

# Final Aggregate Facility Study SPP-2005-AG2-AFS-3 For Transmission Service Requested by Aggregate Transmission Customers

SPP Engineering, SPP Tariff Studies

SPP AGGREGATE FACILITY STUDY (SPP-2005-AG2-AFS-3)

March 8, 2006

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# SPP AGGREGATE FACILITY STUDY (SPP-2005-AG2-AFS-3)

March 8, 2006

# **1. Executive Summary**

Pursuant to Attachment Z of the Southwest Power Pool Open Access Transmission Tariff (OATT), 750 MW of long-term transmission service requests have been restudied in this final Aggregate Facility Study (AFS). This phase of the AFS consists of revisions to reflect the withdrawal of requests after the AFS was posted on February 8, 2006. 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 restudy is \$28,691,997. Additionally \$18,000,000 of assigned E & C cost for 3<sup>rd</sup> party facility upgrades are assignable to the customer. The total upgrade levelized revenue requirement for all transmission requests is \$83,916,542. This is based on full allocation of levelized revenue requirements for upgrades to customers without consideration of base plan funding. The AFS data table 3 reflect the full allocation of upgrade costs to customers based on either the requested reservation period or the deferred reservation period if applicable. Total upgrade levelized revenue

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requirements for all transmission requests after consideration of potential base plan funding is \$30,707,718. For those customers who pursue redispatch in lieu of deferral of start of service, levelized revenue requirements will be based upon the deferred start date with redispatch.

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, one third-party facility was identified. Total engineering and construction cost estimates for required third-party facility upgrades is \$18,000,000. Agreements for third-party impact mitigation must be negotiated by the Transmission Customer and third-party owner with a copy of the agreement provided to SPP prior to start of transmission service.

The Transmission Provider will tender Letter Agreements to revise the existing service agreements for new designated network resource requests for those Transmission Customers currently taking SPP Network Integrated Transmission Service (NITS). The Transmission Provider will tender NITS Service and Operating Agreements for new designated network resource requests for those Transmission Customers that are not currently taking SPP NITS. The Transmission Provider will tender service agreements for Point to Point confirmed service. Service Agreements will be tendered based on full allocation of revenue requirements for facility upgrades assignable to the customer contingent upon verification of designated resources meeting Attachment J, Section III B criteria for base plan funding.

After receipt of a Service Agreement from the Transmission Provider, the Customer shall have 15 days to execute a Service Agreement or request the filing of an unexecuted

Service Agreement or the request will be deemed terminated and withdrawn. Agreements for generation redispatch in lieu of deferral of start of service must be negotiated by the Transmission Customer and generation owner with a copy of the agreement provided to SPP prior to start of transmission service.

# 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 second open season commenced on June 1, 2005. All requests for long-term transmission service received prior to October 1, 2005 with a signed study agreement were then included in the second Aggregate Transmission Service Study (ATSS).

750MW of long-term transmission service has been restudied in this final Aggregate Facility Study (AFS) with over \$28 Million in transmission upgrades being proposed. The results of the final 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

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sharing of costs among customers using the same facility. The detailed results show individual upgrade costs by study as well as potential base plan allowances as determined by Attachments J and Z. The following link can be used to access the SPP OATT: (http://www.spp.org/Publications/SPP\_Tariff.pdf). In order to understand the extent to which base plan upgrades may be applied to both point-to-point and network transmission services, it is necessary to highlight the definition of Designated Resource. Per Section 1.9a of the SPP OATT, a Designated Resource is "[a]ny designated generation resource owned, purchased or leased by a Transmission Customer to serve load in the SPP Region. Designated Resources do not include any resource, or any portion thereof, that is committed for sale to third parties or otherwise cannot be called upon to meet the Transmission Customer's load on a non-interruptible basis." Therefore, not only network service, but also point-to-point service has potential for base plan funding if the conditions for classifying upgrades associated with designated resources as base plan upgrades as defined in Section III.B of Attachment J are met. Base plan funding is not applicable for point-to-point requests where the transmission base rate access charge exceeds the monthly revenue requirements for network upgrades.

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 Transmission 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 and not only by 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 that may allow start of service prior to completion of assigned network upgrades.

# A. <u>Financial Analysis</u>

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. For those customers who pursue redispatch agreements to avoid deferral of start of service the present worth analysis will be based on the deferred start date with redispatch as shown in Table 1 and 2. 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.

# **<u>B. Third-Party Facilities</u>**

For third-party facilities listed in Table 5 and Table 3, 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, one third-party facility was identified. Total engineering and construction cost estimates for required third-party facility upgrades is \$18,000,000. The Transmission Provider will undertake reasonable efforts to assist the Transmission Customer in making arrangements for necessary engineering, permitting, and construction of the third-party facilities. Third-party facility upgrade engineering and construction cost estimates are not utilized to determine the present worth value of levelized revenue requirements as is 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.

# 3. Study Methodology

# A. Description

The system impact analysis was conducted to determine the steady-state impact of the requested service on the SPP and first tier Non - SPP control area systems. The steady-state analysis was done to ensure current SPP Criteria and NERC Reliability Standards

requirements are fulfilled. The Southwest Power Pool conforms to the NERC Reliability Standards, which provide the strictest requirements, related to voltage violations and thermal overloads during normal conditions and during a contingency. It requires that all facilities be within normal operating ratings for normal system conditions and within emergency ratings after a contingency. Normal operating ratings and emergency operating ratings monitored are Rate A and B in the SPP MDWG models, respectively. The upper bound and lower bound of the normal voltage range monitored is 105% and 95%. The upper bound and lower bound of the emergency voltage range monitored is 110% and 90%. The SPS Tuco 230 kV bus voltage is monitored at 92.5% due to predetermined system stability limitations.

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

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

# B. Model Development

SPP used twelve seasonal models to study the aggregate transfers of 2312 MW over a variety of requested service periods. The SPP MDWG 2005 Series Cases Update 4 2005/06 Winter Peak (05WP), 2006 April Minimum (06AP), 2006 Spring Peak (06G), 2006 Summer Shoulder (06SH), 2006 Summer Peak (06SP), 2006 Fall Peak (06FA), 2006/07 Winter Peak (06WP), 2007 Summer Peak (07SP), 2007/08 Winter Peak (07WP), 2010 Summer Peak (10SP), 2010/11 Winter Peak (10WP), and 2015 Summer Peak (15SP) were used to study the impact of the requested service on the transmission system. The Spring Peak models apply to April and May, the Summer Peak models apply to June through September, the Fall Peak models apply to October and November, and the Winter Peak models apply to December through March.

The chosen base case models were modified to reflect the most current modeling information. Four groups of requests were developed from the aggregate of 751 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 2005 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 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 2005 Series Cases flowing in a West to East direction with ERCOT net importing from an outside zone and exporting to the Lamar HVDC Tie. Scenario 3 includes transmission requests not already included in the SPP 2005 Series Cases flowing in a West to East 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 2005 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. 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 overloads caused or impacted by the transfer. Transfer distribution factor cutoffs (SPP and 1<sup>st</sup>-Tier) and voltage threshold (0.02 change below 0.90 pu) were applied to determine the impacted facilities. The PSS/E options chosen to conduct the analysis can be found in Appendix A.

# **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 confirmed service or 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 the incremental or decremental amount was greater than 10 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.

Agreements for generation redispatch must be negotiated by the Transmission Customer and the Generation Owner with a copy of the agreement provided to SPP prior to start of transmission service.

# 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 final AFS. This table lists deferred start and stop dates and the minimum annual allocated ATC without upgrades and season of first impact. The deferred dates of the reservation are given both with and without redispatch that may be available for limitations that are deferring the start of service. Table 2 identifies total E & C cost allocated to each Transmission Customer, 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 in consideration of potential base plan funding, total

SPP AGGREGATE FACILITY STUDY (SPP-2005-AG2-AFS-3) March 8, 2006 Page 13 of 70 revenue requirements for assigned upgrades without consideration of potential base plan funding over the term of the reservation (both with and without redispatch), point-topoint base rate charge and final total cost allocation to the Transmission Customer. Table 3 provides additional details for each request including all assigned facility upgrades required, allocated E & C costs, allocated revenue requirements for upgrades, upgrades not assigned to customer but required for service to be confirmed, facilities limiting rollover rights, credits to be paid for previously assigned AFS facility upgrades, any impacted facilities requiring redispatch agreements to provide transmission service, and any third party upgrades required. Table 4 lists all upgrade requirements with associated solutions needed to provide transmission service for the AFS, 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 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

SPP AGGREGATE FACILITY STUDY (SPP-2005-AG2-AFS-3) March 8, 2006 Page 14 of 70 plan funding. Any allocated customer costs in excess of base plan funding will be assigned to the customer.

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

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

# **B. Study Definitions**

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

# 5. Conclusion

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

The Transmission Provider will tender Letter Agreements to revise the existing service agreements for new designated network resource requests for those Transmission Customers currently taking SPP Network Integrated Transmission Service (NITS). The Transmission Provider will tender NITS Service and Operating Agreements for new designated network resource requests for those Transmission Customers that are not currently taking SPP NITS. The Transmission Provider will tender service agreements for Point to Point confirmed service. Service Agreements will be tendered based on full allocation of revenue requirements for facility upgrades assignable to the customer contingent upon verification of designated resources meeting Attachment J, Section III B criteria for base plan funding. After receipt of a Service Agreement from the Transmission Provider, the Customer shall have 15 days to execute a Service Agreement or request the filing of an unexecuted Service Agreement or the request will be deemed terminated and withdrawn.

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 only
- 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 1mw
- 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. contrig. case Vltg ching for report -0.02
- 12. Sorted output None

Newton Solution:

- 1. Tap adjustment Stepping
- 2. Area interchange control Tie lines only
- 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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								Deferred Start	Deferred Stop			Mimimum Allocated	Season of Minimum
					Requested	Requested	Requested	Date without	Date without	Start Date with	Stop Date with	ATC (MW) within	Allocated ATC within
Customer	Study Number	Reservation	POR	POD	Amount	Start Date	Stop Date	Redispatch	Redispatch	Redispatch	Redispatch	reservation period	reservation period
CALP	SPP-2005-005D	1040112	NPPD	ERCOTE	50	02/15/06	02/15/08			N/A	N/A	0	06SP
EDE	AG2-2005-064	973355	KCPL	EDE	100	1/1/2010	1/1/2030			N/A	N/A	0	10SP
EDE	AG2-2005-021	973373		EDE	50	1/1/2010	1/1/2030			N/A	N/A	0	10SP
KMEA	SPP-2003-275	610383	GRDA	WR	5	5/1/2009	5/1/2010			N/A	N/A	0	10SP
KMEA	AG2-2005-034	974592	GRDA	KCPL	9	5/1/2006	5/1/2026	10/1/2007	10/01/26	10/1/2006	10/1/2026	0	06SP
KMEA	AG2-2005-035	974596	GRDA	KCPL	6	5/1/2006	5/1/2026	10/1/2007	10/01/26	10/1/2006	10/1/2026	0	06SP
KMEA	AG2-2005-039	974637	GRDA	WR	1	5/1/2009	5/1/2026			N/A	N/A	0	15SP
KMEA	AG2-2005-040	974645	GRDA	WR	2	5/1/2009	5/1/2026			N/A	N/A	N/A	N/A
KMEA	AG2-2005-041	974650	GRDA	WR	3	5/1/2009	5/1/2026			N/A	N/A	0	10SP
KMEA	AG2-2005-042	974656	GRDA	WR	3	5/1/2009	5/1/2026			N/A	N/A	0	10SP
KMEA	AG2-2005-043	974658	GRDA	WR	3	5/1/2006	5/1/2026	10/1/2006	10/1/2026	N/A	N/A	0	06SP
KMEA	AG2-2005-044	974660	GRDA	WR	3	5/1/2006	5/1/2026	10/1/2007	10/01/26	10/1/2006	10/1/2026	0	06SP
KMEA	AG2-2005-058	974976	GRDA	WPEK	3	5/1/2006	5/1/2026	10/1/2007	10/01/26	N/A	N/A	0	06SP
KMEA	AG2-2005-059	974977	GRDA	WPEK	2	5/1/2010	5/1/2026			N/A	N/A	0	10SP
SPSM	AG2-2005-053	974790	CSWS	SPS	50	1/1/2007	1/1/2012			N/A	N/A	0	07SP
SPSM	AG2-2005-053	974791	CSWS	SPS	50	1/1/2007	1/1/2012			N/A	N/A	0	07SP
SPSM	AG2-2005-053	974793	CSWS	SPS	50	1/1/2007	1/1/2012			N/A	N/A	0	07SP
SPSM	AG2-2005-053	974797	CSWS	SPS	50	1/1/2007	1/1/2012			N/A	N/A	0	07SP
UCU	AG2-2005-078	1043804	WPEK	MPS	20	10/1/2007	10/01/18			N/A	N/A	0	06SH
UCU	AG2-2005-079D	1043805	WPEK	MPS	40	10/1/2006	10/01/17			N/A	N/A	0	10SP
WFEC	AG2-2005-062	971951	WFEC	WFEC	250	5/1/2010	5/1/2035			N/A	N/A	0	10SP

Customer	Study Number	Reservation	Engineering and Construction Cost of Upgrades Allocated to Customer for Revenue Requirements	Letter of Credit Amount Required	<sup>2</sup> Additional Engineering and Construction Cost of Upgrades Assigned to Customer (3rd party)	<sup>5</sup> Potential Base Plan Engineering and Construction Funding Allowable		Total Revenue Requirements for ssigned Upgrades over term of reservation without potential base plan funding allocation without redispatch	<sup>6</sup> Total Revenue Requirements for Assigned Upgrades over term of reservation WITH potential base plan funding allocation WITH redispatch	Point-to- Point Base Rate over reservation period	<sup>3</sup> Total Cost of Reservation Assignable to Customer contingent upon base plan funding
	SPP-2005-005D	1040112		Required	\$ 18,000,000	\$ -	\$	without redispatch	\$ -	\$ 1,260,000	
	AG2-2005-064	973355		¢ _	φ 10,000,000	\$ 3,502,843	1 \$	15,077,273	\$ 3,920,092	\$ -	\$ 3,920,092
	AG2-2005-004 AG2-2005-021	973373		\$ -		\$ 3,302,043	<sup>1</sup> \$	7,651,551	\$ 3,520,092 \$ 7,651,551	\$-	\$ 7,651,551
	SPP-2003-275	610383		\$ 24,027		\$-	\$	38,864	\$ 38,864	\$ 78,000	. , ,
	AG2-2005-034	974592		\$ 24,027 \$ 31,744		\$ 31,744	\$	87,993	\$ <u>50,004</u> \$ -	\$ 78,000	Sch 9 charges
	AG2-2005-034	974592	, ,	\$ <u>31,744</u> \$ 20,414		\$ 31,744 \$ 20,414	\$	56,587	\$-	\$ - \$ -	Sch 9 charges
	AG2-2005-039	974590		\$ 20,414 \$ 25,576		\$ 20,414	\$	69,764	\$ 69,764	\$ - \$ -	\$ 69,764
	AG2-2005-039 AG2-2005-040	974637 974645		\$ <u>23,570</u> \$ -		<del>\$</del> -	\$	09,704	\$ 09,704 \$ -	\$ - \$ -	Sch 9 charges
	AG2-2005-040 AG2-2005-041	974645		\$ 12,733		\$-	\$	37,995	\$ 37,995	\$	
	AG2-2005-041 AG2-2005-042	974650		\$ 12,733 \$ 12,521		ъ - \$ -	۰ \$	37,362	\$ 37,362	\$ 795,600 \$ 795,600	
	AG2-2005-042 AG2-2005-043	974658		\$ 1,128,617		<del>، م</del>	۰ \$	2,663,292	\$ 37,362 \$ 1,389,009		
	AG2-2005-043	974658		\$ 12,065		\$ 540,000	\$	33,444	\$ 1,389,009	\$ 936,000 \$ 936,000	. , ,
	AG2-2005-044 AG2-2005-058	974000		\$ 12,005 \$ 13,469		<del>\$</del> -	\$	33,444 37,336	\$ 37,336	\$ <u>930,000</u> \$ 704,160	+,
	AG2-2005-058 AG2-2005-059	974976 974977		\$ 13,409 \$ 8,979		\$ -	\$	28,290	\$ 28,290	\$ 704,100 \$ 375,552	
	AG2-2005-059 AG2-2005-053	974977 974790		\$ 416,924		<del>\$</del> -	\$	647,505	\$ 28,290 \$ 647,505	\$ 4,800,000	
	AG2-2005-053 AG2-2005-053	974790 974791		\$ 416,924 \$ 416,924		\$- \$-	۰ \$	647,505	\$ 647,505 \$ 647,505	\$ 4,800,000	. , ,
	AG2-2005-053	974791		\$ 416,924		<del>\$</del> -	\$	647,505	\$ 647,505	\$ 4,800,000	+ ,,
	AG2-2005-053	974793		\$ 416,924		\$ -	\$	647,505	\$ 647,505	\$ 4,800,000	
	AG2-2005-053 AG2-2005-078	1043804	, ,	\$ 410,924 \$ -		<del>\$</del> -	\$		\$ 047,505 \$ -	\$ 4,800,000 \$ 4,253,040	
	AG2-2005-078	1043805	1	\$ - \$ -		\$ - \$ -	\$	-	\$- \$-	\$ 4,253,040 \$ 8,506,080	. , ,
	AG2-2005-079D AG2-2005-062	971951	\$ 18,598,348	\$ 2,598,348		\$ 13,613,991	4 \$	55,506,772	\$	\$ 0,500,000	\$ 14,875,814
WILC	AG2-2003-002	371331	\$ 28,691,997		¢ 19.000.000	\$ 17,708,992	\$	83,916,542	\$ 30,707,718	Ŷ	\$ 82,810,262
			\$ 20,091,997	\$ 5,550,169	\$ 16,000,000	\$ 17,700,992	φ	05,910,542	\$ 30,707,718		\$ 02,010,202
	0 EMDE capacity 100 MW request.	is based on JE	C renewed as a res	ource. Therefore	, a maximum of 74MW	of the 150MW of	cap	acity requested can be cor	isidered for potential base pla	n funding. This	was allocated
			ble for mitigating this			ades. These Inclu		st tier facilities outside SPF	P and Transmission Owner fac	cilities within SP	P that are not
Allocation o requirement	f base plan fundin	g will be detern cilities are not c	nined after verification	on of designated	resource meeting Atta	chment J, Section	n II B	Criteria. Additionally E & C	cost is based on the assigned C of 3rd Party upgrades is ass se plan funding. Customer is i	ignable to Cust	omer. Revenue
Note 4. For	WFEC 250MW re	equest, 183MW	of requested capac	ity can be consid	ered for base plan fun	ding.				1	
	3 criteria. Allocatio								e of base plan funding calcula Not applicable if PTP base rat		
Note 6: Rev	venue requiremen	ts in considerat	ion of base plan fun	ding are identical	both with and without	redispatch in this	stud	y.			
Nata 7: D	lianatah i '	d to man dele	nian One Table Of	a sedien state a l'			_				
NOTE 1: REC	aspatch is require	u to provide sei	rvice. See Table 6 fo	i redispatch pair	s.		_				
			100uh Karssa T	10110100-14400					landaa aanaan inti kuu inti	 	for this parties of
Note 8: The this time.	ese requests impa	ct the GRDA 41	12000-Kansas Tap	INTRV and 412Su		PP-2005-AG2-AF	S-3)	аурер in SPP-2005-AG1. S	Service agreements have not	been executed	ior this service at
						March 08, 2006					

#### Customer CALP Study Number SPP-2005-005D

				Requested	Requested Start		Deferred Start		Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Requested Stop Date	Date	Stop Date	Allowable	Base Rate	Cost	Requirements
CALP	1040112	NPPD	ERCOTE	50	2/15/2006	2/15/2008			\$-	\$ 1,260,000	\$-	\$ -
-									\$-	\$ 1,260,000	\$ -	\$ -
Third Party Lin	nitations											

Third	Party	Limit	ations

				Allocated E & C		
Reservation	Upgrade Name	COD	EOC	Cost	Total E & C Co:	st
826675	3BISMRK - 3HSEHVW 115KV CKT 1	6/1/2006	6/1/2008	\$ 18,000,000	\$ 18,000,	000
			Total	\$ 18,000,000	\$ 18,000,	000

# Customer Study Number EDE AG2-2005-021

				Requested	Requested Start		Deferred Start	Deferred	Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Requested Stop Date	Date	Stop Date	Allowable	Base Rate	Cost	Requirements
EDE	973373	EES	EDE	50	1/1/2010	1/1/2030			\$-	\$-	\$ 2,402,236	\$ 7,651,551
									\$-	\$-	\$ 2,402,236	\$ 7,651,551

				Allocated E & C		Total Revenue
Reservation	Upgrade Name	COD	EOC	Cost	Total E & C Cost	Requirements
973373						
	SUB 110 - ORONOGO JCT SUB 167 - RIVERTON 161KV CKT 1	6/1/2011	6/1/2011	\$ 1,748,604	\$ 5,400,000	\$ 5,569,616
	SUB 110 - ORONOGO JCT. (ORONOGO) 161/69/12.5KV TRANSFORMER CKT 1	6/1/2011	6/1/2011	\$ 653,632	\$ 2,000,000	\$ 2,081,935
			Total	\$ 2,402,236	\$ 7,400,000	\$ 7,651,551

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

Reservation	opgrade Name	000	EOC
973373	BULL SHOALS - BULL SHOALS 161KV CKT 1 SWPA	6/1/2011	6/1/2011
	CLARKSVILLE - MUSKOGEE 345KV CKT 1 AEPW	6/1/2015	6/1/2015
	CLARKSVILLE - MUSKOGEE 345KV CKT 1 OKGE	6/1/2015	6/1/2015
	RIVERSIDE CAPACITOR	6/1/2015	6/1/2015
	SUB 389 - JOPLIN SOUTHWEST - SUB EXPLORER SPRING CITY TAP 69KV CKT 1	6/1/2008	6/1/2009
	SUB 389 - JOPLIN SOUTHWEST (JOPLINSW) 161/69/12.5KV TRANSFORMER CKT 1	6/1/2011	6/1/2011

