55		-0.11408	
/ERE	'RICE 115KV'	999	-0.11532		WACO 138KV	17.93		-0.11307	
/ERE	'KNOLL 3 115 115KV'	75	-0.04955		JEFFREY ENERGY CENTER 345KV	940		-0.06537	
VERE	'KNOLL 3 115 115KV'	75	-0.04955		JEFFREY ENERGY CENTER 230KV	470		-0.06472	
/ERE	'KNOLL 3 115 115KV'	75	-0.04955		'LAWRENCE ENERGY CENTER 230KV'	169.36		-0.05928	
/ERE	'KNOLL 3 115 115KV'	75	-0.04955		'EVANS ENERGY CENTER 138KV'	55		-0.04984	
VEPL	'A. M. MULLERGREN GENERATOR 115KV'	63	-0.09475		'GRAY COUNTY WIND FARM 115KV'	60	-0.06181	-0.03294	-
	ximum Increment were determine from the Souce								

		Aggregate Relief									
Reservation	Relief Amount	Amount									
1090487	22.8	22.8									
									Aggregate		
		Maximum		Sink Control		Maximum			Redispatch		
Source Control Area	Source	Increment(MW)	GSF	Area	Sink	Decrement(MW)	GSF	Factor	Amount (MW)		
SPS	'MADOX 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		

 [SPS
 ['CUNNINGHAM
 115KV'
 50.00977
 -0.06007
 [SPS
 [MUSTG5 118.0 230KV'

 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

Transmissi on Owner		Solution		Assigned Upgrade E & C	needed per AG	Expansion Plan E & C Cost
OKGE	Sooner to Rose Hill 345 kV OKGE	Rebuild & Reconductor 0.57 Miles of 477AS33 to 477 ACCC/TW New 345 kV line from Sooner to Oklahoma/Kansas	1	\$ - \$ 27,500,000	6/1/2016 6/1/2016	\$ 200,000
	Sooner to Rose Hill 345 kV WERE a a deferral group, the expansion plan upgrade(s) that were de	New 345 kV line from Oklahoma/Kansas Stateline to Rose Hill ferred as a result of a requested upgrade are so noted.	1	\$ 27,500,000	6/1/2016	

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