#### Study Number AG2-2005-064 Customer EDE

				Requested	Requested Start		Deferred Start	Deferred	Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Requested Stop Date	Date	Stop Date	Allowable	Base Rate	Cost	Requirements
EDE	973355	KCPL	EDE	100	1/1/2010	1/1/2030			\$ 3,502,843	\$-	\$ 4,733,572	\$ 15,077,273
									\$ 3,502,843	\$ -	\$ 4,733,572	\$ 15,077,273

				Allocated E & C		Total Revenue
Reservation	Upgrade Name	COD	EOC	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

Reservation	Upgrade Name	COD	EOC
973355	166TH STREET - JAGGARD JUNCTION 115KV CKT 1	6/1/2013	6/1/2013
	BULL SHOALS - BULL SHOALS 161KV CKT 1 SWPA	6/1/2011	6/1/2011
	CLARKSVILLE - MUSKOGEE 345KV CKT 1 AEPW	6/1/2015	6/1/2015
	CLARKSVILLE - MUSKOGEE 345KV CKT 1 OKGE	6/1/2015	6/1/2015
	RIVERSIDE CAPACITOR	6/1/2015	6/1/2015
	SUB 389 - JOPLIN SOUTHWEST - SUB EXPLORER SPRING CITY TAP 69KV CKT 1	6/1/2008	6/1/2009
	SUB 389 - JOPLIN SOUTHWEST (JOPLINSW) 161/69/12.5KV TRANSFORMER CKT 1	6/1/2011	6/1/2011

Construction I	Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assi	gnable to the	e transmissio	on customer.
Reservation	Upgrade Name	COD	EOC	
973355	166TH STREET - JARBALO JUNCTION SWITCHING STATION 115KV CKT 1	6/1/2013	6/1/2013	

#### Customer KMEA Study Number SPP-2003-275

				Requested	Requested Start		Deferred Start	Deferred	Potential Base Plan Funding		Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Requested Stop Date	Date	Stop Date	Allowable	Base Rate	Cost	Requirements
KMEA	610383	GRDA	WR	5	5/1/2009	5/1/2010			\$-	\$ 78,00	\$ 24,027	\$ 38,864
									\$-	\$ 78,00	\$ 24,027	\$ 38,864

				Allocated E & C		Total Revenue
Reservation	Upgrade Name	COD	EOC	Cost	Total E & C Cost	Requirements
610383	BEELINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009	\$ 3,003	\$ 200,000	\$ 5,078
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009	\$ 15,017	\$ 1,000,000	\$ 23,628
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009	\$ 6,007	\$ 400,000	\$ 10,158
			Total	\$ 24,027	\$ 1,600,000	\$ 38,864

# Facilities requiring redispatch in order to provide service. Reservation Upgrade Name

Reservation	Upgrade Name	COD
610383	NORTH AMERICAN PHILIPS - NORTH AMERICAN PHILIPS JUNCTION (SOUTH) 115KV CKT 1	12/1/2009
	NORTH AMERICAN PHILIPS JUNCTION (SOUTH) - WEST MCPHERSON 115KV CKT 1	12/1/2009

The renewal of the point-to-point request is dependent on the upgrades the following facilities. Reservation Facility Name

The renewal of the point-to-point request is dependent on the upgrades the following facilities.		
Reservation Facility Name	COD	EOC
610383 WEST MCPHERSON - WHEATLAND 115KV CKT 1	6/1/2015	6/1/2015

# Customer Study Number KMEA AG2-2005-034

				Requested	Requested Start		Deferred Start	Deferred	Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Requested Stop Date		Stop Date	Allowable	Base Rate	Cost	Requirements
KMEA	974592	GRDA	KCPL	9	5/1/2006	5/1/2026	10/1/2007	10/1/2026	\$ 31,744	\$-	\$ 31,744	\$ 87,993
									\$ 31,744	\$-	\$ 31,744	\$ 87,993

				Allocated E & C		Total Revenue
Reservation	Upgrade Name	COD	EOC	Cost	Total E & C Cost	Requirements
974592	BEELINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009	\$ 3,968	\$ 200,000	\$ 11,086
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009	\$ 19,840	\$ 1,000,000	\$ 54,734
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009	\$ 7,936	\$ 400,000	\$ 22,173
			Total	\$ 31,744	\$ 1,600,000	\$ 87,993

Expansion PI	an - The requested service is contingent upon completion of the following upgrades. Cost is not assignabl	e to the trans	mission cus	tomer.
Reservation	Upgrade Name	COD	EOC	
974592	JEC - Swissvale 345KV	6/1/2011	6/1/2011	

Credite may h	e required for the following network upgrades directly assigned to transmission customers in previous ag	areaste etud	,
	Upgrade Name	COD	EOC
974592	412SUB - KANSAS TAP 161KV CKT 1	6/1/2015	6/1/2015
	412SUB - KERR 161KV CKT 1	6/1/2015	6/1/2015
	Pending - The requested service is contingent upon completion of the following upgrades. Cost is not ass		
	Upgrade Name	COD	EOC
974592	AEPW PLANNED UPGRADE FOR NW ARKANSAS	6/1/2006	6/1/2009
	LACYGNE-PAOLA-WEST GARDER 345KV	6/1/2006	6/1/2008

# Customer Study Number KMEA AG2-2005-035

				Requested	Requested Start		Deferred Start	Deferred	Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Requested Stop Date	Date	Stop Date	Allowable	Base Rate	Cost	Requirements
KMEA	974596	GRDA	KCPL	6	5/1/2006	5/1/2026	10/1/2007	10/1/2026	\$ 20,414	\$-	\$ 20,414	\$ 56,586
									\$ 20.414	s -	\$ 20.414	\$ 56,586

					Allocated E	& C			Total Revenue
Rese	ervation	Upgrade Name	COD	EOC	Cost		Total E & C Cost		Requirements
9745	i96	BEELINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009	\$ 2,	552	\$ 200,000	\$	7,130
		EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009	\$ 12,	759	\$ 1,000,000	\$	35,199
		EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009	\$ 5,	103	\$ 400,000	\$	14,257
		·		Total	\$ 20	414	\$ 1,600,000	s	56 586

Reservation	Upgrade Name	COD	EOC
974596	JEC - Swissvale 345KV	6/1/201	1 6/1/2011
Credits may b	be required for the following network upgrades directly assigned to transmission customers in p	previous aggregate stu	
	be required for the following network upgrades directly assigned to transmission customers in p Upgrade Name	corevious aggregate stu COD	eoc
Reservation			EOC

Reservation	Upgrade Name	COD	EOC
974596	AEPW PLANNED UPGRADE FOR NW ARKANSAS	6/1/2006	6/1/2009
	LACYGNE-PAOLA-WEST GARDER 345KV	6/1/2006	6/1/2008

#### Customer Study Number KMEA AG2-2005-039

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date	Deferred Stop Date	Potential Base Plan Funding Allowable	Point-to-Poin Base Rate	Cost	Requiren	nents
MEA	974637	GRDA	WR	1	5/1/2009	5/1/2026			\$ -	\$		'6 \$ '6 \$	69
									ş -	φ	- \$ 20,01	0 \$	0
				Allocated E & C		Total Revenue	ſ						
Reservation	Upgrade Name	COD	EOC	Cost	Total E & C Cost	Requirements							
974637	SUB 110 - ORONOGO JCT SUB 167 - RIVERTON 161KV CKT 1	6/1/2011	6/1/2011	\$ 25,576	\$ 5,400,000	\$ 69,764							
			Total	\$ 25,576	\$ 5,400,000	\$ 69,764							
redits may b	e required for the following network upgrades directly assigned to transmission customers in previous ag	inrenate stud	,										
	Upgrade Name	COD	EOC										
74637	412SUB - KANSAS TAP 161KV CKT 1	6/1/2015	6/1/2015										
	412SUB - KERR 161KV CKT 1	6/1/2015	6/1/2015										
	Study Number AG2:2005-040												
									Potential Base				
				Requested	Requested Start		Deferred Start	Deferred	Plan Funding	Point-to-Point	nt Allocated E & C	Total Rev	venue
Customer	Reservation	POR	POD	Amount	Date	Requested Stop Date	Date	Stop Date	Allowable	Base Rate	Cost	Requiren	nents
MEA	974645	GRDA	WR	2	5/1/2009	5/1/2026			<u>\$</u> -	\$	- \$	- \$	
Stadita may b	e required for the following network upgrades directly assigned to transmission customers in previous ag	areaste stud							\$-	\$	- \$	- \$	
	upgrade Name	COD	EOC										
74645	412SUB - KANSAS TAP 161KV CKT 1	6/1/2015	6/1/2015										
	412SUB - KERR 161KV CKT 1	6/1/2015	6/1/2015										
	Study Number AG2-2005-041												
									Potential Base				
uetomor	Pacamation	POP	POD	Requested	Requested Start	Pequested Stop Date	Deferred Start	Deferred Stop Date	Plan Funding	Point-to-Poin Base Pate			
Customer (MEA	Reservation 974650	POR GRDA	POD WR	Requested Amount 3	Date	Requested Stop Date 5/1/2026	Deferred Start Date	Deferred Stop Date	Plan Funding Allowable \$ -	Base Rate	Cost	Requiren	nents
Customer KMEA		POR GRDA	POD WR	Amount		Requested Stop Date 5/1/2026				Base Rate	Cost 0 \$ 12,73	Requiren	nents 3
				Amount 3	Date	5/1/2026				Base Rate \$ 795,60	Cost 0 \$ 12,73	Requiren	nents 31
(MEA	974650	GRDA	WR	Amount 3 Allocated E & C	Date 5/1/2009	5/1/2026 Total Revenue				Base Rate \$ 795,60	Cost 0 \$ 12,73	Requiren	
Reservation	974650 Upgrade Name	GRDA	WR EOC	Amount 3 Allocated E & C Cost	Date 5/1/2009 Total E & C Cost	5/1/2026 Total Revenue Requirements				Base Rate \$ 795,60	Cost 0 \$ 12,73	Requiren	nents 31
(MEA	974650 Upgrade Name BEELINE - EXPLORER GLENPOOL 138KV CKT 1	GRDA COD 6/1/2009	WR EOC 6/1/2009	Allocated E & C Cost \$ 1,592	Date           5/1/2009           Total E & C Cost           \$ 200,000	5/1/2026 Total Revenue Requirements \$ 4,750				Base Rate \$ 795,60	Cost 0 \$ 12,73	Requiren	nents 3
Reservation	974650 Upgrade Name	GRDA	WR EOC	Amount 3 Allocated E & C Cost	Date 5/1/2009 Total E & C Cost \$ 200,000 \$ 1,000,000	5/1/2026 Total Revenue Requirements \$ 4,750 \$ 23,748				Base Rate \$ 795,60	Cost 0 \$ 12,73	Requiren	nents 31
Reservation	974650 Upgrade Name BEELINE - EXPLORER GLENPOOL 138KV CKT 1 EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	GRDA COD 6/1/2009 6/1/2009	EOC 6/1/2009 6/1/2009	Allocated E & C Cost \$ 1,592 \$ 7,958	Date           5/1/2009           Total E & C Cost           \$ 200,000           \$ 1,000,000           \$ 400,000	5/1/2026 Total Revenue Requirements \$ 4,750 \$ 23,748 \$ 9,497				Base Rate \$ 795,60	Cost 0 \$ 12,73	Requiren	nents 31
KMEA Reservation 074650	974650 Upgrade Name BEELINE - EXPLORER GLENPOOL 138KV CKT 1 EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	GRDA COD 6/1/2009 6/1/2009 6/1/2009	WR EOC 6/1/2009 6/1/2009 6/1/2009 Total	Amount 3 Allocated E & C Cost \$ 1,592 \$ 7,958 \$ 3,183 \$ 12,733	Date           5/1/2009           Total E & C Cost           \$ 200,000           \$ 1,000,000           \$ 400,000	5/1/2026 Total Revenue Requirements \$ 4,750 \$ 23,748 \$ 9,497				Base Rate \$ 795,60	Cost 0 \$ 12,73	Requiren	nents 31
KMEA Reservation 774650	974650 Upgrade Name BEELINE - EXPLORER GLENPOOL 138KV CKT 1 BEELINE - EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE an - The requested service is contingent upon completion of the following upgrades. Cost is not assignab	COD 6/1/2009 6/1/2009 6/1/2009 le to the tran	EOC 6/1/2009 6/1/2009 6/1/2009 Total	Amount 3 Allocated E & C Cost \$ 1,592 \$ 7,958 \$ 3,183 \$ 12,733	Date           5/1/2009           Total E & C Cost           \$ 200,000           \$ 1,000,000           \$ 400,000	5/1/2026 Total Revenue Requirements \$ 4,750 \$ 23,748 \$ 9,497				Base Rate \$ 795,60	Cost 0 \$ 12,73	Requiren	nents 31
Reservation 774650 Expansion Pla Reservation	974650 Upgrade Name BEELINE - EXPLORER GLENPOOL 138KV CKT 1 EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE an - The requested service is contingent upon completion of the following upgrades. Cost is not assignab	GRDA COD 6/1/2009 6/1/2009 6/1/2009 1/200 1/2009 1/200 1/2009 1/2009 1/2009 1/2009 1/2009 1/2009	WR EOC 6/1/2009 6/1/2009 6/1/2009 Total smission cus EOC	Amount 3 Allocated E & C Cost \$ 1,592 \$ 7,958 \$ 3,183 \$ 12,733	Date           5/1/2009           Total E & C Cost           \$ 200,000           \$ 1,000,000           \$ 400,000	5/1/2026 Total Revenue Requirements \$ 4,750 \$ 23,748 \$ 9,497				Base Rate \$ 795,60	Cost 0 \$ 12,73	Requiren	nents 3
Reservation 774650 Expansion Pla Reservation	974650 Upgrade Name BEELINE - EXPLORER GLENPOOL 138KV CKT 1 BEELINE - EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE an - The requested service is contingent upon completion of the following upgrades. Cost is not assignab	GRDA COD 6/1/2009 6/1/2009 6/1/2009 1/200 1/2009 1/200 1/2009 1/2009 1/2009 1/2009 1/2009 1/2009	EOC 6/1/2009 6/1/2009 6/1/2009 Total	Amount 3 Allocated E & C Cost \$ 1,592 \$ 7,958 \$ 3,183 \$ 12,733	Date           5/1/2009           Total E & C Cost           \$ 200,000           \$ 1,000,000           \$ 400,000	5/1/2026 Total Revenue Requirements \$ 4,750 \$ 23,748 \$ 9,497				Base Rate \$ 795,60	Cost 0 \$ 12,73	Requiren	nents 31
KMEA Reservation 974650 Expansion Pla Reservation 974650	974650 Upgrade Name BEELINE - EXPLORER GLENPOOL 138KV CKT 1 EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE an - The requested service is contingent upon completion of the following upgrades. Cost is not assignab Upgrade Name JEC - Swissvale 345KV	GRDA COD 6/1/2009 6/1/2009 6/1/2009 le to the tran COD 6/1/2011	WR EOC 6/1/2009 6/1/2009 Total smission cus EOC 6/1/2011	Amount 3 Allocated E & C Cost \$ 1,592 \$ 7,958 \$ 3,183 \$ 12,733	Date           5/1/2009           Total E & C Cost           \$ 200,000           \$ 1,000,000           \$ 400,000	5/1/2026 Total Revenue Requirements \$ 4,750 \$ 23,748 \$ 9,497				Base Rate \$ 795,60	Cost 0 \$ 12,73	Requiren	nents 3
KMEA Reservation 174650 Expansion Pla Reservation 174650 Credits may b Reservation	974650 Upgrade Name BEELINE - EXPLORER GLENPOOL 138KV CKT 1 EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE an - The requested service is contingent upon completion of the following upgrades. Cost is not assignab Upgrade Name JEC - Swiesvale 345KV required for the following network upgrades directly assigned to transmission customers in previous ag Upgrade Name	GRDA COD 6/1/2009 6/1/2009 6/1/2009 le to the tran COD 6/1/2011 gregate stud COD	WR EOC 6/1/2009 6/1/2009 Total smission cus EOC 6/1/2011 /. EOC	Amount 3 Allocated E & C Cost \$ 1,592 \$ 7,958 \$ 3,183 \$ 12,733	Date           5/1/2009           Total E & C Cost           \$ 200,000           \$ 1,000,000           \$ 400,000	5/1/2026 Total Revenue Requirements \$ 4,750 \$ 23,748 \$ 9,497				Base Rate \$ 795,60	Cost 0 \$ 12,73	Requiren	nents 31
CMEA Reservation 174650 Expansion Pla Reservation 174650 Credits may b Reservation 174650	974650 Upgrade Name EXELORER GLENPOOL 138KV CKT 1 EXELORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE un - The requested service is contingent upon completion of the following upgrades. Cost is not assignat Upgrade Name LEC - Swissvale 345KV e required for the following network upgrades directly assigned to transmission customers in previous ac Upgrade Name 142SUB - KANSAS TAP 161KV CKT 1	GRDA COD 6/1/2009 6/1/2009 6/1/2009 1/2009 1/2011 1/2011 1/2011 1/2015	WR EOC 6/1/2009 6/1/2009 6/1/2009 Total EOC 6/1/2011 , EOC 6/1/2015	Amount 3 Allocated E & C Cost \$ 1,592 \$ 7,958 \$ 3,183 \$ 12,733	Date           5/1/2009           Total E & C Cost           \$ 200,000           \$ 1,000,000           \$ 400,000	5/1/2026 Total Revenue Requirements \$ 4,750 \$ 23,748 \$ 9,497				Base Rate \$ 795,60	Cost 0 \$ 12,73	Requiren	nents 3
CMEA Reservation 174650 Expansion Pla Reservation 174650 Credits may b Reservation 174650	974650 Upgrade Name BEELINE - EXPLORER GLENPOOL 138KV CKT 1 EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE an - The requested service is contingent upon completion of the following upgrades. Cost is not assignab Upgrade Name JEC - Swiesvale 345KV required for the following network upgrades directly assigned to transmission customers in previous ag Upgrade Name	GRDA COD 6/1/2009 6/1/2009 6/1/2009 le to the tran COD 6/1/2011 gregate stud COD	WR EOC 6/1/2009 6/1/2009 Total smission cus EOC 6/1/2011 /. EOC	Amount 3 Allocated E & C Cost \$ 1,592 \$ 7,958 \$ 3,183 \$ 12,733	Date           5/1/2009           Total E & C Cost           \$ 200,000           \$ 1,000,000           \$ 400,000	5/1/2026 Total Revenue Requirements \$ 4,750 \$ 23,748 \$ 9,497				Base Rate \$ 795,60	Cost 0 \$ 12,73	Requiren	nents 31
MEA Reservation 774650 Expansion Pla Reservation 774650 Credits may b Reservation 774650	974650 Upgrade Name EXELORER GLENPOOL 138KV CKT 1 EXELORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE un - The requested service is contingent upon completion of the following upgrades. Cost is not assignat Upgrade Name LEC - Swissvale 345KV e required for the following network upgrades directly assigned to transmission customers in previous ac Upgrade Name 142SUB - KANSAS TAP 161KV CKT 1	GRDA COD 6/1/2009 6/1/2009 6/1/2009 1/2009 1/2011 1/2011 1/2011 1/2015	WR EOC 6/1/2009 6/1/2009 6/1/2009 Total EOC 6/1/2011 , EOC 6/1/2015	Amount 3 Allocated E & C Cost \$ 1,592 \$ 7,958 \$ 3,183 \$ 12,733	Date           5/1/2009           Total E & C Cost           \$ 200,000           \$ 1,000,000           \$ 400,000	5/1/2026 Total Revenue Requirements \$ 4,750 \$ 23,748 \$ 9,497			Allowable S - S S -	Base Rate           \$ 795.60           \$ 795.60	Cost 0 \$ 12,73	Requiren	nents 3
IMEA Reservation 174650 Expansion Pla Expansion Pla Expansion Pla 174650 Credits may b Reservation 174650 Customer IMEA	974650 Upgrade Name BEELINE - EXPLORER GLENPOOL 138KV CKT 1 EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE In - The requested service is contingent upon completion of the following upgrades. Cost is not assignat Upgrade Name LEC - Swissvale 345KV e required for the following network upgrades directly assigned to transmission customers in previous ac Upgrade Name LS2BB - KANSAS TAP 161KV CKT 1 412SUB - KERR 161KV CKT 1 4	GRDA COD 6/1/2009 6/1/2009 6/1/2019 6/1/2015 6/1/2015 6/1/2015 6/1/2015	WR EOC 6/1/2009 6/1/2009 Total mission cus EOC 6/1/2011 ¢. EOC 6/1/2015 6/1/2015	Allocated E & C Cost \$ 1.592 \$ 3.183 \$ 12,733 Domer.	Date           5/1/2009           Total E & C Cost           \$ 200,000           \$ 1,000,000           \$ 1,000,000           \$ 1,600,000           \$ 1,600,000	5/1/2026 Total Revenue Requirements \$ 23,748 \$ 9,497 \$ 37,995 Requested Stop Date	Date			Base Rate \$ 795.60 \$ 795.60 Point-to-Point Base Rate	Cost           0 \$         12,7;           0 \$         12,7;           12,7;         12,7;	Requirem 3 \$ 3 \$ 3 \$ 5 Total Re Requirem	venuv
MEA Reservation 174650 Expansion Ple Reservation 174650 Credits may b Reservation 174650 Sustomer (MEA	974650 Upgrade Name BEELINE - EXPLORER GLENPOOL 138KV CKT 1 EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AKEE In - The requested service is contingent upon completion of the following upgrades. Cost is not assignate Upgrade Name JEC - Swissvale 345KV re required for the following network upgrades directly assigned to transmission customers in previous ag Upgrade Name 412SUB - KANSAS TAP 161KV CKT 1 412SUB - KARNAS - K	GRDA COD 6/1/2009 6/1/2009 6/1/2009 6/1/2011 gregate stud COD 6/1/2015 6/1/2015	WR EOC 6/1/2009 6/1/2009 Total smission cus EOC 6/1/2011 /. EOC 6/1/2015	Allocatof E & Cost Cost \$ 1,592 \$ 3,169 \$ 3,169 \$ 12,733 omer.	Date           5/17/2009           Total E & C Cost           \$ 200,000           \$ 1,000,000           \$ 400,000           \$ 1,800,000	5/1/2026 Total Revenue Requirements 5 23,748 5 9,4750 5 23,748 5 37,995	Date	Stop Date	Allovable \$	Base Rate           \$ 795.60           \$ 795.61           Point-to-Poin           Base Rate           \$ 795.62	Cost         Cost           0 \$         12.73           0 \$         12.73           xt         Allocated E & Cost           0 \$         12.73	Total Requirem	venue 3 3 3 3
IMEA Reservation 174650 Expansion Pla Expansion Pla Expansion Pla 174650 Credits may b Reservation 174650 Customer IMEA	974650 Upgrade Name BEELINE - EXPLORER GLENPOOL 138KV CKT 1 EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE In - The requested service is contingent upon completion of the following upgrades. Cost is not assignat Upgrade Name LEC - Swissvale 345KV e required for the following network upgrades directly assigned to transmission customers in previous ac Upgrade Name LS2BB - KANSAS TAP 161KV CKT 1 412SUB - KERR 161KV CKT 1 4	GRDA COD 6/1/2009 6/1/2009 6/1/2019 6/1/2015 6/1/2015 6/1/2015 6/1/2015	WR EOC 6/1/2009 6/1/2009 Total mission cus EOC 6/1/2011 ¢. EOC 6/1/2015 6/1/2015	Allocated E & C Cost \$ 1.592 \$ 3.183 \$ 12,733 Domer.	Date           5/1/2009           Total E & C Cost           \$ 200,000           \$ 1,000,000           \$ 1,000,000           \$ 1,600,000           \$ 1,600,000	5/1/2026 Total Revenue Requirements \$ 23,748 \$ 9,497 \$ 37,995 Requested Stop Date	Date	Stop Date	Allovable \$	Base Rate \$ 795.60 \$ 795.60 Point-to-Point Base Rate	Cost         Cost           0 \$         12.73           0 \$         12.73           xt         Allocated E & Cost           0 \$         12.73	Total Requirem	venus 3
IMEA Reservation 174650 Expansion Pla Expansion Pla Expansion Pla 174650 Credits may b Reservation 174650 Customer IMEA	974650 Upgrade Name BEELINE - EXPLORER GLENPOOL 138KV CKT 1 EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE In - The requested service is contingent upon completion of the following upgrades. Cost is not assignat Upgrade Name LEC - Swissvale 345KV e required for the following network upgrades directly assigned to transmission customers in previous ac Upgrade Name LS2BB - KANSAS TAP 161KV CKT 1 412SUB - KERR 161KV CKT 1 412SUB - KERR 161KV CKT 1 412SUB - KERR 161KV CKT 1	GRDA COD 6/1/2009 6/1/2009 6/1/2019 6/1/2015 6/1/2015 6/1/2015 6/1/2015	WR EOC 6/1/2009 6/1/2009 Total mission cus EOC 6/1/2011 ¢. EOC 6/1/2015 6/1/2015	Amount         Amount           3         3           Allocated E & C         Cost           \$ 7,552         5           \$ 3,163         \$ 12,733           ormer.         3	Date           5/17/2009           Total E & C Cost           \$ 200,000           \$ 400,000           \$ 400,000           \$ 1,600,000	5/1/2026           Total Revenue           Requirements           5         4,750           \$         23,748           \$         9,477           \$         37,995	Date	Stop Date	Allovable \$	Base Rate           \$ 795.60           \$ 795.61           Point-to-Poin           Base Rate           \$ 795.62	Cost         Cost           0 \$         12.73           0 \$         12.73           xt         Allocated E & Cost           0 \$         12.73	Total Requirem	venus 3
(MEA Reservation 774650 Expansion Ple Reservation 774650 Credits may b Reservation 774650 Customer (MEA	974650 Upgrade Name BEELINE - EXPLORER GLENPOOL 138KV CKT 1 EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE n - The reguested service is contingent upon completion of the following upgrades. Cost is not assignat Upgrade Name LGC - Swissvale 345KV e required for the following network upgrades directly assigned to transmission customers in previous ac Upgrade Name L3250B - CANSAS TAP 161KV CKT 1 41250B - KANSAS TAP 161KV CKT 1 4150B - KANSAS TAP 161KV CKT	GRDA           6/1/2009           6/1/2009           6/1/2009           6/1/2009           6/1/2019           6/1/2011           gregate stud           COD           6/1/2015           6/1/2015           6/1/2015           POR           GRDA	WR 6/1/2009 6/1/2009 6/1/2009 Total mission cus EOC 6/1/2015 6/1/2015 6/1/2015 6/1/2015 9/1/2015	Allocated E & C Cost 5 1,592 5 7,966 5 3,183 5 12,733 Domer. Requested Amount 3 Allocated E & C	Date           5/1/2009           Total E & C Cost           \$ 200,000           \$ 1,000,000           \$ 1,000,000           \$ 1,000,000           \$ 1,000,000           \$ 1,000,000           \$ 1,000,000           \$ 1,000,000           \$ 1,000,000           \$ 1,000,000           \$ 1,000,000           \$ 1,000,000           \$ 1,000,000           \$ 1,000,000           \$ 1,000,000           \$ 1,000,000           \$ 1,000,000	5/1/2026 Total Revenue Requirements \$ 4,750 \$ 23,748 \$ 9,477 \$ 37,995 \$ 37,995 Requested Stop Date 5/1/2026 Total Revenue	Date	Stop Date	Allovable \$	Base Rate           \$ 795.60           \$ 795.61           Point-to-Poin           Base Rate           \$ 795.62	Cost         Cost           0 \$         12.73           0 \$         12.73           xt         Allocated E & Cost           0 \$         12.73	Total Requirem	venus 3
IMEA teservation 774650 ixpansion Pie teservation 774650 redits may b teservation 774650 ixpansion redits may b teservation 774650 ixpansion teservation 774650 ixpansion teservation 774650 ixpansion teservation 774650 ixpansion teservation 774650 ixpansion teservation 774650 ixpansion teservation 774650 ixpansion teservation 774650 ixpansion teservation 774650 ixpansion teservation 774650 ixpansion teservation 774650 ixpansion teservation 774650 ixpansion teservation 774650 ixpansion teservation 774650 ixpansion teservation 774650 ixpansion ix	974650 Upgrade Name BEELINE - EXPLORER GLENPOOL 138KV CKT 1 EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE In - The requested service is contingent upon completion of the following upgrades. Cost is not assignat Upgrade Name LEC - Swissvale 345KV e required for the following network upgrades directly assigned to transmission customers in previous ac Upgrade Name LS2BB - KANSAS TAP 161KV CKT 1 412SUB - KERR 161KV CKT 1 412SUB - KERR 161KV CKT 1 412SUB - KERR 161KV CKT 1	GRDA COD 6/1/2009 6/1/2009 6/1/2019 6/1/2015 6/1/2015 6/1/2015 6/1/2015	WR EOC 6/1/2009 6/1/2009 Total mission cus EOC 6/1/2011 ¢. EOC 6/1/2015 6/1/2015	Amount         Amount           3         3           Allocated E & C         Cost           \$ 7,958         3,183           \$ 3,183         \$ 12,733           ormer.         Requested           Amount         3	Date           5/1/2009           Total E & C Cost           \$ 200,000           \$ 1,000,000           \$ 1,000,000           \$ 1,600,000 <td>5/1/2026           Total Revenue           Requirements           5           23,748           5           9,4750           5           37,995           5           5/1/2026           5/1/2026           Total Revenue           Requested Stop Date           5/1/2026</td> <td>Date</td> <td>Stop Date</td> <td>Allovable \$</td> <td>Base Rate           \$ 795.60           \$ 795.61           Point-to-Poin           Base Rate           \$ 795.62</td> <td>Cost         Cost           0 \$         12.73           0 \$         12.73           xt         Allocated E &amp; Cost           0 \$         12.73</td> <td>Total Requirem</td> <td>venus 3</td>	5/1/2026           Total Revenue           Requirements           5           23,748           5           9,4750           5           37,995           5           5/1/2026           5/1/2026           Total Revenue           Requested Stop Date           5/1/2026	Date	Stop Date	Allovable \$	Base Rate           \$ 795.60           \$ 795.61           Point-to-Poin           Base Rate           \$ 795.62	Cost         Cost           0 \$         12.73           0 \$         12.73           xt         Allocated E & Cost           0 \$         12.73	Total Requirem	venus 3
(MEA Reservation 774650 Expansion Ple Reservation 774650 Credits may b Reservation 774650 Customer (MEA Customer (MEA Reservation 774656	974650 Upgrade Name BEELINE - EXPLORER GLENPOOL 138KV CKT 1 EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW In - The requested service is contingent upon completion of the following upgrades. Cost is not assignab Upgrade Name If 25UB - KANSAS TAP 161KV CKT 1 If 25UB - KANSAS 161K - KYELINPOL - RIVERSIDE STATION 138KV CKT 1 AEPW If 25UB - KANSAS TAP 161KV CKT 1 AEPW If 25UB - KANSAS 161K - KINESTAP 170KV 13KV CKT 1 AEPW If 25UB - KANSAS 161K - KINESTAP 170KV 13KV CKT 1 AEPW If 25UB - KANSAS 161K - KINESTAP 161KV CKT 1 AEPW If 25UB - KANSAS 161K - KINESTAP 161KV CKT 1 AEPW If 25UB - KANSAS 161K - KINESTAP 161KV CKT 1 AEPW If 25UB - KINESTAP 161KV - KINESTAP 161KV CKT 1 AEPW If 25UB - KINESTAP 161KV - KINESTAP 161KV - KINESTAP 161KV -	GRDA           COD           6/1/2009           6/1/2009           6/1/2009           6/1/2015           6/1/2015           6/1/2015           6/1/2015           6/1/2015           GRDA           COD           GRDA           COD           6/1/2015           COD           GRDA           COD           GRDA           COD           6/1/2015	WR           EOC           6/1/2009           6/1/2009           6/1/2009           mission cus           EOC           6/1/2015           6/1/2015           6/1/2015           POD           WR           EOC           6/1/2015           6/1/2015	Anount         3           Allocated E & C         Cost           \$ 1.592         7.958           \$ 3.183         1.2,733           ormer.         0	Date           5/1/2009           Total E & C Cost           \$ 200,000           \$ 1,000,000           \$ 1,000,000           \$ 1,600,000           \$ 1,600,000           \$ 1,600,000           \$ 1,600,000           \$ 1,600,000           \$ 1,600,000           \$ 1,600,000           \$ 1,000,000           \$ 1,000,000           \$ 2,000           \$ 200,000           \$ 200,000	5/1/2026           Total Revenue           Requirements           \$         4,750           \$         23,748           \$         9,477           \$         37,995   Requested Stop Date           5/1/2026           5/1/2026   Total Revenue           Requested Stop Date           5/1/2026   Total Revenue           \$         4,669           \$         2,3354	Date	Stop Date	Allovable \$	Base Rate           \$ 795.60           \$ 795.61           Point-to-Poin           Base Rate           \$ 795.62	Cost         Cost           0 \$         12.73           0 \$         12.73           xt         Allocated E & Cost           0 \$         12.73	Total Requirem	venue
(MEA Reservation 774650 Expansion Ple Reservation 774650 Credits may b Reservation 774650 Customer (MEA Customer (MEA Reservation 774656	974650 Upgrade Name BEELINE - EXPLORER GLENPOOL 138KV CKT 1 EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE n The requested service is contingent upon completion of the following upgrades. Cost is not assignat Upgrade Name EC - Swissvale 345KV e required for the following network upgrades directly assigned to transmission customers in previous ac Upgrade Name Upgrade Name Reservation 974656 Upgrade Name BEELINE - EXPLORER GLENPOOL 138KV CKT 1	GRDA           COD           6/1/2009           6/1/2009           6/1/2009           6/1/2009           6/1/2011           Gregate stud           COD           6/1/2015           6/1/2015           POR           GRDA           COD           6/1/2015	WR EOC 6/1/2009 6/1/2009 6/1/2009 Total mission cus EOC 6/1/2015 6/1/2015 6/1/2015 6/1/2015	Amount         3           Allocated E & C         Cost           \$         1.592           \$         7.958           \$         3.183           \$         12,733           ormer.         Amount           3         3           Allocated E & C         Cost           \$         1,052	Date           5/1/2009           Total E & C Cost           \$ 200,000           \$ 1,000,000           \$ 1,000,000           \$ 1,000,000           \$ 1,000,000           \$ 1,000,000           \$ 1,000,000           \$ 20,000           \$ 1,000,000           \$ 1,000,000           \$ 1,000,000	5/1/2026           Total Revenue Requirements           8         4,750           \$         2,748           \$         9,475           \$         37,995             Requested Stop Date           5/1/2026   Total Revenue Requirements 5           \$         2,468           \$         5/1/2026	Date	Stop Date	Allovable \$	Base Rate           \$ 795.60           \$ 795.61           Point-to-Poin           Base Rate           \$ 795.62	Cost         Cost           0 \$         12.73           0 \$         12.73           xt         Allocated E & Cost           0 \$         12.73	Total Requirem	venue 3 3 3 3

Reservation	Upgrade Name	COD	EOC
974656	27TH & CROCO - TECUMSEH HILL 115KV	6/1/2010	6/1/2010
	27TH & CROCO JUNCTION - 41ST & CALIFORNIA 115KV	6/1/2010	6/1/2010
	JEC - Swissvale 345KV	6/1/2011	6/1/2011
	JEC - SWISSVale 345KV	6/1/2011	0/1/2011
Credits may b	JUC - Swissvale 345KV		
Reservation	be required for the following network upgrades directly assigned to transmission customers in previous ag	gregate stud	<i>ı</i> .

#### Customer Study Number KMEA AG2-2005-043

,,												
									Potential Base			
				Requested	Requested Start		Deferred Start	Deferred	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Requested Stop Date	Date	Stop Date	Allowable	Base Rate	Cost	Requirements
KMEA	974658	GRDA	WR	3	5/1/2006	5/1/2026	10/1/2006	10/1/2026	\$ 540,000	\$ 936,000	\$ 1,128,617	\$ 2,663,292
									\$ 540,000	\$ 936,000	\$ 1,128,617	\$ 2,663,292

				Allocated E & 0		Total Revenue
Reservation	Upgrade Name	COD	EOC	Cost	Total E & C Cost	Requirements
974658	AFTON (AFTAUTO1) 161/69/13.8KV TRANSFORMER CKT 1	12/1/2010		\$ 890,000	\$ 890,000	\$ 2,090,23
	SUB 110 - ORONOGO JCT SUB 167 - RIVERTON 161KV CKT 1	6/1/2011	6/1/2011	\$ 238,617	\$ 5,400,000	\$ 573,05
			Total	\$ 1,128,617	\$ 6,290,000	\$ 2,663,29
Expansion Pla	an - The requested service is contingent upon completion of the following upgrades. Cost is not a	ssignable to the trans	mission cus	tomer.		
	Upgrade Name	COD	EOC			
Reservation						
	NEOSHO\ 138/69/12.47KV TRANSFORMER	6/1/2009	6/1/2009			
974658 Credits may b	NEOSHO\138/69/12.47KV TRANSFORMER	6/1/2009 vious aggregate study	6/1/2009			
974658 Credits may b Reservation	NEOSHOL 138/69/12.47KV TRANSFORMER e required for the following network upgrades directly assigned to transmission customers in prev [Upgrade Name	6/1/2009 vious aggregate study COD	6/1/2009 /. EOC			
974658 Credits may b Reservation 974658	NEÓSHO: 138/69/12.47KV TRANSFORMER he required for the following network upgrades directly assigned to transmission customers in prev [Upgrade Name 4/25UB - KANSAS TAP 161KV CKT 1	6/1/2009 vious aggregate study COD 6/1/2015	6/1/2009 /. EOC 6/1/2015			
974658 Credits may b Reservation 974658	NEOSHOL 138/69/12.47KV TRANSFORMER e required for the following network upgrades directly assigned to transmission customers in prev [Upgrade Name	6/1/2009 vious aggregate study COD	6/1/2009 /. EOC			
974658 Credits may b Reservation 974658	NEÓSHO: 138/69/12.47KV TRANSFORMER he required for the following network upgrades directly assigned to transmission customers in prev [Upgrade Name 4/25UB - KANSAS TAP 161KV CKT 1	6/1/2009 vious aggregate study COD 6/1/2015 6/1/2015	6/1/2009 /. EOC 6/1/2015 6/1/2015	on customer.		
974658 Credits may b Reservation 974658 Construction I	NEÓSHOL 138/69/12.47KV TRANSFORMER er required for the following network upgrades directly assigned to transmission customers in prev Upgrade Name 412SUB - KARNSAS TAP 161KV CKT 1 412SUB - KERR 161KV CKT 1	6/1/2009 vious aggregate study COD 6/1/2015 6/1/2015	6/1/2009 /. EOC 6/1/2015 6/1/2015	on customer.		
974658 Credits may b Reservation 974658	NEÓSHO: 138/69/12.47KV TRANSFORMER he required for the following network upgrades directly assigned to transmission customers in prev [Upgrade Name 4/25UB - KANSAS TAP 161KV CKT 1	6/1/2009 vious aggregate study COD 6/1/2015	6/1/2009 /. EOC 6/1/2015			

#### Customer Study Number KMEA AG2-2005-044

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date	Deferred Stop Date	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
KMEA	974660	GRDA	WR	3	5/1/2006	5/1/2026	10/1/2007	10/1/2026	\$-	\$ 936,000	\$ 12,065	\$ 33,444
									\$-	\$ 936,000	\$ 12,065	\$ 33,444

				Allocated E & C		Total Revenue
Reservation	Upgrade Name	COD	EOC	Cost	Total E & C Cost	Requirements
	BEELINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009	\$ 1,508	\$ 200,000	
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009	\$ 7,541	\$ 1,000,000	\$ 20,804
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009	\$ 3,016	\$ 400,000	\$ 8,427
			Total	\$ 12,065	\$ 1,600,000	\$ 33,444

Reservation	Upgrade Name	COD	EOC
974660	CIRCLEVILLE - HOYT HTI SWITCHING JUNCTION 115KV CKT 1	4/1/2006	3/1/2007
	JEC - Swissvale 345KV	6/1/2011	6/1/2011
	TECUMSEH HILL () 161/115/13.8KV TRANSFORMER CKT 1	6/1/2010	6/1/2010
	ee required for the following network upgrades directly assigned to transmission customers in previous ag It horade Name	gregate study	/. EOC
	pe required for the following network upgrades directly assigned to transmission customers in previous ag Upgrade Name 4/12SUB - KANSAS TAP 161KV CKT 1		

	41230B - RERK 161RV CR1 1	0/1/2015	0/1/2013	
O and a state of the state	Dendler. The expected ender is continued and ender the following second of the following second of the second	an abla ta tha		
Construction	Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assi	gnable to the		on customer.
Reservation	Upgrade Name	COD	EOC	
974660	AEPW PLANNED UPGRADE FOR NW ARKANSAS	6/1/2006	6/1/2009	
	LACYGNE-PAOLA-WEST GARDER 345KV	6/1/2006	6/1/2008	

#### Customer KMEA Study Number AG2-2005-058

				Requested	Requested Start		Deferred Start	Deferred	Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Requested Stop Date		Stop Date	Allowable	Base Rate	Cost	Requirements
KMEA	974976	GRDA	WPEK	3	5/1/2006	5/1/2026	10/1/2007	10/1/2026	\$-	\$ 704,160	\$ 13,469	\$ 37,336
									\$-	\$ 704,160	\$ 13,469	\$ 37,336

				Allocated E & C		Total Revenue
Reservation	Upgrade Name	COD	EOC	Cost	Total E & C Cost	Requirements
974976	BEELINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009	\$ 1,684	\$ 200,000	\$ 4,705
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009	\$ 8,418	\$ 1,000,000	\$ 23,224
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009	\$ 3,367	\$ 400,000	\$ 9,407
			Total	\$ 13,469	\$ 1,600,000	\$ 37.336

Expansion Pla	Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.								
Reservation	Upgrade Name	COD	EOC						
974976	BELOIT 115KV	6/1/2006	10/1/2007						
	CIRCLEVILLE - HOYT HTI SWITCHING JUNCTION 115KV CKT 1	4/1/2006	3/1/2007						

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.									
Reservation	Upgrade Name	COD	EOC						
974976	412SUB - KANSAS TAP 161KV CKT 1	6/1/2015	6/1/2015						
	412SUB - KERR 161KV CKT 1	6/1/2015	6/1/2015						

Construction I	Pending - The requested service is contingent upon completion of the following upgrades. Cost is not ass	ignable to the	e transmissie
Reservation	Upgrade Name	COD	EOC
974976	AEPW PLANNED UPGRADE FOR NW ARKANSAS	6/1/2006	6/1/2009
	HEIZER - KNOLL 115KV	6/1/2006	6/1/2007
	LACYGNE-PAOLA-WEST GARDER 345KV	6/1/2006	6/1/2008
	RHOADES - PHILLIPSBURG 115KV	6/1/2006	6/1/2008

# Customer Study Number KMEA AG2-2005-059

Even ion Die

									Potential Base			
				Requested	Requested Start		Deferred Start	Deferred	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Requested Stop Date	Date	Stop Date	Allowable	Base Rate	Cost	Requirements
KMEA	974977	GRDA	WPEK	2	5/1/2010	5/1/2026	5/1/2010	5/1/2026	\$-	\$ 375,552	\$ 8,979	\$ 28,290
									\$-	\$ 375,552	\$ 8,979	\$ 28,290
				Allocated E & C		Total Revenue						
Reservation	Upgrade Name	COD	EOC	Cost	Total E & C Cost	Requirements						
974977	BEELINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009	\$ 1,122	\$ 200,000	\$ 3,516						
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009	\$ 5,612	\$ 1,000,000	\$ 17,740						
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009	\$ 2,245	\$ 400,000	\$ 7,034						
			Total	\$ 8,979	\$ 1,600,000	\$ 28,290						

	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009	\$	2,245	\$ 400,000	\$
			Total	\$	8,979	\$ 1,600,000	\$
١a	an - The requested service is contingent upon completion of the following upgrades. Cost is not assignable	e to the trans	mission cus	tomer.			

Expansion Fia	an - The requested service is contingent upon completion of the following upgrades. Cost is not assignable	e to the trans	sinission cus	.01
Reservation	Upgrade Name	COD	EOC	
974977	BELOIT 115KV	6/1/2006	10/1/2007	

Credits may b	e required for the following network upgrades directly assigned to transmission customers in previous ag	gregate study	/.
Reservation	Upgrade Name	COD	EOC
974977	412SUB - KANSAS TAP 161KV CKT 1	6/1/2015	6/1/2015
	412SUB - KERR 161KV CKT 1	6/1/2015	6/1/2015

Customer SPSM AG2-2005-053

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date	Deferred Stop Date	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
SPSM	974790	CSWS	SPS	50	1/1/2007	1/1/2012				\$ 4,800,000	\$ 416,924	\$ 647,5
SPSM	974791	CSWS	SPS	50	1/1/2007	1/1/2012				\$ 4,800,000	\$ 416,924	\$ 647,
SPSM	974793	CSWS	SPS	50	1/1/2007	1/1/2012				\$ 4,800,000	\$ 416,924	\$ 647,
SPSM	974797	CSWS	SPS	50	1/1/2007	1/1/2012				\$ 4,800,000	\$ 416,924	\$ 647,
										\$ 19,200,000	\$ 1,667,696	\$ 2,590,
				Allocated E & C		Total Revenue						
Reservation	Upgrade Name	COD	EOC	Cost	Total E & C Cost	Requirements						
974790	BEELINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009	45,751.00	\$ 200,000	\$ 74,850						
	CACHE - SNYDER 138KV CKT 1	6/1/2008	6/1/2008	2,913.00	\$ 85,000	\$ 4,943						
	EAST CENTRAL HENRYETTA - OKMULGEE 138KV CKT 1	12/1/2006	12/1/2006	27,000.00	\$ 108,000	\$ 41,250						
	EAST CENTRAL HENRYETTA - WELEETKA 138KV CKT 1	6/1/2007	6/1/2007	21,000.00	\$ 84,000	\$ 30,634						
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009	228,757.00	\$ 1,000,000	\$ 346,125						
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009	91,503.00	\$ 400,000	\$ 149,703						
			Total	\$ 416,924	\$ 1,877,000	\$ 647,505						
974791	BEELINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009	45,751,00	\$ 200,000	\$ 74,850	1					

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

	CACHE - SNYDER 138KV CKT 1	6/1/2008	6/1/2008	2.913.00	\$ 85.000	¢	4,943
	EAST CENTRAL HENRYETTA - OKMULGEE 138KV CKT 1	12/1/2006	12/1/2006	27.000.00			41.250
	EAST CENTRAL HENRYETTA - OKMOLGEE 136KV CKT 1		6/1/2008				
		6/1/2007		21,000.00			30,634
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009		\$ 1,000,000		346,125
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009	91,503.00	\$ 400,000	\$	149,703
			Total	\$ 416,924	\$ 1,877,000	\$	647,505
974793	BEELINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009	45,751.00	\$ 200,000	\$	74,850
	CACHE - SNYDER 138KV CKT 1	6/1/2008	6/1/2008	2,913.00	\$ 85,000	\$	4,943
	EAST CENTRAL HENRYETTA - OKMULGEE 138KV CKT 1	12/1/2006	12/1/2006	27,000.00	\$ 108,000	\$	41,250
	EAST CENTRAL HENRYETTA - WELEETKA 138KV CKT 1	6/1/2007	6/1/2007	21,000.00	\$ 84,000	\$	30,634
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009	228,757.00	\$ 1,000,000	\$	346,125
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009	91,503.00	\$ 400,000	\$	149,703
			Total	\$ 416,924	\$ 1,877,000	\$	647,505
974797	BEELINE - EXPLORER GLENPOOL 138KV CKT 1	6/1/2009	6/1/2009	45,751.00	\$ 200,000	\$	74,850
	CACHE - SNYDER 138KV CKT 1	6/1/2008	6/1/2008	2,913.00	\$ 85,000	\$	4,943
	EAST CENTRAL HENRYETTA - OKMULGEE 138KV CKT 1	12/1/2006	12/1/2006	27,000.00	\$ 108,000	\$	41,250
	EAST CENTRAL HENRYETTA - WELEETKA 138KV CKT 1	6/1/2007	6/1/2007	21,000.00	\$ 84,000	\$	30,634
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009	228,757.00	\$ 1,000,000	\$	346,125
	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009	91,503.00	\$ 400,000	\$	149,703
			Total	\$ 416,924	\$ 1,877,000	\$	647,505

#### Customer Study Number UCU AG2-2005-078

				Requested	Requested Start		Deferred Start	Deferred	Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Requested Stop Date		Stop Date	Allowable	Base Rate	Cost	Requirements
UCU	1043804	WPEK	MPS	20	10/1/2007	10/1/2018			\$-	\$ 4,253,040	\$-	\$-
									\$-	\$ 4,253,040	\$-	\$-

				Allocated E & 0		Total Revenue
Reservation	Upgrade Name	COD	EOC	Cost	Total E & C Cost	Requirements
				\$	\$ -	\$-
			Total	\$	\$ .	\$-
Expansion Pla	in - The requested service is contingent upon completion of the following upgrades. Cost is not assignable	e to the trans	mission cus	tomer.		
Reservation	Upgrade Name	COD	EOC			
977014	AVONDALE - GLADSTONE 161KV CKT 1	6/1/2011	6/1/2011			
	JEC - Swissvale 345KV	6/1/2011	6/1/2011			

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

 Reservation
 Upgrade Name
 COD
 EOC
 EOC
 EVT014
 LACYORE-PACIA-WEST GARDER 345KV
 6/12/2006
 6/12/2006
 6/12/2006

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#### Customer UCU Study Number AG2-2005-079D

				Requested	Requested Start		Deferred Start		Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Requested Stop Date	Date	Stop Date	Allowable	Base Rate	Cost	Requirements
UCU	1043805	WPEK	MPS	40	10/1/2006	10/1/2017			•	\$ 8,506,080	\$-	\$
	· · · · · · · · · · · · · · · · · · ·								\$ -	\$ 8,506,080	\$ -	\$

				Allocated E & C		Total Revenue
Reservation	Upgrade Name	COD	EOC	Cost	Total E & C Cost	Requirements
				\$-	\$-	\$ -
		-	Total	s -	s -	\$ ·

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer. Reservation Upgrade Name Q77018 JLeC - Swissel 345KV 6/12011 6/12011

# Customer Study Number WFEC AG2-2005-062

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date	Deferred Stop Date	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
WFEC	971951	WFEC	WFEC	250	5/1/2010	5/1/2035	Date	Stop Date	\$ 13,613,991	\$ -	\$ 18,598,348	
									\$ 13,613,991	\$-	\$ 18,598,348	\$ 55,506,772

				Allocated E & C		Total Revenue
Reservation	Upgrade Name	COD	EOC	Cost	Total E & C Cost	Requirements
971951	BROWN - EXPLORER TAP 138KV CKT 1	6/1/2008	6/1/2008	\$ 25,000	\$ 25,000	
	CACHE - SNYDER 138KV CKT 1	6/1/2008	6/1/2008	\$ 73,348	\$ 85,000	\$ 348,355
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	5/1/2010	5/1/2010	\$ 2,500,000	\$ 2,500,000	\$ 10,339,521
	HUGO POWER PLANT - VALLIANT 345 KV WFEC	5/1/2010	5/1/2010	\$ 16,000,000	\$ 16,000,000	\$ 44,703,657
			Total	\$ 18,598,348	\$ 18,610,000	\$ 55,506,772

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

Reservation	Upgrade Name	COD	EOC
971951	CLARKSVILLE - MUSKOGEE 345KV CKT 1 AEPW	6/1/2015	6/1/2015
	CLARKSVILLE - MUSKOGEE 345KV CKT 1 OKGE	6/1/2015	6/1/2015
	ELK CITY - ELK CITY 69KV CKT 1 AEPW	6/1/2008	6/1/2008
	FRANKLIN SW 138/69KV TRANSFORMER CKT 1	6/1/2011	6/1/2011
	Marietta Switch Capacitor	6/1/2010	6/1/2010
	PAOLI 138/69KV TRANSFORMER CKT 1	6/1/2009	6/1/2009
Construction	Pending - The requested service is contingent upon completion of the following upgrades. Cost is not ass	ignable to the	e transmissio
Reservation	Upgrade Name	COD	EOC
971951	CHICKASAW & CANEY CREEK CAPACITOR	6/1/2015	10/1/2006

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

				Season of		Estimated Date of	
Transmission			Minimum ATC per	Minimum Allocated	Earliest Data Upgrade	Upgrade Completion	Estimated Engineering
Owner	Upgrade	Solution	Upgrade (MW)	ATC	Required (COD)	(EOC)	& Construction Cost
	CACHE - SNYDER 138KV CKT 1	Replace Snyder wavetrap	215	15SP	6/1/2008	6/1/2008	\$ 85,000
	EAST CENTRAL HENRYETTA - OKMULGEE 138KV CKT 1	Replace Okmulgee Wavetrap	0	07SP	12/1/2006	12/1/2006	\$ 108,000
AEPW	EAST CENTRAL HENRYETTA - WELEETKA 138KV CKT 1	Replace Weleetka Wavetrap	0	07SP	6/1/2007	6/1/2007	\$ 84,000
AEPW	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 AEPW	Reconductor 1.9 miles with ACCC. Replace wave trap jumpers at Riverside.	0	10SP	6/1/2009	6/1/2009	\$ 1,000,000
AEPW	HUGO POWER PLANT - VALLIANT 345 KV AEPW	Vallient 345 KV line terminal	0	10SP	5/1/2010	5/1/2010	\$ 2,500,000
EMDE	SUB 110 - ORONOGO JCT SUB 167 - RIVERTON 161KV CKT 1	Reconductor Oronogo 59467 to Riverton 59469 with Bundled 556 ACSR	54	15SP	6/1/2011	6/1/2011	\$ 5,400,000
EMDE	SUB 110 - ORONOGO JCT. (ORONOGO) 161/69/12.5KV TRANSFORMER CKT 1	Installl new 161/12 kV 22.4 transmer and take load off 69 kV system	54	15SP	6/1/2011	6/1/2011	\$ 2,000,000
GRDA	AFTON (AFTAUTO1) 161/69/13.8KV TRANSFORMER CKT 1	Replace 50 MVA Transformer with 84 MVA unit.	0	10WP	12/1/2010	12/1/2010	\$ 890,000
OKGE	BEELINE - EXPLORER GLENPOOL 138KV CKT 1	Reconductor .92miles of line with Drake ACCC/TW.	0	10SP	6/1/2009	6/1/2009	\$ 200,000
OKGE	BROWN - EXPLORER TAP 138KV CKT 1	Upgrade CT to 800A at Brown.	19	15SP	6/1/2008	6/1/2008	\$ 25,000
OKGE	EXPLORER GLENPOOL - RIVERSIDE STATION 138KV CKT 1 OKGE	Reconductor 1.82 miles line with Drake ACCC/TW.	0	10SP	6/1/2009	6/1/2009	\$ 400,000
WERE	NORTH AMERICAN PHILIPS - NORTH AMERICAN PHILIPS JUNCTION (SOUTH) 115KV CKT 1	Redispatch required	0	10WP	6/1/2009		\$ -
WERE	NORTH AMERICAN PHILIPS JUNCTION (SOUTH) - WEST MCPHERSON 115KV CKT 1	Redispatch required	0	10WP	6/1/2009		\$ -
WFEC	HUGO POWER PLANT - VALLIANT 345 KV WFEC	New 345/138 kv Auto, and 19 miles 345 KV	0	10SP	5/1/2010	5/1/2010	\$ 16,000,000

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

				Season of		Estimated Date of
Transmission			Minimum ATC per	Minimum Allocated	Earliest Data Upgrade	Upgrade Completion
Owner	Upgrade	Solution	Upgrade (MW)	ATC	Required (COD)	(EOC)
AEPW	AEPW PLANNED UPGRADE FOR NW ARKANSAS	NW Project phase II scheduled to be in-service 06/2009	(	06SP	6/1/2006	6/1/2009
EMDE	NICHOLS ST. SUB-NICHOLS ST SUB 69KV	New connection between EDE Nichols St. Sub and Springfield City Utilities Nichols St. Sub	82	15SP	6/1/2015	12/1/2006
KACP	LACYGNE-PAOLA-WEST GARDER 345KV	New 345/161kV transformer and 345kV line tapping LaCyne - West Gardner 345kV	(	06SH	6/1/2006	6/1/2008
MIDW	RHOADES - PHILLIPSBURG 115KV	Construct Rhoades to Phillipsburg 56373 to 58785	(	07SP	6/1/2006	6/1/2008
		OGE has budgeted for 2006 30Mvar of 138kV caps at each of the following locations:				
OKGE	CHICKASAW & CANEY CREEK CAPACITOR	Chickasaw Bus # 55171, Caney Creek Bus 55150.	229	15SP	6/1/2015	10/1/2006
WEPL	HEIZER - KNOLL 115KV		(	06SP	6/1/2006	6/1/2007
WEPL	RHOADES - PHILLIPSBURG 115KV	Construct Rhoades to Phillipsburg 56373 to 58785	(	07SP	6/1/2006	6/1/2008
WERE	166TH STREET - JARBALO JUNCTION SWITCHING STATION 115KV CKT 1	Tear down and rebuild 7.22 mile Jarbalo-166 115 kV line.	(	10SP	6/1/2013	6/1/2013

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

				Season of		Estimated Date of
Transmission			Minimum ATC per		Earliest Data Upgrade	
Owner	Upgrade	Solution	Upgrade (MW)	ATC	Required (COD)	(EOC)
		Rebuild 2.54 miles with 2-795 ACSR & reset Clarksville CT, Replace Switches & Breakers @				
AEPW	CLARKSVILLE - MUSKOGEE 345KV CKT 1 AEPW	Clarksville.		0 15SP	6/1/2015	6/1/2015
AEPW	ELK CITY - ELK CITY 69KV CKT 1 AEPW	Replace CTS & jumpers		0 10SP	6/1/2008	6/1/2008
		Install 3 - stages of 22 MVAR each for a total of 66 MVAR capacitor bank at Riverside Sub #438				
EMDE	RIVERSIDE CAPACITOR	59497	7	7 15SP	6/1/2015	6/1/2015
		Reconductor 69 kV line from 59438 to 59592 with 556 ACSR Lindy at 59563 is droped for				
EMDE	SUB 389 - JOPLIN SOUTHWEST - SUB EXPLORER SPRING CITY TAP 69KV CKT 1	contingency		0 10SP	6/1/2008	6/1/2009
		Replace 75 MVA Auto-xfmr at Joplin SW with 150 MVA Auto-xfmr and install 69 kV bank				
EMDE	SUB 389 - JOPLIN SOUTHWEST (JOPLINSW) 161/69/12.5KV TRANSFORMER CKT 1	breaker. Auto-xfmr will have an impedance similar to Aurora 59468, 59537, 59704.		2 15SP	6/1/2011	6/1/2011
KACP	AVONDALE - GLADSTONE 161KV CKT 1	Replace 800 amp wavetrap at Gladstone with 1200 amp wavetrap		0 15SP	6/1/2011	6/1/2011
		Change 2-345kV breakers to 3000A, a trap to 3000A, 5 switches to 3000A, and 2 differential				
OKGE	CLARKSVILLE - MUSKOGEE 345KV CKT 1 OKGE	relays		0 15SP	6/1/2015	6/1/2015
		Replace three 600A switches @ Bull Shoals w/ 1200 A switches. Resag conductor and replace				
SWPA	BULL SHOALS - BULL SHOALS 161KV CKT 1 SWPA	structures as necessary to achieve 195 MW rating.		4 15SP	6/1/2011	6/1/2011
WEPL	BELOIT 115KV	Install capacitor at Beloit		07SP	6/1/2006	10/1/2007
WERE	166TH STREET - JAGGARD JUNCTION 115KV CKT 1	Tear down and rebuild 3.66 mile 166-Jaggard 115 kV line.		0 10SP	6/1/2013	6/1/2013
WERE	27TH & CROCO - TECUMSEH HILL 115KV	Tear down and rebuild 2.72 mile Tecumseh Hill-27th & Croco 115 kV line as a single circuit.		0 10SP	6/1/2010	6/1/2010
WERE	27TH & CROCO JUNCTION - 41ST & CALIFORNIA 115KV	Tear down and rebuild 3.43 mile 27th & Croco-41st & California 115 kV line as a single circuit.		10SP	6/1/2010	6/1/2010
WERE	CIRCLEVILLE - HOYT HTI SWITCHING JUNCTION 115KV CKT 1	Rebuild 15.50 mile Circleville-Hoyt HTI Junction 115 kV line.		06FA	4/1/2006	3/1/2007
WERE	JEC - Swissvale 345KV	Construct JEC-Swissvale 345 kV line.		) 15SP	6/1/2011	6/1/2011
		Replace the three Neosho 138-69 kV #2 transformers (#2A, #2B, #2C) with one 85 MVA				
WERE	NEOSHO\ 138/69/12.47KV TRANSFORMER	transformer.		0 10SP	6/1/2009	6/1/2009
WERE	TECUMSEH HILL () 161/115/13.8KV TRANSFORMER CKT 1	Move the Midland Jct. 161-115 kV transformer to Tecumseh Hill.		) 15SP	6/1/2010	6/1/2010
		Replace 70 MVA Auto with 112 MVA autotranformer (100 MVA base Rating), Upgrade 138 and				
WFEC	FRANKLIN SW 138/69KV TRANSFORMER CKT 1	69 KV buswork and switches.	6	8 15SP	6/1/2011	6/1/2011
WFEC	Marietta Switch Capacitor	12 MVAR at Marietta Switch	22	7 10SP	6/1/2010	6/1/2010
WFEC	PAOLI 138/69KV TRANSFORMER CKT 1	Upgrade auto to 70 MVA	6	7 15SP	6/1/2009	6/1/2009

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

			Earliest Data	Estimated Date of	Estimated
Transmission			Upgrade Required	Upgrade	Engineering &
Owner	Upgrade	Solution	(COD)	Completion (EOC)	Construction Cost
	412SUB - KANSAS TAP 161KV CKT 1	Reconductor 9.7 miles with 1590MCM ACSR.	6/1/2015	6/1/2015	\$1,488,000
GRDA	412SUB - KERR 161KV CKT 1	Reconductor 12.5 miles with 1590MCM ACSR	6/1/2015	6/1/2015	\$1,918,000

#### Rollover Right Limitations for Point-to-Point Requests

	Transmission			
	Owner	Limiting Facility	Earliest Date Upgrade Required (COD)	
-	WERE	WEST MCPHERSON - WHEATLAND 115KV CKT 1	6/1/2015	

# Table 5 - Third Party Facility Constraints

					Earliest Date	Estimated Date of	Estimated
Transmission			Minimum ATC per	Season of Minimum	Upgrade Required	Upgrade	Engineering &
Owner	Upgrade	Solution	Upgrade (MW)	Allocated ATC	(COD)	Completion (EOC)	Construction Cost
ENTR	3BISMRK - 3HSEHVW 115KV CKT 1	Murfreesboro South Project	0	06SP	6/1/2006	6/1/2008	\$ 18,000,000

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irection: ine Outage: lowgate: ate Redispatch N	To-sFrom IATAN - ST JOE 345KV CKT 1 57152571661579825919912106FA kt10/1/06-12/1/06		T								
		Aggregate									
Reservation	Relief Amount	Relief Amount	1								
974660	2.0	2.0	Maximum		Sink			Maximum		1	1
Source Control			Increment		Control			Decrement			Redispat
Area	Source	Source Id	(MW)	GSF	Area	Sink	Sink Id	(MW)	GSF	Factor	Amount (N
EPL	CLIFTON GENERATOR	1	70.0			JUDSON LARGE GENERATOR	4	45.0	0.00338	-0.10084	
ERE	GETTY	1	35.0	-0.00292		TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04918	-0.0521	
ERE	GETTY	1	35.0	-0.00292	WERE	TECUMSEH ENERGY CENTER UNIT 8	1	68.0	0.04918	-0.0521	
ERE	GETTY	1	35.0	-0.00292	WERE	JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04072	-0.04364	
/ERE	GETTY	1	35.0			JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04072	-0.04364	
ERE	NEOSHO ENERGY CENTER UNIT 3	1	67.0	0.00822		TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04918	-0.04096	
ERE	NEOSHO ENERGY CENTER UNIT 3	1	67.0	0.00822		TECUMSEH ENERGY CENTER UNIT 8	1	68.0	0.04918	-0.04096	
/ERE	GILL ENERGY CENTER UNIT 1	1	44.0	0.00816		TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04918	-0.04102	
/ERE	GILL ENERGY CENTER UNIT 1	1	44.0	0.00816		TECUMSEH ENERGY CENTER UNIT 8	1	68.0	0.04918	-0.04102	
/ERE	GILL ENERGY CENTER UNIT 2	1	74.0	0.00816		TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04918	-0.04102	
/ERE	GILL ENERGY CENTER UNIT 2	1	74.0	0.00816		TECUMSEH ENERGY CENTER UNIT 8	1	68.0	0.04918	-0.04102	
/ERE	GILL ENERGY CENTER UNIT 3	1	112.0	0.00825		TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04918	-0.04093	
/ERE	GILL ENERGY CENTER UNIT 3		112.0	0.00825		TECUMSEH ENERGY CENTER UNIT 8	1	68.0	0.04918	-0.04093	
ERE	GETTY	1	35.0 80.0	-0.00292 0.00953		JEFFREY ENERGY CENTER UNIT 1	1	470.0	0.03783	-0.04075 -0.03965	
	EVANS ENERGY CENTER GAS TURBINE 1 EVANS ENERGY CENTER GAS TURBINE 1	1	80.0	0.00953		TECUMSEH ENERGY CENTER UNIT 7 TECUMSEH ENERGY CENTER UNIT 8	1	40.0	0.04918	-0.03965	
/ERE /ERE	EVANS ENERGY CENTER GAS TURBINE 1	1	80.0	0.00953		TECUMSEH ENERGY CENTER UNIT 8	1	40.0	0.04918	-0.03965	
VERE	EVANS ENERGY CENTER GAS TURBINE 2	1	80.0	0.00953		TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04918	-0.03965	
VERE	EVANS ENERGY CENTER GAS TURBINE 2 EVANS ENERGY CENTER GAS TURBINE 3	1	154.0	0.00953		TECUMSEH ENERGY CENTER UNIT 8	1	40.0	0.04918	-0.03965	
VERE	EVANS ENERGY CENTER GAS TORBINE 3	1	154.0	0.00953		TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04918	-0.03965	
VERE	EVANS ENERGY CENTER UNIT 1	1	151.0	0.00953		TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04918	-0.03963	
VERE	EVANS ENERGY CENTER UNIT 1	1	151.0	0.00954		TECUMSEH ENERGY CENTER UNIT 8	1	68.0	0.04918	-0.03964	
VERE	EVANS ENERGY CENTER UNIT 2	1	109.1	0.00954		TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04918	-0.03964	
VERE	EVANS ENERGY CENTER UNIT 2	1	109.1	0.00954		TECUMSEH ENERGY CENTER UNIT 8	1	68.0	0.04918	-0.03964	
VERE	GETTY	1	35.0	-0.00292		LAWRENCE ENERGY CENTER UNIT 3	1	25.0	0.03443	-0.03735	
/ERE	GETTY	1	35.0	-0.00292	WERE	LAWRENCE ENERGY CENTER UNIT 4	1	60.0	0.03451	-0.03743	
/ERE	GETTY	1	35.0	-0.00292	WERE	LAWRENCE ENERGY CENTER UNIT 5	1	225.0	0.03428	-0.0372	
/ERE	NEOSHO ENERGY CENTER UNIT 3	1	67.0	0.00822	WERE	JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04072	-0.0325	
/ERE	NEOSHO ENERGY CENTER UNIT 3	1	67.0	0.00822	WERE	JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04072	-0.0325	j .
/ERE	GILL ENERGY CENTER UNIT 1	1	44.0	0.00816	WERE	JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04072	-0.03256	j.
/ERE	GILL ENERGY CENTER UNIT 1	1	44.0			JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04072		
/ERE	GILL ENERGY CENTER UNIT 2	1	74.0	0.00816		JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04072	-0.03256	
/ERE	GILL ENERGY CENTER UNIT 2	1	74.0	0.00816		JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04072	-0.03256	
/ERE	GILL ENERGY CENTER UNIT 3	1	112.0	0.00825		JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04072	-0.03247	
/ERE	GILL ENERGY CENTER UNIT 3	1	112.0	0.00825		JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04072	-0.03247	
/ERE	EVANS ENERGY CENTER UNIT 1	1	151.0	0.00954		JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04072	-0.03118	
/ERE	EVANS ENERGY CENTER UNIT 1	1	151.0			JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04072		
/ERE	EVANS ENERGY CENTER UNIT 2	1	109.1	0.00954		JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04072	-0.03118	
/ERE	EVANS ENERGY CENTER UNIT 2	1	109.1	0.00954		JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04072	-0.03118	
/ERE /ERE	EVANS ENERGY CENTER GAS TURBINE 1	1	80.0 80.0	0.00953		JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04072	-0.03119 -0.03119	
/ERE	EVANS ENERGY CENTER GAS TURBINE 1 EVANS ENERGY CENTER GAS TURBINE 2	1	80.0	0.00953		JEFFREY ENERGY CENTER UNIT 3 JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04072	-0.03119	
VERE	EVANS ENERGY CENTER GAS TURBINE 2 EVANS ENERGY CENTER GAS TURBINE 2	1	80.0	0.00953		JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04072		
VERE	EVANS ENERGY CENTER GAS TURBINE 2 EVANS ENERGY CENTER GAS TURBINE 3	1	80.0			JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04072		
VERE	EVANS ENERGY CENTER GAS TURBINE 3	1	154.0			JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04072	-0.03119	
	EVANS ENERGY CENTER GAS TURBINE 3 ent and Maximum Increment were determine from the Souce and Sini						1	4/0.0	0.04072	-0.03119	d

SPP Aggregate Facility Study (SPP-2005-AG2-AFS-3) March 08, 2006 Page 29 of 37

imiting Facility:	CIRCLEVILLE - HOYT HTI SWITCHING JUNCTION 115KV CKT 1										
irection:	To->From										
ne Outage:	IATAN - ST JOE 345KV CKT 1										
owgate:	57152571651579825919913106WP										
ate Redispatch r	Ne 12/1/06-4/1/07		т								
		Aggregate									
Reservation	Relief Amount	Relief Amount									
974660	0.5	0.5	1								
974000	0.5	0.5	Maximum	1	Sink			Maximum			1
Source Control			Increment		Control			Decrement			Redispato
Area	Source	Source Id	(MW)	GSF	Area	Sink	Sink Id	(MW)	GSF	Factor	Amount (M
VEPL	CLIFTON GENERATOR	1	70.0			JUDSON LARGE GENERATOR	4	45.4	0.00332	-0.10086	Amount (W
/EPL	CLIFTON GENERATOR	1	70.0	-0.09754		A. M. MULLERGREN GENERATOR	3	16.0	0.00866	-0.1060	
/ERE	GETTY	1	35.0	-0.00295		TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04913	-0.05208	
VERE	GETTY	1	35.0			TECUMSEH ENERGY CENTER UNIT 8	1	48.0	0.04913	-0.05208	
VERE	GILL ENERGY CENTER UNIT 1	1	44.0	0.00813		TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04913	-0.041	
/ERE	GILL ENERGY CENTER UNIT 1	1	44.0			TECUMSEH ENERGY CENTER UNIT 8	1	48.0	0.04913	-0.041	
/ERE	GILL ENERGY CENTER UNIT 2	1	74.0			TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04913	-0.041	
/ERE	GILL ENERGY CENTER UNIT 2	1	74.0			TECUMSEH ENERGY CENTER UNIT 8	1	40.0	0.04913	-0.041	1
VERE	GETTY	1	35.0			JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04068	-0.04363	1
/ERE	GETTY	1	35.0			JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04068	-0.04363	1
VERE	CHANUTE GENERATION SUB	1	21.9			TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04000	-0.0416	1
/ERE	CHANUTE GENERATION SUB	1	21.8			TECUMSEH ENERGY CENTER UNIT 8	1	40.0	0.04913	-0.0416	1
VERE	NEOSHO ENERGY CENTER UNIT 3	1	67.0		WERE	TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04913	-0.04093	
VERE	NEOSHO ENERGY CENTER UNIT 3	1	67.0	0.0082		TECUMSEH ENERGY CENTER UNIT 8	1	48.0	0.04913	-0.04093	
VERE	EVANS ENERGY CENTER UNIT 1	1	151.0	0.00952		TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04913	-0.03961	
VERE	EVANS ENERGY CENTER UNIT 1	1	151.0	0.00952		TECUMSEH ENERGY CENTER UNIT 8	1	48.0	0.04913	+0.03961	
/ERE	EVANS ENERGY CENTER UNIT 2	1	256.8	0.00952		TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04913	-0.03961	-
/ERE	EVANS ENERGY CENTER UNIT 2	1	256.8	0.00952		TECUMSEH ENERGY CENTER UNIT 8	1	48.0	0.04913	-0.03961	
/ERE	EVANS ENERGY CENTER GAS TURBINE 1	1	80.0	0.00951		TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04913	-0.03962	-
VERE	EVANS ENERGY CENTER GAS TURBINE 1	1	80.0			TECUMSEH ENERGY CENTER UNIT 8	1	48.0	0.04913	-0.03962	
VERE	EVANS ENERGY CENTER GAS TURBINE 2	1	80.0	0.00951		TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04913	-0.03962	
VERE	EVANS ENERGY CENTER GAS TURBINE 2	1	80.0	0.00951		TECUMSEH ENERGY CENTER UNIT 8	1	48.0	0.04913	-0.03962	-
VERE	EVANS ENERGY CENTER GAS TURBINE 3	1	154.0	0.00951		TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04913	-0.03962	-
VERE	EVANS ENERGY CENTER GAS TURBINE 3	1	154.0	0.00951		TECUMSEH ENERGY CENTER UNIT 8	1	48.0	0.04913	-0.03962	
VERE	GILL ENERGY CENTER UNIT 3	1	112.0	0.00823		TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04913	-0.0409	
VERE	GILL ENERGY CENTER UNIT 3	1	112.0	0.00823	WERE	TECUMSEH ENERGY CENTER UNIT 8	1	48.0	0.04913	-0.0409	/
VERE	GILL ENERGY CENTER UNIT 4	1	106.0	0.00826		TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.04913	-0.04087	
VERE	GILL ENERGY CENTER UNIT 4	1	106.0			TECUMSEH ENERGY CENTER UNIT 8	1	48.0	0.04913	-0.04087	
/ERE	GETTY	1	35.0			JEFFREY ENERGY CENTER UNIT 1	1	470.0	0.03778	-0.04073	
VERE	GETTY	1	35.0			LAWRENCE ENERGY CENTER UNIT 5	1	175.5	0.03424	-0.03719	/
VERE	CHANUTE GENERATION SUB	1	21.9	0.00753	WERE	JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04068	-0.03315	
/ERE	CHANUTE GENERATION SUB	1	21.9	0.00753	WERE	JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04068	-0.03315	
VERE	NEOSHO ENERGY CENTER UNIT 3	1	67.0		WERE	JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04068	-0.03248	
VERE	NEOSHO ENERGY CENTER UNIT 3	1	67.0		WERE	JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04068		
/ERE	EVANS ENERGY CENTER UNIT 1	1	151.0	0.00952		JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04068	-0.03116	
/ERE	EVANS ENERGY CENTER UNIT 1	1	151.0			JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04068	-0.03116	
/ERE	EVANS ENERGY CENTER UNIT 2	1	256.8	0.00952		JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04068	-0.03116	
/ERE	EVANS ENERGY CENTER UNIT 2	1	256.8	0.00952		JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04068	-0.03116	
/ERE	EVANS ENERGY CENTER GAS TURBINE 1	1	80.0			JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04068	-0.03117	
/ERE	EVANS ENERGY CENTER GAS TURBINE 1	1	80.0	0.00951	WERE	JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04068	-0.03117	-
/ERE	EVANS ENERGY CENTER GAS TURBINE 2	1	80.0	0.00951	WERE	JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04068	-0.03117	
/ERE	EVANS ENERGY CENTER GAS TURBINE 2	1	80.0	0.00951		JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04068	-0.03117	
ERE	EVANS ENERGY CENTER GAS TURBINE 3	1	154.0	0.00951	WERE	JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04068	-0.03117	
'ERE	EVANS ENERGY CENTER GAS TURBINE 3	1	154.0	0.00951	WERE	JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04068	-0.03117	
ERE	GILL ENERGY CENTER UNIT 1	1	44.0			JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04068	-0.03255	
/ERE	GILL ENERGY CENTER UNIT 1	1	44.0			JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04068	-0.03255	1
/ERE	GILL ENERGY CENTER UNIT 2	1	74.0			JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04068	-0.03255	
/ERE	GILL ENERGY CENTER UNIT 2	1	74.0			JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04068	-0.03255	
/ERE	GILL ENERGY CENTER UNIT 3	1	112.0			JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04068	-0.03245	
/ERE	GILL ENERGY CENTER UNIT 3	1	112.0			JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04068	-0.03245	
/ERE	GILL ENERGY CENTER UNIT 4	1	106.0	0.00826		JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.04068	-0.03242	
/ERE	GILL ENERGY CENTER UNIT 4	1	106.0			JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.04068	-0.03242	
/ERE	CHANUTE GENERATION SUB	1	21.9			JEFFREY ENERGY CENTER UNIT 1		470.0	0.03778		

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

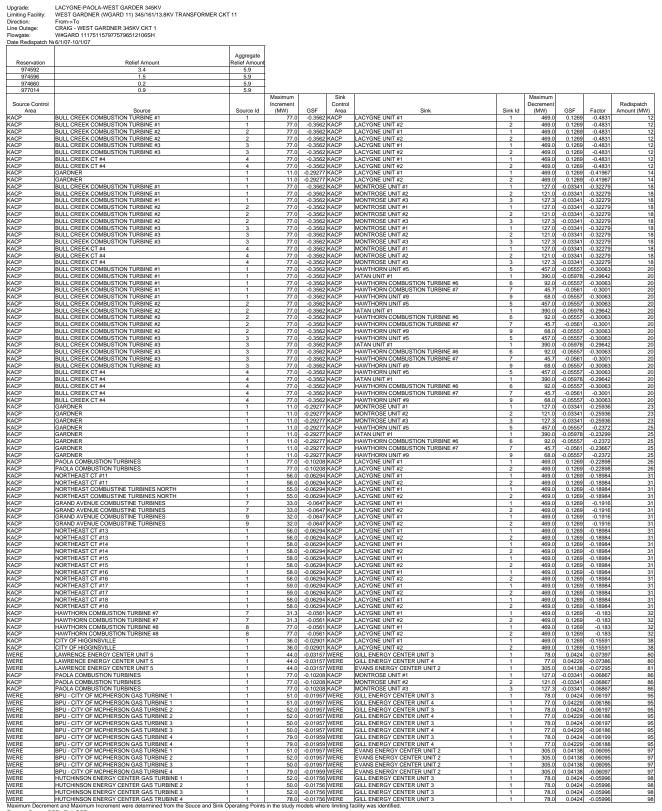
Upgrade:	LACYGNE-PAOLA-WEST GARDER 345KV
Limiting Eacility	WEST GARDNER (MGARD 11) 345/161/13 8KV/ TRANSCORMER CKT 11

Umiting Facility: WEST GARDNER (WGARD 11) 345/161/13.8KV TRANSFORMER CKT 11 Direction: From-sTo Line Outage: CRAIG: WEST GARDNER 345KV CKT 1

Flowgate:	W#GARD 1117511579775796512106SH
Date Redispatch N	6/1/06-10/1/06

Reservation 977014	Relief Amount 0.9	Relief Amount 0.9								
Source Control			Maximum Increment	Sink Control			Maximum Decrement			Redispatch
Area KACP	Source BULL CREEK COMBUSTION TURBINE #1	Source Id	(MW) 77.0	-0.3562 KACP	Sink LACYGNE UNIT #1	Sink Id	(MW) 469.0	GSF 0.1269	Factor -0.4831	Amount (MW
ACP	BULL CREEK COMBUSTION TURBINE #1	1	77.0	-0.3562 KACP	LACYGNE UNIT #2	2	469.0	0.1269	-0.4831	
ACP ACP	BULL CREEK COMBUSTION TURBINE #2 BULL CREEK COMBUSTION TURBINE #2	2	77.0	-0.3562 KACP -0.3562 KACP	LACYGNE UNIT #1 LACYGNE UNIT #2	1 2	469.0 469.0	0.1269	-0.4831 -0.4831	
(ACP (ACP	BULL CREEK COMBUSTION TURBINE #3 BULL CREEK COMBUSTION TURBINE #3	3	77.0	-0.3562 KACP -0.3562 KACP	LACYGNE UNIT #1 LACYGNE UNIT #2	1	469.0 469.0	0.1269	-0.4831 -0.4831	
(ACP	BULL CREEK CT #4	4	77.0	-0.3562 KACP	LACYGNE UNIT #1	1	469.0	0.1269	-0.4831	-
(ACP (ACP	BULL CREEK CT #4 GARDNER	4	77.0	-0.3562 KACP -0.29277 KACP	LACYGNE UNIT #2 LACYGNE UNIT #1	2	469.0 469.0	0.1269	-0.4831 -0.41967	-
KACP	GARDNER	1	11.0	-0.29277 KACP	LACYGNE UNIT #2	2	469.0	0.1269	-0.41967	
KACP KACP	BULL CREEK COMBUSTION TURBINE #1 BULL CREEK COMBUSTION TURBINE #1	1	77.0	-0.3562 KACP -0.3562 KACP	MONTROSE UNIT #1 MONTROSE UNIT #2	1 2	127.0 121.0	-0.03341 -0.03341	-0.32279 -0.32279	
KACP KACP	BULL CREEK COMBUSTION TURBINE #1 BULL CREEK COMBUSTION TURBINE #2	1 2	77.0	-0.3562 KACP -0.3562 KACP	MONTROSE UNIT #3 MONTROSE UNIT #1	3	127.3 127.0	-0.03341 -0.03341	-0.32279 -0.32279	
KACP	BULL CREEK COMBUSTION TURBINE #2	2	77.0	-0.3562 KACP	MONTROSE UNIT #2	2	121.0	-0.03341	-0.32279	
KACP KACP	BULL CREEK COMBUSTION TURBINE #2 BULL CREEK COMBUSTION TURBINE #3	2	77.0	-0.3562 KACP -0.3562 KACP	MONTROSE UNIT #3 MONTROSE UNIT #1	3	127.3 127.0	-0.03341 -0.03341	-0.32279 -0.32279	
KACP	BULL CREEK COMBUSTION TURBINE #3	3	77.0	-0.3562 KACP	MONTROSE UNIT #2	2	121.0	-0.03341	-0.32279	
KACP KACP	BULL CREEK COMBUSTION TURBINE #3 BULL CREEK CT #4	3	77.0	-0.3562 KACP -0.3562 KACP	MONTROSE UNIT #3 MONTROSE UNIT #1	3	127.3	-0.03341	-0.32279 -0.32279	
KACP KACP	BULL CREEK CT #4 BULL CREEK CT #4	4 4	77.0 77.0		MONTROSE UNIT #2 MONTROSE UNIT #3	2	121.0 127.3	-0.03341 -0.03341	-0.32279 -0.32279	
KACP	BULL CREEK COMBUSTION TURBINE #1	4	77.0	-0.3562 KACP	HAWTHORN UNIT #5	5	457.0	-0.03341	-0.32279	
KACP KACP	BULL CREEK COMBUSTION TURBINE #1 BULL CREEK COMBUSTION TURBINE #1	1	77.0	-0.3562 KACP -0.3562 KACP	IATAN UNIT #1 HAWTHORN COMBUSTION TURBINE #6	1	390.0 92.0	-0.05978 -0.05557	-0.29642	
KACP	BULL CREEK COMBUSTION TURBINE #1	1	77.0	-0.3562 KACP	HAWTHORN COMBUSTION TURBINE #7	7	45.7	-0.0561	-0.30063 -0.3001	
KACP KACP	BULL CREEK COMBUSTION TURBINE #1 BULL CREEK COMBUSTION TURBINE #2	1	77.0	-0.3562 KACP -0.3562 KACP	HAWTHORN UNIT #9 HAWTHORN UNIT #5	9	68.0 457.0	-0.05557 -0.05557	-0.30063 -0.30063	
KACP	BULL CREEK COMBUSTION TURBINE #2	2	77.0	-0.3562 KACP	IATAN UNIT #1	1	390.0	-0.05978	-0.29642	
KACP KACP	BULL CREEK COMBUSTION TURBINE #2 BULL CREEK COMBUSTION TURBINE #2	2	77.0	-0.3562 KACP -0.3562 KACP	HAWTHORN COMBUSTION TURBINE #6 HAWTHORN COMBUSTION TURBINE #7	6	92.0 45.7	-0.05557	-0.30063	
(ACP (ACP	BULL CREEK COMBUSTION TURBINE #2 BULL CREEK COMBUSTION TURBINE #3	2	77.0	-0.3562 KACP -0.3562 KACP	HAWTHORN UNIT #9 HAWTHORN UNIT #5	9	68.0	-0.05557	-0.30063	
KACP KACP	BULL CREEK COMBUSTION TURBINE #3 BULL CREEK COMBUSTION TURBINE #3	3	77.0	-0.3562 KACP -0.3562 KACP	IATAN UNIT #1	5	457.0 390.0	-0.05557 -0.05978	-0.30063 -0.29642	
KACP KACP	BULL CREEK COMBUSTION TURBINE #3 BULL CREEK COMBUSTION TURBINE #3	3	77.0	-0.3562 KACP	HAWTHORN COMBUSTION TURBINE #6 HAWTHORN COMBUSTION TURBINE #7	6	92.0 45.7	-0.05557	-0.30063	-
KACP	BULL CREEK COMBUSTION TURBINE #3	3	77.0	-0.3562 KACP -0.3562 KACP	HAWTHORN UNIT #9	9	68.0		-0.30063	
KACP KACP	BULL CREEK CT #4 BULL CREEK CT #4	4	77.0	-0.3562 KACP -0.3562 KACP	HAWTHORN UNIT #5 IATAN UNIT #1	5	457.0 390.0	-0.05557 -0.05978	-0.30063 -0.29642	
KACP	BULL CREEK CT #4	4	77.0	-0.3562 KACP	HAWTHORN COMBUSTION TURBINE #6	6	92.0	-0.05557	-0.30063	
KACP KACP	BULL CREEK CT #4 BULL CREEK CT #4	4	77.0	-0.3562 KACP -0.3562 KACP	HAWTHORN COMBUSTION TURBINE #7 HAWTHORN UNIT #9	7	45.7	-0.0561 -0.05557	-0.3001 -0.30063	
KACP	GARDNER	1	11.0	-0.29277 KACP	MONTROSE UNIT #1	1	127.0	-0.03341	-0.25936	
KACP KACP	GARDNER GARDNER	1	11.0 11.0	-0.29277 KACP -0.29277 KACP	MONTROSE UNIT #2 MONTROSE UNIT #3	2	121.0 127.3	-0.03341 -0.03341	-0.25936 -0.25936	
KACP KACP	GARDNER GARDNER	1	11.0	-0.29277 KACP -0.29277 KACP	HAWTHORN UNIT #5 IATAN UNIT #1	5	457.0 390.0	-0.05557 -0.05978	-0.2372 -0.23299	
KACP	GARDNER	1	11.0	-0.29277 KACP	HAWTHORN COMBUSTION TURBINE #6	6	92.0		-0.23239	
KACP KACP	GARDNER GARDNER	1	11.0 11.0	-0.29277 KACP -0.29277 KACP	HAWTHORN COMBUSTION TURBINE #7 HAWTHORN UNIT #9	7	45.7	-0.0561	-0.23667	
KACP	PAOLA COMBUSTION TURBINES	1	77.0	-0.10208 KACP	LACYGNE UNIT #1	1	469.0	0.1269	-0.22898	
KACP KACP	PAOLA COMBUSTION TURBINES NORTHEAST CT #11	1	77.0	-0.10208 KACP -0.06294 KACP	LACYGNE UNIT #2 LACYGNE UNIT #1	2	469.0 469.0	0.1269	-0.22898 -0.18984	
KACP	NORTHEAST CT #11	1	56.0	-0.06294 KACP	LACYGNE UNIT #2	2	469.0	0.1269	-0.18984	
KACP KACP	NORTHEAST COMBUSTINE TURBINES NORTH NORTHEAST COMBUSTINE TURBINES NORTH	1	55.0 55.0	-0.06294 KACP -0.06294 KACP	LACYGNE UNIT #1 LACYGNE UNIT #2	1 2	469.0 469.0	0.1269	-0.18984 -0.18984	
KACP KACP	GRAND AVENUE COMBUSTINE TURBINES GRAND AVENUE COMBUSTINE TURBINES	7	33.0 33.0	-0.0647 KACP -0.0647 KACP	LACYGNE UNIT #1 LACYGNE UNIT #2	1 2	469.0 469.0	0.1269	-0.1916	
KACP	GRAND AVENUE COMBUSTINE TURBINES	9	32.0	-0.0647 KACP	LACYGNE UNIT #1	1	469.0	0.1269	-0.1916	
KACP KACP	GRAND AVENUE COMBUSTINE TURBINES NORTHEAST CT #13	9	32.0 56.0	-0.0647 KACP -0.06294 KACP	LACYGNE UNIT #2 LACYGNE UNIT #1	2	469.0 469.0	0.1269	-0.1916 -0.18984	
KACP	NORTHEAST CT #13	1	56.0	-0.06294 KACP	LACYGNE UNIT #2	2	469.0	0.1269	-0.18984	
KACP KACP	NORTHEAST CT #14 NORTHEAST CT #14	1	58.0 58.0	-0.06294 KACP -0.06294 KACP	LACYGNE UNIT #1 LACYGNE UNIT #2	1 2	469.0 469.0	0.1269	-0.18984 -0.18984	
KACP KACP	NORTHEAST CT #15 NORTHEAST CT #15	1	58.0 58.0	-0.06294 KACP -0.06294 KACP	LACYGNE UNIT #1 LACYGNE UNIT #2	1 2	469.0 469.0	0.1269	-0.18984 -0.18984	
KACP	NORTHEAST CT #16	1	58.0	-0.06294 KACP	LACYGNE UNIT #1	1	469.0	0.1269	-0.18984	
KACP KACP	NORTHEAST CT #16 NORTHEAST CT #17	1	58.0 59.0	-0.06294 KACP -0.06294 KACP	LACYGNE UNIT #2 LACYGNE UNIT #1	2	469.0 469.0	0.1269	-0.18984 -0.18984	
KACP	NORTHEAST CT #17	1	59.0	-0.06294 KACP	LACYGNE UNIT #2	2	469.0	0.1269	-0.18984	
KACP KACP	NORTHEAST CT #18 NORTHEAST CT #18	1	58.0 58.0	-0.06294 KACP -0.06294 KACP	LACYGNE UNIT #1 LACYGNE UNIT #2	1 2	469.0 469.0	0.1269	-0.18984 -0.18984	
(ACP (ACP	HAWTHORN COMBUSTION TURBINE #7	7	31.3 31.3	-0.0561 KACP -0.0561 KACP	LACYGNE UNIT #1 LACYGNE UNIT #2	1	469.0 469.0	0.1269	-0.183	
KACP	HAWTHORN COMBUSTION TURBINE #7 HAWTHORN COMBUSTION TURBINE #8	8	77.0	-0.0561 KACP	LACYGNE UNIT #1	1	469.0	0.1269	-0.183	
KACP KACP	HAWTHORN COMBUSTION TURBINE #8 CITY OF HIGGINSVILLE	8	77.0 36.0	-0.0561 KACP -0.02901 KACP	LACYGNE UNIT #2 LACYGNE UNIT #1	2	469.0 469.0	0.1269	-0.183 -0.15591	
KACP	CITY OF HIGGINSVILLE	1	36.0	-0.02901 KACP	LACYGNE UNIT #2	2	469.0	0.1269	-0.15591	1
VERE VERE	LAWRENCE ENERGY CENTER UNIT 5 LAWRENCE ENERGY CENTER UNIT 5	1	44.0 44.0		GILL ENERGY CENTER UNIT 3 GILL ENERGY CENTER UNIT 4	1	78.0	0.0424	-0.07397 -0.07386	1
WERE	LAWRENCE ENERGY CENTER UNIT 5	1	44.0	-0.03157 WERE	EVANS ENERGY CENTER UNIT 2	1	305.0	0.04138	-0.07295	1
KACP KACP	PAOLA COMBUSTION TURBINES PAOLA COMBUSTION TURBINES	1	77.0	-0.10208 KACP -0.10208 KACP	MONTROSE UNIT #1 MONTROSE UNIT #2	2	127.0 121.0		-0.06867 -0.06867	1
KACP	PAOLA COMBUSTION TURBINES	1	77.0	-0.10208 KACP	MONTROSE UNIT #3	3	127.3	-0.03341	-0.06867	1
	BPU - CITY OF MCPHERSON GAS TURBINE 1 BPU - CITY OF MCPHERSON GAS TURBINE 1	1	51.0 51.0		GILL ENERGY CENTER UNIT 3 GILL ENERGY CENTER UNIT 4	1	78.0 77.0	0.0424	-0.06197 -0.06186	1
WERE WERE	BPU - CITY OF MCPHERSON GAS TURBINE 2 BPU - CITY OF MCPHERSON GAS TURBINE 2	1	52.0 52.0	-0.01957 WERE	GILL ENERGY CENTER UNIT 3 GILL ENERGY CENTER UNIT 4	1	78.0 77.0		-0.06197 -0.06186	1
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 3	1	50.0	-0.01957 WERE	GILL ENERGY CENTER UNIT 3	1	78.0	0.0424	-0.06197	1
VERE VERE	BPU - CITY OF MCPHERSON GAS TURBINE 3 BPU - CITY OF MCPHERSON GAS TURBINE 4	1	50.0 79.0	-0.01957 WERE -0.01959 WERE	GILL ENERGY CENTER UNIT 4 GILL ENERGY CENTER UNIT 3	1	77.0	0.04229	-0.06186 -0.06199	1
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 4	1	79.0	-0.01959 WERE	GILL ENERGY CENTER UNIT 4	1	77.0	0.04229	-0.06188	1
VERE	BPU - CITY OF MCPHERSON GAS TURBINE 1 BPU - CITY OF MCPHERSON GAS TURBINE 2	1	51.0 52.0	-0.01957 WERE -0.01957 WERE	EVANS ENERGY CENTER UNIT 2 EVANS ENERGY CENTER UNIT 2	1	305.0 305.0	0.04138	-0.06095 -0.06095	1
VERE	BPU - CITY OF MCPHERSON GAS TURBINE 3	1	50.0	-0.01957 WERE	EVANS ENERGY CENTER UNIT 2	1	305.0	0.04138	-0.06095	1
VERE VERE	BPU - CITY OF MCPHERSON GAS TURBINE 4 HUTCHINSON ENERGY CENTER GAS TURBINE 1	1	79.0 52.0	-0.01959 WERE -0.01756 WERE	EVANS ENERGY CENTER UNIT 2 GILL ENERGY CENTER UNIT 3	1	305.0 78.0	0.04138	-0.06097 -0.05996	1
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 2	1	50.0		GILL ENERGY CENTER UNIT 3	1	78.0	0.0424	-0.05996	1
VERE	HUTCHINSON ENERGY CENTER GAS TURBINE 3		52.0	-0.01756 WERE	GILL ENERGY CENTER UNIT 3	-	78.0	0.0424	-0.05996	1

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



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

imiting Facility: Direction:	MARTIN CITY - TURNER ROAD SUBSTATION 161KV CKT 1 To->From										
ne Outage:	GRD OAK - PLEASANT HILL 345KV CKT 1										
wgate:	59210592591591985920013106SP										
te Redispatch N	6/1/06-10/1/06										
Reservation	Relief Amount	Aggregate Relief Amount									
977018	1.4	1.4									
977018	1.4	1.4	Maximum		Sink		1	Maximum			1
Source Control			Increment		Control			Decrement			Redispa
Area	Source	Source Id	(MW)	GSF	Area	Sink	Sink Id	(MW)	GSF	Factor	Amount (M
IPU	SIBLEY GENERATING UNIT #3	3	20.1			SHARPR#1	1	105.0	0.38755	-0.41958	3
IPU	SIBLEY GENERATING UNIT #3	3	20.1			SHARPR#2	2	105.0	0.38755	-0.41958	j.
IPU	SIBLEY GENERATING UNIT #3	3	20.1			SHARPR#3	3	105.0	0.38755	-0.41958	
IPU	GREENWOOD GENERATING UNIT #1	1	63.8			SHARPR#1	1	105.0	0.38755	-0.4329	
IPU	GREENWOOD GENERATING UNIT #1	1	63.8			SHARPR#2	2	105.0	0.38755	-0.4329	
IPU	GREENWOOD GENERATING UNIT #1	1	63.8			SHARPR#3	3	105.0	0.38755	-0.4329	
IPU IPU	GREENWOOD GENERATING UNIT #2 GREENWOOD GENERATING UNIT #2	2	64.0			SHARPR#1 SHARPR#2	2	105.0 105.0	0.38755	-0.4329 -0.4329	
IPU	GREENWOOD GENERATING UNIT #2	2	64.0			SHARPR#2 SHARPR#3	3	105.0	0.38755	-0.4329	
IPU	GREENWOOD GENERATING UNIT #2 GREENWOOD GENERATING UNIT #3	2	42.1			SHARPR#3 SHARPR#1	1	105.0	0.38755	-0.4329	
IPU	GREENWOOD GENERATING UNIT #3	3	42.1			SHARPR#2	2	105.0	0.38755	-0.4329	
IPU	GREENWOOD GENERATING UNIT #3	3	42.1			SHARPR#3	3	105.0	0.38755	-0.4329	
IPU	NEVADA GENERATING UNIT #1	1	20.3	-0.00985	MIPU	SHARPR#1	1	105.0	0.38755	-0.3974	
IPU	NEVADA GENERATING UNIT #1	1	20.3	-0.00985	MIPU	SHARPR#2	2	105.0	0.38755	-0.3974	1
IPU	NEVADA GENERATING UNIT #1	1	20.3		MIPU	SHARPR#3	3	105.0	0.38755	-0.3974	
IPU	TWA#1	1	14.6			SHARPR#1	1	105.0	0.38755	-0.41128	
IPU	TWA#1	1	14.6			SHARPR#2	2	105.0	0.38755	-0.41128	
IPU	TWA#1	1	14.6			SHARPR#3	3	105.0	0.38755	-0.41128	
IPU	TWA#2	1	17.5			SHARPR#1	1	105.0	0.38755	-0.41128	
IPU IPU	TWA#2 TWA#2	1	17.5			SHARPR#2 SHARPR#3	2	105.0 105.0	0.38755	-0.41128 -0.41128	
IPU	ARIES STEAM TURBINE	1	265.0			SHARPR#1	1	105.0	0.38755	-0.42998	
IPU	ARIES STEAM TURBINE	1	265.0			SHARPR#2	2	105.0	0.38755	-0.42998	
IPU	ARIES STEAM TURBINE	1	265.0			SHARPR#3	3	105.0	0.38755	-0.42998	
IPU	ARIES COMBUSTION TURBINE #1	1	21.0			SHARPR#1	1	105.0	0.38755	-0.42998	
IIPU	ARIES COMBUSTION TURBINE #1	1	21.0			SHARPR#2	2	105.0	0.38755	-0.42998	5
IIPU	ARIES COMBUSTION TURBINE #1	1	21.0			SHARPR#3	3	105.0	0.38755	-0.42998	
IIPU	ARIES COMBUSTION TURBINE #2	1	165.0			SHARPR#1	1	105.0	0.38755	-0.42998	
IIPU	ARIES COMBUSTION TURBINE #2	1	165.0			SHARPR#2	2	105.0	0.38755	-0.42998	
IIPU	ARIES COMBUSTION TURBINE #2	1	165.0			SHARPR#3	3	105.0	0.38755	-0.42998	
IIPU IIPU	LAKE ROAD	1	135.0			SHARPR#1 SHARPR#2	2	105.0	0.38755	-0.40288 -0.40288	
IIPU IIPU	LAKE ROAD	1	135.0			SHARPR#2 SHARPR#3	3	105.0 105.0	0.38755	-0.40288	
IPU	RALPH GREEN GENERATING UNIT #3	3	73.7			SHARPR#1	1	105.0	0.38755	-0.31091	
IPU	RALPH GREEN GENERATING UNIT #3	3	73.7			SHARPR#2	2	105.0	0.38755	-0.31091	
IIPU	RALPH GREEN GENERATING UNIT #3	3	73.7			SHARPR#3	3	105.0	0.38755	-0.31091	
ACP	NORTHEAST CT #11	1	43.2	-0.02843	KACP	LACYGNE UNIT #1	1	469.0	0.03977	-0.0682	1
ACP	NORTHEAST CT #11	1	43.2			LACYGNE UNIT #2	2	469.0	0.03977	-0.0682	4
ACP	NORTHEAST COMBUSTINE TURBINES NORTH	1	55.0			LACYGNE UNIT #1	1	469.0	0.03977	-0.0682	4
ACP	NORTHEAST COMBUSTINE TURBINES NORTH	1	55.0			LACYGNE UNIT #2	2	469.0	0.03977	-0.0682	
ACP	GRAND AVENUE COMBUSTINE TURBINES	7	33.0			LACYGNE UNIT #1	1	469.0	0.03977	-0.06784	
ACP	GRAND AVENUE COMBUSTINE TURBINES	7	33.0			LACYGNE UNIT #2	2	469.0	0.03977	-0.06784	
ACP	GRAND AVENUE COMBUSTINE TURBINES GRAND AVENUE COMBUSTINE TURBINES	9	32.0		KACP	LACYGNE UNIT #1 LACYGNE UNIT #2	2	469.0 469.0	0.03977	-0.06784	
ACP ACP	NORTHEAST CT #13	9	32.0			LACYGNE UNIT #2 LACYGNE UNIT #1	1	469.0	0.03977	-0.06784	
ACP	NORTHEAST CT #13	1	56.0			LACYGNE UNIT #1	2	469.0	0.03977	-0.0682	
ACP	NORTHEAST CT #14	1	58.0			LACYGNE UNIT #1	Ĩ	469.0	0.03977	-0.0682	
ACP	NORTHEAST CT #14	1	58.0			LACYGNE UNIT #2	2	469.0	0.03977	-0.0682	
ACP	NORTHEAST CT #15	1	58.0	-0.02843	KACP	LACYGNE UNIT #1	1	469.0	0.03977	-0.0682	
ACP	NORTHEAST CT #15	1	58.0	-0.02843	KACP	LACYGNE UNIT #2	2	469.0	0.03977	-0.0682	2
ACP	NORTHEAST CT #16	1	58.0			LACYGNE UNIT #1	1	469.0	0.03977	-0.0682	
ACP	NORTHEAST CT #16	1	58.0			LACYGNE UNIT #2	2	469.0	0.03977	-0.0682	
ACP	NORTHEAST CT #17	1	59.0		KACP	LACYGNE UNIT #1	1	469.0	0.03977	-0.0682	
ACP ACP	NORTHEAST CT #17	1	59.0 58.0			LACYGNE UNIT #2	2	469.0 469.0	0.03977	-0.0682	
ACP ACP	NORTHEAST CT #18 NORTHEAST CT #18	1	58.0			LACYGNE UNIT #1 LACYGNE UNIT #2	2	469.0 469.0	0.03977	-0.0682	
ACP ACP	GARDNER	1	58.0		KACP	LACYGNE UNIT #2	1	469.0	0.03977	-0.0682	
ACP	GARDNER	1	11.0			LACYGNE UNIT #1	2	469.0	0.03977	-0.04599	
IPU	GREENWOOD GENERATING UNIT #1	1	63.8			LAKE ROAD	1	409.0	-0.01533	-0.03002	
IPU	GREENWOOD GENERATING UNIT #2	2	64.0			LAKE ROAD	1	117.0	-0.01533	-0.03002	
IPU	GREENWOOD GENERATING UNIT #3	3	42.1			LAKE ROAD	1	117.0	-0.01533	-0.03002	

Maximum Decrement and Maximum Increment of Factor = Source GSF - Sink GSF Redispatch Amount = Relief Amount / Factor Upgrade: N/A Limiting Facility: NORTH AMERICAN PHILIPS - NORTH AMERICAN PHILIPS JUNCTION (SOUTH) 115KV CKT 1 Direction: From->To Line Outage: EAST MCPHERSON - SUMMIT 230KV CKT 1 Flowgate: 57372573741568725687312210WP

Date Redispatch Ne 12/1/09-4/1/10									

Date Redispatch N	12/1/09-4/1/10										
		Aggregate									
Reservation	Relief Amount	Relief Amount									
610383	1.8	1.8				r					
Source Control			Maximum Increment		Sink Control			Maximum Decrement			Redispatch
Area	Source	Source Id	(MW)	GSF	Area	Sink	Sink Id	(MW)	GSF	Factor	Amount (MW)
WERE	LYONS (KMEA Municipal Sterling)	KS		-0.48305	WERE	JEFFREY ENERGY CENTER UNIT 1	1	470.0	0.02906	-0.51211	3
WERE	LYONS (KMEA Municipal Sterling)	KS		-0.48305		JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.03052	-0.51357	3
WERE	LYONS (KMEA Municipal Sterling) LYONS (KMEA Municipal Sterling)	KS KS		-0.48305 -0.48305		JEFFREY ENERGY CENTER UNIT 3 TECUMSEH ENERGY CENTER UNIT 7	1	470.0 40.0	0.03052	-0.51357 -0.50317	3
WERE	LYONS (KMEA Municipal Sterling)	KS		-0.48305		TECUMSEH ENERGY CENTER UNIT 8	1	48.0	0.02012	-0.50317	3
WERE	BPU - CITY OF MCPHERSON STEAM PLANT	1	27.0	-0.52184	WERE	JEFFREY ENERGY CENTER UNIT 1	1	470.0	0.02906	-0.5509	3
WERE	BPU - CITY OF MCPHERSON STEAM PLANT BPU - CITY OF MCPHERSON STEAM PLANT	1	27.0	-0.52184 -0.52184		JEFFREY ENERGY CENTER UNIT 2 JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.03052	-0.55236 -0.55236	3
WERE	BPU - CITY OF MCPHERSON STEAM PLANT BPU - CITY OF MCPHERSON STEAM PLANT	1	27.0	-0.52184		LAWRENCE ENERGY CENTER UNIT 4	1	470.0	0.03052	-0.5395	3
WERE	BPU - CITY OF MCPHERSON STEAM PLANT	1	27.0			LAWRENCE ENERGY CENTER UNIT 5	1	225.8	0.0185	-0.54034	3
WERE	BPU - CITY OF MCPHERSON STEAM PLANT	1	27.0	-0.52184	WERE	TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.02012	-0.54196	3
WERE	BPU - CITY OF MCPHERSON STEAM PLANT BPU - CITY OF MCPHERSON STEAM PLANT	1	27.0	-0.52184 -0.52184		TECUMSEH ENERGY CENTER UNIT 8 EVANS ENERGY CENTER UNIT 2	1	48.0 110.0	0.02012	-0.54196 -0.52153	3
WERE	BPU - CITY OF MCPHERSON STEAM PLANT	1	27.0			WACO	1	18.0	-0.0029	-0.51894	3
WERE	BPU - CITY OF MCPHERSON STEAM PLANT	1	27.0	-0.52184	WERE	CITY OF WELLINGTON	1	14.3	-0.00185	-0.51999	3
WERE	BPU - CITY OF MCPHERSON STEAM PLANT	1	27.0			CITY OF WINFIELD	1	24.6	-0.00114	-0.5207	3
WERE	BPU - CITY OF MCPHERSON STEAM PLANT BPU - CITY OF MCPHERSON STEAM PLANT	1	27.0 27.0	-0.52184 -0.52184		CHANUTE GENERATION SUB CITY OF ERIE	1	24.5 20.0	0.00261	-0.52445 -0.52445	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 1	1	51.0	-0.52184		JEFFREY ENERGY CENTER UNIT 1	1	470.0	0.02906	-0.5509	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 1	1	51.0	-0.52184	WERE	JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.03052	-0.55236	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 1	1	51.0 51.0	-0.52184 -0.52184		JEFFREY ENERGY CENTER UNIT 3 LAWRENCE ENERGY CENTER UNIT 4	1	470.0	0.03052	-0.55236	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 1 BPU - CITY OF MCPHERSON GAS TURBINE 1	1	51.0	-0.52184		LAWRENCE ENERGY CENTER UNIT 4 LAWRENCE ENERGY CENTER UNIT 5	1	225.8	0.01766	-0.5395	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 1	1	51.0	-0.52184	WERE	TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.02012	-0.54196	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 1	1	51.0	-0.52184		TECUMSEH ENERGY CENTER UNIT 8	1	48.0	0.02012	-0.54196	3
WERE WERE	BPU - CITY OF MCPHERSON GAS TURBINE 1 BPU - CITY OF MCPHERSON GAS TURBINE 1	1	51.0 51.0	-0.52184 -0.52184		EVANS ENERGY CENTER UNIT 2 WACO	1	110.0 18.0	-0.00031	-0.52153 -0.51894	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 1 BPU - CITY OF MCPHERSON GAS TURBINE 1	1	51.0			CITY OF WELLINGTON	1	14.3	-0.0029	-0.51894	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 1	1	51.0	-0.52184	WERE	CITY OF WINFIELD	1	24.6	-0.00114	-0.5207	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 1	1	51.0			CHANUTE GENERATION SUB	1	24.5	0.00261	-0.52445	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 1 BPU - CITY OF MCPHERSON GAS TURBINE 2	1	51.0 52.0	-0.52184 -0.52184	WERE	CITY OF ERIE JEFFREY ENERGY CENTER UNIT 1	1	20.0	0.00261	-0.52445 -0.5509	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 2	1	52.0		WERE	JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.02900	-0.55236	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 2	1	52.0		WERE	JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.03052	-0.55236	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 2	1	52.0		WERE	LAWRENCE ENERGY CENTER UNIT 4	1	60.0	0.01766	-0.5395	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 2 BPU - CITY OF MCPHERSON GAS TURBINE 2	1	52.0 52.0	-0.52184 -0.52184	WERE WERE	LAWRENCE ENERGY CENTER UNIT 5 TECUMSEH ENERGY CENTER UNIT 7	1	225.8 40.0	0.0185	-0.54034 -0.54196	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 2	1	52.0	-0.52184	WERE	TECUMSEH ENERGY CENTER UNIT 8	1	48.0	0.02012	-0.54196	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 2	1	52.0	-0.52184	WERE	EVANS ENERGY CENTER UNIT 2	1	110.0	-0.00031	-0.52153	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 2 BPU - CITY OF MCPHERSON GAS TURBINE 2	1	52.0 52.0		WERE WERE	WACO CITY OF WELLINGTON	1	18.0 14.3	-0.0029	-0.51894 -0.51999	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 2	1	52.0	-0.52184	WERE	CITY OF WINFIELD	1	24.6	-0.00185	-0.5207	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 2	1	52.0	-0.52184	WERE	CHANUTE GENERATION SUB	1	24.5	0.00261	-0.52445	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 2	1	52.0		WERE	CITY OF ERIE	1	20.0	0.00261	-0.52445	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 3 BPU - CITY OF MCPHERSON GAS TURBINE 3	1	50.0 50.0	-0.52184 -0.52184	WERE	JEFFREY ENERGY CENTER UNIT 1 JEFFREY ENERGY CENTER UNIT 2	1	470.0 470.0	0.02906	-0.5509 -0.55236	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 3	1	50.0	-0.52184	WERE	JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.03052	-0.55236	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 3	1	50.0	-0.52184	WERE	LAWRENCE ENERGY CENTER UNIT 4	1	60.0	0.01766	-0.5395	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 3 BPU - CITY OF MCPHERSON GAS TURBINE 3	1	50.0 50.0		WERE	LAWRENCE ENERGY CENTER UNIT 5 TECUMSEH ENERGY CENTER UNIT 7	1	225.8 40.0	0.0185	-0.54034 -0.54196	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 3	1	50.0		WERE	TECUMSEH ENERGY CENTER UNIT 8	1	40.0	0.02012	-0.54196	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 3	1	50.0	-0.52184	WERE	EVANS ENERGY CENTER UNIT 2	1	110.0	-0.00031	-0.52153	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 3	1	50.0		WERE	WACO	1	18.0	-0.0029	-0.51894	3
WERE WERE	BPU - CITY OF MCPHERSON GAS TURBINE 3 BPU - CITY OF MCPHERSON GAS TURBINE 3	1	50.0 50.0	-0.52184 -0.52184	WERE WERE	CITY OF WELLINGTON CITY OF WINFIELD	1	14.3 24.6	-0.00185	-0.51999 -0.5207	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 3	1	50.0			CHANUTE GENERATION SUB	1	24.5	0.00261	-0.52445	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 3	1	50.0	-0.52184	WERE	CITY OF FRIE	1	20.0	0.00261	-0.52445	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 4	1	79.0 79.0	-0.50855	WERE	JEFFREY ENERGY CENTER UNIT 1	1	470.0 470.0	0.02906	-0.53761	3
WERE WERE	BPU - CITY OF MCPHERSON GAS TURBINE 4 BPU - CITY OF MCPHERSON GAS TURBINE 4	1	79.0	-0.50855 -0.50855	WERE WERE	JEFFREY ENERGY CENTER UNIT 2 JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.03052	-0.53907 -0.53907	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 4	1	79.0	-0.50855	WERE	LAWRENCE ENERGY CENTER UNIT 4	1	60.0	0.01766	-0.52621	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 4	1	79.0	-0.50855	WERE	LAWRENCE ENERGY CENTER UNIT 5	1	225.8	0.0185	-0.52705	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 4 BPU - CITY OF MCPHERSON GAS TURBINE 4	1	79.0 79.0		WERE	TECUMSEH ENERGY CENTER UNIT 7 TECUMSEH ENERGY CENTER UNIT 8	1	40.0 48.0	0.02012	-0.52867 -0.52867	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 4 BPU - CITY OF MCPHERSON GAS TURBINE 4	1	79.0	-0.50855	WERE	EVANS ENERGY CENTER UNIT 2	1	48.0	-0.00031	-0.52867	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 4	1	79.0	-0.50855	WERE	WACO	1	18.0	-0.0029	-0.50565	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 4	1	79.0		WERE	CITY OF WELLINGTON	1	14.3	-0.00185	-0.5067	3
WERE WERE	BPU - CITY OF MCPHERSON GAS TURBINE 4 BPU - CITY OF MCPHERSON GAS TURBINE 4	1	79.0 79.0		WERE WERE	CITY OF WINFIELD CHANUTE GENERATION SUB	1	24.6 24.5	-0.00114 0.00261	-0.50741 -0.51116	3
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 4 BPU - CITY OF MCPHERSON GAS TURBINE 4	1	79.0	-0.50855		CITY OF ERIE	1	24.5	0.00261	-0.51116	3
WERE	LYONS (KMEA Municipal Sterling)	кs		-0.48305	WERE	LAWRENCE ENERGY CENTER UNIT 4	1	60.0	0.01766	-0.50071	4
WERE	LYONS (KMEA Municipal Sterling)	KS		-0.48305		LAWRENCE ENERGY CENTER UNIT 5	1	225.8	0.0185	-0.50155	4
WERE	LYONS (KMEA Municipal Sterling) LYONS (KMEA Municipal Sterling)	KS KS		-0.48305 -0.48305	WERE	EVANS ENERGY CENTER UNIT 2 WACO	1	110.0 18.0	-0.00031	-0.48274 -0.48015	4
WERE	LYONS (KMEA Municipal Sterling)	KS		-0.48305	WERE	CITY OF WELLINGTON	1	14.3	-0.00185	-0.4812	4
WERE	LYONS (KMEA Municipal Sterling)	KS		-0.48305	WERE	CITY OF WINFIELD	1	24.6	-0.00114	-0.48191	4
WERE	LYONS (KMEA Municipal Sterling)	KS		-0.48305		CHANUTE GENERATION SUB	1	24.5	0.00261	-0.48566	4
WERE	LYONS (KMEA Municipal Sterling) RICE COUNTY (KMEA Municipal Ellinwood)	KS KE		-0.48305 -0.46436	WERE	CITY OF ERIE JEFFREY ENERGY CENTER UNIT 1	1	20.0	0.00261	-0.48566	4
WERE	RICE COUNTY (KMEA Municipal Ellinwood)	KE		-0.46436		JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.02900	-0.49342	4
WERE	RICE COUNTY (KMEA Municipal Ellinwood)	KE		-0.46436	WERE	JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.03052	-0.49488	4
WERE	RICE COUNTY (KMEA Municipal Ellinwood)	KE		-0.46436		LAWRENCE ENERGY CENTER UNIT 4	1	60.0	0.01766	-0.48202	4
WERE WERE	RICE COUNTY (KMEA Municipal Ellinwood) RICE COUNTY (KMEA Municipal Ellinwood)	KE		-0.46436 -0.46436		LAWRENCE ENERGY CENTER UNIT 5 TECUMSEH ENERGY CENTER UNIT 7	1	225.8	0.0185	-0.48286	4
WERE	RICE COUNTY (KMEA Municipal Ellinwood)	KE		-0.46436		TECUMSEH ENERGY CENTER UNIT 8	1	40.0	0.02012	-0.48448	4
WERE	RICE COUNTY (KMEA Municipal Ellinwood)	KE		-0.46436	WERE	EVANS ENERGY CENTER UNIT 2	1	110.0	-0.00031	-0.46405	4
WERE	RICE COUNTY (KMEA Municipal Ellinwood)	KE		-0.46436		WACO CITY OF WELLINGTON	1	18.0	-0.0029	-0.46146	4
NEDE	DIOE COUNTY WATEA Musicipal End										4
WERE	RICE COUNTY (KMEA Municipal Ellinwood) RICE COUNTY (KMEA Municipal Ellinwood)	KE		-0.46436							A
WERE WERE WERE	RICE COUNTY (KMEA Municipal Ellinwood) RICE COUNTY (KMEA Municipal Ellinwood) RICE COUNTY (KMEA Municipal Ellinwood)	KE KE KE		-0.46436 -0.46436 -0.46436	WERE	CITY OF WELLINGTON CITY OF WINFIELD CHANUTE GENERATION SUB	1	24.6	-0.00114	-0.46322	4

Source Control		_	Maximum Increment		Sink Control	_	Maximum Decrement	Redispatch
	Source HUTCHINSON ENERGY CENTER UNIT 1	Source Id 1	(MW) 18.0		Area WERE	Sink JEFFREY ENERGY CENTER UNIT 1	Sink Id         (MW)         GSF           1         470.0         0.02906	Factor Amount (MW) -0.43088 4
WERE	HUTCHINSON ENERGY CENTER UNIT 1 HUTCHINSON ENERGY CENTER UNIT 1	1	18.0 18.0	-0.40182 -0.40182	WERE	JEFFREY ENERGY CENTER UNIT 2 JEFFREY ENERGY CENTER UNIT 3	1 470.0 0.03052 1 470.0 0.03052	-0.43234 4 -0.43234 4
WERE	HUTCHINSON ENERGY CENTER UNIT 1	1	18.0	-0.40182	WERE	LAWRENCE ENERGY CENTER UNIT 4	1 60.0 0.01766	-0.41948 4
WERE	HUTCHINSON ENERGY CENTER UNIT 1 HUTCHINSON ENERGY CENTER UNIT 1	1	18.0 18.0	-0.40182	WERE WERE	LAWRENCE ENERGY CENTER UNIT 5 TECUMSEH ENERGY CENTER UNIT 7	1 225.8 0.0185 1 40.0 0.02012	-0.42032 4 -0.42194 4
	HUTCHINSON ENERGY CENTER UNIT 1 HUTCHINSON ENERGY CENTER UNIT 1	1	18.0 18.0		WERE WERE	TECUMSEH ENERGY CENTER UNIT 8 EVANS ENERGY CENTER UNIT 2	1 48.0 0.02012 1 110.0 -0.00031	-0.42194 4 -0.40151 4
WERE	HUTCHINSON ENERGY CENTER UNIT 1 HUTCHINSON ENERGY CENTER UNIT 1	1	18.0 18.0	-0.40182	WERE	WACO CITY OF WELLINGTON	1 18.0 -0.0029	-0.39892 4
WERE	HUTCHINSON ENERGY CENTER UNIT 1	1	18.0	-0.40182	WERE	CITY OF WINFIELD	1 24.6 -0.00114	-0.39997 4 -0.40068 4
WERE	HUTCHINSON ENERGY CENTER UNIT 1 HUTCHINSON ENERGY CENTER UNIT 1	1	18.0 18.0	-0.40182 -0.40182	WERE WERE	CHANUTE GENERATION SUB CITY OF ERIE	1 24.5 0.00261 1 20.0 0.00261	-0.40443 4 -0.40443 4
WERE	HUTCHINSON ENERGY CENTER UNIT 2 HUTCHINSON ENERGY CENTER UNIT 2	1	18.0 18.0	-0.40182 -0.40182	WERE	JEFFREY ENERGY CENTER UNIT 1 JEFFREY ENERGY CENTER UNIT 2	1 470.0 0.02906 1 470.0 0.03052	-0.43088 4 -0.43234 4
WERE	HUTCHINSON ENERGY CENTER UNIT 2	1	18.0	-0.40182	WERE	JEFFREY ENERGY CENTER UNIT 3	1 470.0 0.03052	-0.43234 4
WERE	HUTCHINSON ENERGY CENTER UNIT 2 HUTCHINSON ENERGY CENTER UNIT 2	1	18.0 18.0	-0.40182 -0.40182	WERE WERE	LAWRENCE ENERGY CENTER UNIT 4 LAWRENCE ENERGY CENTER UNIT 5	1 60.0 0.01766 1 225.8 0.0185	-0.41948 4 -0.42032 4
WERE	HUTCHINSON ENERGY CENTER UNIT 2 HUTCHINSON ENERGY CENTER UNIT 2	1	18.0 18.0	-0.40182 -0.40182	WERE	TECUMSEH ENERGY CENTER UNIT 7 TECUMSEH ENERGY CENTER UNIT 8	1 40.0 0.02012 1 48.0 0.02012	-0.42194 4 -0.42194 4
WERE	HUTCHINSON ENERGY CENTER UNIT 2	1	18.0	-0.40182	WERE	EVANS ENERGY CENTER UNIT 2	1 110.0 -0.00031	-0.40151 4
WERE	HUTCHINSON ENERGY CENTER UNIT 2 HUTCHINSON ENERGY CENTER UNIT 2	1	18.0 18.0	-0.40182 -0.40182	WERE	WACO CITY OF WELLINGTON	1 18.0 -0.0029 1 14.3 -0.00185	-0.39892 4 -0.39997 4
WERE	HUTCHINSON ENERGY CENTER UNIT 2 HUTCHINSON ENERGY CENTER UNIT 2	1	18.0 18.0	-0.40182 -0.40182	WERE	CITY OF WINFIELD CHANUTE GENERATION SUB	1 24.6 -0.00114 1 24.5 0.00261	-0.40068 4 -0.40443 4
WERE	HUTCHINSON ENERGY CENTER UNIT 2	1	18.0	-0.40182	WERE	CITY OF ERIE	1 20.0 0.00261	-0.40443 4
WERE	HUTCHINSON ENERGY CENTER UNIT 3 HUTCHINSON ENERGY CENTER UNIT 3	1	31.0 31.0	-0.40182 -0.40182	WERE	JEFFREY ENERGY CENTER UNIT 1 JEFFREY ENERGY CENTER UNIT 2	1 470.0 0.02906 1 470.0 0.03052	-0.43088 4 -0.43234 4
WERE	HUTCHINSON ENERGY CENTER UNIT 3 HUTCHINSON ENERGY CENTER UNIT 3	1	31.0 31.0		WERE	JEFFREY ENERGY CENTER UNIT 3 LAWRENCE ENERGY CENTER UNIT 4	1 470.0 0.03052 1 60.0 0.01766	-0.43234 4 -0.41948 4
WERE	HUTCHINSON ENERGY CENTER UNIT 3 HUTCHINSON ENERGY CENTER UNIT 3	1	31.0 31.0	-0.40182	WERE	LAWRENCE ENERGY CENTER UNIT 5 TECUMSEH ENERGY CENTER UNIT 7	1 225.8 0.0185	-0.42032 4 -0.42194 4
WERE	HUTCHINSON ENERGY CENTER UNIT 3	1	31.0	-0.40182	WERE	TECUMSEH ENERGY CENTER UNIT 8	1 48.0 0.02012	-0.42194 4
WERE	HUTCHINSON ENERGY CENTER UNIT 3 HUTCHINSON ENERGY CENTER UNIT 3	1	31.0 31.0	-0.40182 -0.40182	WERE WERE	EVANS ENERGY CENTER UNIT 2 WACO	1 110.0 -0.00031 1 18.0 -0.0029	-0.40151 4 -0.39892 4
WERE	HUTCHINSON ENERGY CENTER UNIT 3	1	31.0	-0.40182	WERE	CITY OF WELLINGTON CITY OF WINFIELD	1 14.3 -0.00185	-0.39997 4
WERE	HUTCHINSON ENERGY CENTER UNIT 3 HUTCHINSON ENERGY CENTER UNIT 3	1	31.0 31.0	-0.40182	WERE	CHANUTE GENERATION SUB	1 24.6 -0.00114 1 24.5 0.00261	-0.40068 4 -0.40443 4
WERE	HUTCHINSON ENERGY CENTER UNIT 3 HUTCHINSON ENERGY CENTER UNIT 4	1	31.0 149.1	-0.40182 -0.40249	WERE	CITY OF ERIE JEFFREY ENERGY CENTER UNIT 1	1 20.0 0.00261 1 470.0 0.02906	-0.40443 4 -0.43155 4
WERE	HUTCHINSON ENERGY CENTER UNIT 4	1	149.1	-0.40249	WERE	JEFFREY ENERGY CENTER UNIT 2	1 470.0 0.03052	-0.43301 4
WERE	HUTCHINSON ENERGY CENTER UNIT 4 HUTCHINSON ENERGY CENTER UNIT 4	1	149.1 149.1	-0.40249		JEFFREY ENERGY CENTER UNIT 3 LAWRENCE ENERGY CENTER UNIT 4	1 60.0 0.01766	-0.43301 4 -0.42015 4
WERE	HUTCHINSON ENERGY CENTER UNIT 4 HUTCHINSON ENERGY CENTER UNIT 4	1	149.1 149.1	-0.40249 -0.40249	WERE	LAWRENCE ENERGY CENTER UNIT 5 TECUMSEH ENERGY CENTER UNIT 7	1 225.8 0.0185 1 40.0 0.02012	-0.42099 4 -0.42261 4
	HUTCHINSON ENERGY CENTER UNIT 4 HUTCHINSON ENERGY CENTER UNIT 4	1	149.1 149.1	-0.40249 -0.40249	WERE	TECUMSEH ENERGY CENTER UNIT 8 EVANS ENERGY CENTER UNIT 2	1 48.0 0.02012 1 110.0 -0.00031	-0.42261 4 -0.40218 4
WERE	HUTCHINSON ENERGY CENTER UNIT 4	1	149.1	-0.40249	WERE	WACO	1 18.0 -0.0029	-0.39959 4
	HUTCHINSON ENERGY CENTER UNIT 4 HUTCHINSON ENERGY CENTER UNIT 4	1	149.1 149.1	-0.40249 -0.40249	WERE WERE	CITY OF WELLINGTON CITY OF WINFIELD	1 14.3 -0.00185 1 24.6 -0.00114	-0.40064 4 -0.40135 4
WERE WERE	HUTCHINSON ENERGY CENTER UNIT 4 HUTCHINSON ENERGY CENTER UNIT 4	1	149.1 149.1	-0.40249 -0.40249	WERE WERE	CHANUTE GENERATION SUB	1 24.5 0.00261 1 20.0 0.00261	-0.4051 4 -0.4051 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 1	1	52.0	-0.40222	WERE	JEFFREY ENERGY CENTER UNIT 1	1 470.0 0.02906	-0.43128 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 1 HUTCHINSON ENERGY CENTER GAS TURBINE 1	1	52.0 52.0		WERE	JEFFREY ENERGY CENTER UNIT 2 JEFFREY ENERGY CENTER UNIT 3	1 470.0 0.03052 1 470.0 0.03052	-0.43274 4 -0.43274 4
	HUTCHINSON ENERGY CENTER GAS TURBINE 1 HUTCHINSON ENERGY CENTER GAS TURBINE 1	1	52.0 52.0	-0.40222	WERE	LAWRENCE ENERGY CENTER UNIT 4 LAWRENCE ENERGY CENTER UNIT 5	1 60.0 0.01766 1 225.8 0.0185	-0.41988 4 -0.42072 4
	HUTCHINSON ENERGY CENTER GAS TURBINE 1 HUTCHINSON ENERGY CENTER GAS TURBINE 1	1	52.0 52.0	-0.40222	WERE	TECUMSEH ENERGY CENTER UNIT 7 TECUMSEH ENERGY CENTER UNIT 8	1 40.0 0.02012 1 48.0 0.02012	-0.42234 4 -0.42234 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 1	1	52.0	-0.40222	WERE	EVANS ENERGY CENTER UNIT 2	1 110.0 -0.00031	-0.40191 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 1 HUTCHINSON ENERGY CENTER GAS TURBINE 1	1	52.0 52.0	-0.40222 -0.40222	WERE	WACO CITY OF WELLINGTON	1 18.0 -0.0029 1 14.3 -0.00185	-0.39932 4 -0.40037 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 1 HUTCHINSON ENERGY CENTER GAS TURBINE 1	1	52.0 52.0	-0.40222	WERE	CITY OF WINFIELD CHANUTE GENERATION SUB	1 24.6 -0.00114 1 24.5 0.00261	-0.40108 4 -0.40483 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 1	1	52.0	-0.40222	WERE	CITY OF ERIE	1 20.0 0.00261	-0.40483 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 2 HUTCHINSON ENERGY CENTER GAS TURBINE 2	1	50.0 50.0	-0.40222	WERE WERE	JEFFREY ENERGY CENTER UNIT 1 JEFFREY ENERGY CENTER UNIT 2	1 470.0 0.02906 1 470.0 0.03052	-0.43128 4 -0.43274 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 2 HUTCHINSON ENERGY CENTER GAS TURBINE 2	1	50.0 50.0	-0.40222	WERE	JEFFREY ENERGY CENTER UNIT 3 LAWRENCE ENERGY CENTER UNIT 4	1 470.0 0.03052 1 60.0 0.01766	-0.43274 4 -0.41988 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 2	1	50.0 50.0	-0.40222	WERE	LAWRENCE ENERGY CENTER UNIT 5	1 225.8 0.0185	-0.42072 4 -0.42234 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 2 HUTCHINSON ENERGY CENTER GAS TURBINE 2	1	50.0	-0.40222	WERE	TECUMSEH ENERGY CENTER UNIT 7 TECUMSEH ENERGY CENTER UNIT 8	1 48.0 0.02012	-0.42234 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 2 HUTCHINSON ENERGY CENTER GAS TURBINE 2	1	50.0 50.0	-0.40222 -0.40222	WERE	EVANS ENERGY CENTER UNIT 2 WACO	1 110.0 -0.00031 1 18.0 -0.0029	-0.40191 4 -0.39932 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 2 HUTCHINSON ENERGY CENTER GAS TURBINE 2	1	50.0 50.0	-0.40222	WERE	CITY OF WELLINGTON CITY OF WINFIELD	1 14.3 -0.00185 1 24.6 -0.00114	-0.40037 4 -0.40108 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 2	1	50.0	-0.40222	WERE	CHANUTE GENERATION SUB	1 24.5 0.00261	-0.40483 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 2 HUTCHINSON ENERGY CENTER GAS TURBINE 3	1	50.0 52.0		WERE	CITY OF ERIE JEFFREY ENERGY CENTER UNIT 1	1 20.0 0.00261 1 470.0 0.02906	-0.40483 4 -0.43128 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 3 HUTCHINSON ENERGY CENTER GAS TURBINE 3	1	52.0 52.0	-0.40222 -0.40222	WERE	JEFFREY ENERGY CENTER UNIT 2 JEFFREY ENERGY CENTER UNIT 3	1 470.0 0.03052 1 470.0 0.03052	-0.43274 4 -0.43274 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 3	1	52.0	-0.40222	WERE	LAWRENCE ENERGY CENTER UNIT 4	1 60.0 0.01766	-0.41988 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 3 HUTCHINSON ENERGY CENTER GAS TURBINE 3	1	52.0 52.0	-0.40222 -0.40222	WERE	LAWRENCE ENERGY CENTER UNIT 5 TECUMSEH ENERGY CENTER UNIT 7	1 225.8 0.0185 1 40.0 0.02012	-0.42072 4 -0.42234 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 3 HUTCHINSON ENERGY CENTER GAS TURBINE 3	1	52.0 52.0	-0.40222 -0.40222	WERE	TECUMSEH ENERGY CENTER UNIT 8 EVANS ENERGY CENTER UNIT 2	1 48.0 0.02012 1 110.0 -0.00031	-0.42234 4 -0.40191 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 3	1	52.0	-0.40222	WERE	WACO	1 18.0 -0.0029	-0.39932 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 3 HUTCHINSON ENERGY CENTER GAS TURBINE 3	1	52.0 52.0	-0.40222		CITY OF WELLINGTON CITY OF WINFIELD	1 14.3 -0.00185 1 24.6 -0.00114	-0.40037 4 -0.40108 4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 3 HUTCHINSON ENERGY CENTER GAS TURBINE 3	1	52.0 52.0	-0.40222 -0.40222	WERE	CHANUTE GENERATION SUB CITY OF ERIE	1 24.5 0.00261 1 20.0 0.00261	-0.40483 4 -0.40483 4
WERE	HUTCHINSON ENERGY CENTER GAS TRUBINE 4	1	78.0	-0.40222	WERE	JEFFREY ENERGY CENTER UNIT 1	1 470.0 0.02906	-0.43128 4
WERE	HUTCHINSON ENERGY CENTER GAS TRUBINE 4 HUTCHINSON ENERGY CENTER GAS TRUBINE 4	1	78.0 78.0	-0.40222	WERE	JEFFREY ENERGY CENTER UNIT 2 JEFFREY ENERGY CENTER UNIT 3	1 470.0 0.03052	-0.43274 4 -0.43274 4
	HUTCHINSON ENERGY CENTER GAS TRUBINE 4 HUTCHINSON ENERGY CENTER GAS TRUBINE 4	1	78.0 78.0		WERE	LAWRENCE ENERGY CENTER UNIT 4 LAWRENCE ENERGY CENTER UNIT 5	1 60.0 0.01766 1 225.8 0.0185	-0.41988 4 -0.42072 4
WERE	HUTCHINSON ENERGY CENTER GAS TRUBINE 4 HUTCHINSON ENERGY CENTER GAS TRUBINE 4 HUTCHINSON ENERGY CENTER GAS TRUBINE 4	1	78.0	-0.40222	WERE	TECUMSEH ENERGY CENTER UNIT 7 TECUMSEH ENERGY CENTER UNIT 7	1 40.0 0.02012 1 48.0 0.02012	-0.42234 4 -0.42234 4
WERE	HUTCHINSON ENERGY CENTER GAS TRUBINE 4	1	78.0	-0.40222	WERE	EVANS ENERGY CENTER UNIT 2	1 110.0 -0.00031	-0.40191 4
WERE	HUTCHINSON ENERGY CENTER GAS TRUBINE 4 HUTCHINSON ENERGY CENTER GAS TRUBINE 4	1	78.0 78.0		WERE WERE	WACO CITY OF WELLINGTON	1 18.0 -0.0029 1 14.3 -0.00185	-0.39932 4 -0.40037 4
WERE	HUTCHINSON ENERGY CENTER GAS TRUBINE 4 HUTCHINSON ENERGY CENTER GAS TRUBINE 4	1	78.0	-0.40222	WERE	CITY OF WINFIELD CHANUTE GENERATION SUB	1 24.6 -0.00114	-0.40108 4 -0.40483 4
WERE	HUTCHINSON ENERGY CENTER GAS TRUBINE 4	1	78.0	-0.40222	WERE	CITY OF ERIE	1 20.0 0.00261	-0.40483 4
WERE	PAWNEE (KMEA Municipal Larned) PAWNEE (KMEA Municipal Larned)	KL KL		-0.21424 -0.21424	WERE	JEFFREY ENERGY CENTER UNIT 1 JEFFREY ENERGY CENTER UNIT 2	1 470.0 0.02906 1 470.0 0.03052	-0.2433 7 -0.24476 7
WERE	PAWNEE (KMEA Municipal Larned)	KL		-0.21424	WERE	JEFFREY ENERGY CENTER UNIT 3	1 470.0 0.03052	-0.24476 7
WERE	PAWNEE (KMEA Municipal Larned) PAWNEE (KMEA Municipal Larned)	KL KL		-0.21424 -0.21424	WERE	LAWRENCE ENERGY CENTER UNIT 4 LAWRENCE ENERGY CENTER UNIT 5	1 225.8 0.0185	-0.2319 8 -0.23274 8
NERE	PAWNEE (KMEA Municipal Larned) PAWNEE (KMEA Municipal Larned)	KL KL		-0.21424 -0.21424	WERE	TECUMSEH ENERGY CENTER UNIT 7 TECUMSEH ENERGY CENTER UNIT 8	1 40.0 0.02012 1 48.0 0.02012	-0.23436 8 -0.23436 8
WERE	PAWNEE (KMEA Municipal Larned) PAWNEE (KMEA Municipal Larned)	KL		-0.21424 -0.21424	WERE	EVANS ENERGY CENTER UNIT 2 WACO	1 110.0 -0.00031 1 18.0 -0.0029	-0.21393 8 -0.21134 8
WERE	PAWNEE (KMEA Municipal Larned)	KL		-0.21424	WERE	CITY OF WELLINGTON	1 14.3 -0.00185	-0.21239 8
WERE	PAWNEE (KMEA Municipal Lamed) PAWNEE (KMEA Municipal Lamed)	KL KL		-0.21424 -0.21424		CITY OF WINFIELD CHANUTE GENERATION SUB	1 24.6 -0.00114 1 24.5 0.00261	-0.2131 8 -0.21685 8
WERE								

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

Upgrade: N/A Limiting Facility: NORTH AMERICAN PHILIPS JUNCTION (SOUTH) - WEST MCPHERSON 115KV CKT 1 Direction: From-To Line Outage: EAST MCPHERSON - SUMMIT 230KV CKT 1 Flowgate: 57374574391568725867312210WP Date Redispatch Nt 12/1/09-4/1/10

Reservation	Relief Amount	Aggregate Relief Amount									
610383 Source Control	0.9	0.9	Maximum		Sink Control			Maximum Decrement			Redispatch
Area	Source LYONS (KMEA Municipal Sterling)	Source Id KS	(MW)	GSF -0.22463	Area	Sink JEFFREY ENERGY CENTER UNIT 1	Sink Id	(MW) 470.0	GSF 0.01351	Factor -0.23814	Amount (MW)
WERE	LYONS (KMEA Municipal Sterling) LYONS (KMEA Municipal Sterling)	KS		-0.22463	WERE	JEFFREY ENERGY CENTER UNIT 2 JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.01419	-0.23882	4
WERE	LYONS (KMEA Municipal Sterling) LYONS (KMEA Municipal Sterling)	KS		-0.22463	WERE	LAWRENCE ENERGY CENTER UNIT 4 LAWRENCE ENERGY CENTER UNIT 5	1	60.0	0.00821 0.00861	-0.23284 -0.23324	4
WERE	LYONS (KMEA Municipal Sterling) LYONS (KMEA Municipal Sterling)	KS		-0.22463	WERE	TECUMSEH ENERGY CENTER UNIT 7 TECUMSEH ENERGY CENTER UNIT 8	1	40.0	0.00935	-0.23398 -0.23398	4
WERE	LYONS (KMEA Municipal Sterling) LYONS (KMEA Municipal Sterling)	KS		-0.22463 -0.22463		EVANS ENERGY CENTER UNIT 2	1	110.0	-0.00935 -0.00015 -0.00135	-0.223398 -0.22448 -0.22328	4
WERE	LYONS (KMEA Municipal Sterling)	KS		-0.22463	WERE	CITY OF WELLINGTON	1	14.3	-0.00086	-0.22377	4
WERE WERE WERE	LYONS (KMEA Municipal Sterling) LYONS (KMEA Municipal Sterling) LYONS (KMEA Municipal Sterling)	KS KS		-0.22463 -0.22463 -0.22463	WERE	CITY OF WINFIELD CHANUTE GENERATION SUB CITY OF FRIE	1	24.6 24.5 20.0	-0.00053	-0.2241 -0.22584 -0.22584	4 4 4 4
WERE	RICE COUNTY (KMEA Municipal Ellinwood)	KS KE KE		-0.21594	WERE	JEFFREY ENERGY CENTER UNIT 1 JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.00121 0.01351 0.01419	-0.22945	4
WERE	RICE COUNTY (KMEA Municipal Ellinwood) RICE COUNTY (KMEA Municipal Ellinwood) RICE COUNTY (KMEA Municipal Ellinwood)	KE KE		-0.21594 -0.21594 -0.21594	WERE	JEFFREY ENERGY CENTER UNIT 2 JEFFREY ENERGY CENTER UNIT 3 LAWRENCE ENERGY CENTER UNIT 4	1	470.0 470.0 60.0	0.01419 0.00821	-0.23013 -0.23013 -0.22415	4
WERE	RICE COUNTY (KMEA Municipal Ellinwood)	KE		-0.21594	WERE	LAWRENCE ENERGY CENTER UNIT 5	1	225.8	0.00861	-0.22455	4
WERE WERE	RICE COUNTY (KMEA Municipal Ellinwood) RICE COUNTY (KMEA Municipal Ellinwood)	KE KE		-0.21594 -0.21594	WERE	TECUMSEH ENERGY CENTER UNIT 7 TECUMSEH ENERGY CENTER UNIT 8 EVANS ENERGY CENTER UNIT 2	1	40.0 48.0	0.00935	-0.22529 -0.22529	4
WERE	RICE COUNTY (KMEA Municipal Ellinwood) RICE COUNTY (KMEA Municipal Ellinwood)	KE KE		-0.21594 -0.21594	WERE	WACO	1	110.0 18.0	-0.00015 -0.00135	-0.21579 -0.21459	4
WERE	RICE COUNTY (KMEA Municipal Ellinwood) RICE COUNTY (KMEA Municipal Ellinwood) RICE COUNTY (KMEA Municipal Ellinwood)	KE KE		-0.21594 -0.21594	WERE	CITY OF WELLINGTON CITY OF WINFIELD	1	14.3 24.6	-0.00086	-0.21508 -0.21541	4
WERE	RICE COUNTY (KMEA Municipal Ellinwood) RICE COUNTY (KMEA Municipal Ellinwood)	KE KE		-0.21594 -0.21594	WERE	CHANUTE GENERATION SUB CITY OF ERIE	1	24.5 20.0	0.00121	-0.21715 -0.21715	4
WERE	HUTCHINSON ENERGY CENTER UNIT 1 HUTCHINSON ENERGY CENTER UNIT 1	1	18.0 18.0	-0.18686 -0.18686	WERE	JEFFREY ENERGY CENTER UNIT 1 JEFFREY ENERGY CENTER UNIT 2	1	470.0 470.0	0.01351 0.01419	-0.20037 -0.20105	4
WERE WERE	HUTCHINSON ENERGY CENTER UNIT 1 HUTCHINSON ENERGY CENTER UNIT 2	1	18.0	-0.18686	WERE	JEFFREY ENERGY CENTER UNIT 3 JEFFREY ENERGY CENTER UNIT 1	1	470.0 470.0	0.01419	-0.20105	4
WERE WERE	HUTCHINSON ENERGY CENTER UNIT 2 HUTCHINSON ENERGY CENTER UNIT 2	1	18.0	-0.18686	WERE	JEFFREY ENERGY CENTER UNIT 2 JEFFREY ENERGY CENTER UNIT 3	1	470.0 470.0	0.01419	-0.20105 -0.20105	4
WERE	HUTCHINSON ENERGY CENTER UNIT 3 HUTCHINSON ENERGY CENTER UNIT 3	1	31.0 31.0	-0.18686 -0.18686	WERE	JEFFREY ENERGY CENTER UNIT 1 JEFFREY ENERGY CENTER UNIT 2	1	470.0 470.0	0.01351 0.01419	-0.20037 -0.20105	4
WERE	HUTCHINSON ENERGY CENTER UNIT 3 HUTCHINSON ENERGY CENTER UNIT 4	1	31.0 149.1	-0.18686 -0.18717		JEFFREY ENERGY CENTER UNIT 3 JEFFREY ENERGY CENTER UNIT 1	1	470.0 470.0	0.01419	-0.20105 -0.20068	4
WERE	HUTCHINSON ENERGY CENTER UNIT 4 HUTCHINSON ENERGY CENTER UNIT 4	1	149.1 149.1	-0.18717		JEFFREY ENERGY CENTER UNIT 2 JEFFREY ENERGY CENTER UNIT 3	1	470.0 470.0	0.01419	-0.20136 -0.20136	4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 1 HUTCHINSON ENERGY CENTER GAS TURBINE 1	1	52.0 52.0	-0.18704 -0.18704		JEFFREY ENERGY CENTER UNIT 1 JEFFREY ENERGY CENTER UNIT 2	1	470.0 470.0	0.01351 0.01419	-0.20055 -0.20123	4
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 1 HUTCHINSON ENERGY CENTER GAS TURBINE 2	1	52.0 50.0	-0.18704	WERE	JEFFREY ENERGY CENTER UNIT 3 JEFFREY ENERGY CENTER UNIT 1	1	470.0 470.0	0.01419 0.01351	-0.20123 -0.20055	4
WERE WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 2 HUTCHINSON ENERGY CENTER GAS TURBINE 2	1	50.0 50.0	-0.18704 -0.18704		JEFFREY ENERGY CENTER UNIT 2 JEFFREY ENERGY CENTER UNIT 3	1	470.0 470.0	0.01419 0.01419	-0.20123 -0.20123	4
WERE WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 3 HUTCHINSON ENERGY CENTER GAS TURBINE 3	1	52.0 52.0	-0.18704 -0.18704		JEFFREY ENERGY CENTER UNIT 1 JEFFREY ENERGY CENTER UNIT 2	1	470.0 470.0	0.01351 0.01419	-0.20055 -0.20123	4
WERE WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 3 HUTCHINSON ENERGY CENTER GAS TRUBINE 4	1	52.0 78.0	-0.18704 -0.18704		JEFFREY ENERGY CENTER UNIT 3 JEFFREY ENERGY CENTER UNIT 1	1	470.0 470.0	0.01419	-0.20123 -0.20055	4
WERE	HUTCHINSON ENERGY CENTER GAS TRUBINE 4 HUTCHINSON ENERGY CENTER GAS TRUBINE 4	1	78.0 78.0	-0.18704 -0.18704	WERE	JEFFREY ENERGY CENTER UNIT 2 JEFFREY ENERGY CENTER UNIT 3	1	470.0 470.0	0.01419	-0.20123 -0.20123	4
WERE WERE	BPU - CITY OF MCPHERSON STEAM PLANT BPU - CITY OF MCPHERSON STEAM PLANT	1	27.0 27.0			JEFFREY ENERGY CENTER UNIT 1 JEFFREY ENERGY CENTER UNIT 2	1	470.0 470.0	0.01351 0.01419	-0.25618 -0.25686	4
WERE	BPU - CITY OF MCPHERSON STEAM PLANT BPU - CITY OF MCPHERSON STEAM PLANT	1	27.0 27.0	-0.24267 -0.24267	WERE	JEFFREY ENERGY CENTER UNIT 3 LAWRENCE ENERGY CENTER UNIT 4	1	470.0 60.0	0.01419	-0.25686 -0.25088	4
WERE	BPU - CITY OF MCPHERSON STEAM PLANT BPU - CITY OF MCPHERSON STEAM PLANT	1	27.0 27.0	-0.24267 -0.24267	WERE	LAWRENCE ENERGY CENTER UNIT 5 TECUMSEH ENERGY CENTER UNIT 7	1	225.8 40.0	0.00861	-0.25128 -0.25202	4
WERE WERE WERE	BPU - CITY OF MCPHERSON STEAM PLANT BPU - CITY OF MCPHERSON STEAM PLANT BPU - CITY OF MCPHERSON STEAM PLANT	1 1 1	27.0 27.0 27.0	-0.24267 -0.24267 -0.24267	WERE	TECUMSEH ENERGY CENTER UNIT 8 EVANS ENERGY CENTER UNIT 2 WACO	1	48.0 110.0 18.0	0.00935 -0.00015 -0.00135	-0.25202 -0.24252 -0.24132	4 4 4
WERE	BPU - CITY OF MCPHERSON STEAM PLANT BPU - CITY OF MCPHERSON STEAM PLANT	1	27.0	-0.24267 -0.24267	WERE	CITY OF WELLINGTON CITY OF WINFIELD	1	14.3	-0.00086	-0.24181 -0.24214	4
WERE	BPU - CITY OF MCPHERSON STEAM PLANT BPU - CITY OF MCPHERSON STEAM PLANT	1	27.0 27.0	-0.24267 -0.24267	WERE	CHANUTE GENERATION SUB CITY OF ERIE	1	24.5 20.0	0.00121	-0.24388 -0.24388	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 1 BPU - CITY OF MCPHERSON GAS TURBINE 1	1	51.0	-0.24267 -0.24267	WERE	JEFFREY ENERGY CENTER UNIT 1 JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.01351	-0.25618 -0.25686	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 1 BPU - CITY OF MCPHERSON GAS TURBINE 1	1	51.0 51.0	-0.24267		JEFFREY ENERGY CENTER UNIT 3 LAWRENCE ENERGY CENTER UNIT 4	1	470.0	0.01419 0.00821	-0.25686 -0.25088	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 1 BPU - CITY OF MCPHERSON GAS TURBINE 1	1	51.0 51.0	-0.24267	WERE	LAWRENCE ENERGY CENTER UNIT 5 TECUMSEH ENERGY CENTER UNIT 7	1	225.8 40.0	0.00861	-0.25128	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 1 BPU - CITY OF MCPHERSON GAS TURBINE 1	1	51.0 51.0	-0.24267 -0.24267	WERE	TECUMSEH ENERGY CENTER UNIT 8 EVANS ENERGY CENTER UNIT 2	1	48.0	0.00935	-0.25202 -0.24252	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 1 BPU - CITY OF MCPHERSON GAS TURBINE 1	1	51.0 51.0	-0.24267 -0.24267	WERE	WACO CITY OF WELLINGTON	1	18.0	-0.00135	-0.24132 -0.24181	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 1 BPU - CITY OF MCPHERSON GAS TURBINE 1	1	51.0 51.0	-0.24267 -0.24267	WERE	CITY OF WINFIELD CHANUTE GENERATION SUB	1	24.6 24.5	-0.00053	-0.24214 -0.24388	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 1 BPU - CITY OF MCPHERSON GAS TURBINE 1 BPU - CITY OF MCPHERSON GAS TURBINE 2	1	51.0 52.0	-0.24267	WERE	CITY OF ERIE JEFFREY ENERGY CENTER UNIT 1	1	20.0	0.00121 0.01351	-0.24388 -0.25618	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 2 BPU - CITY OF MCPHERSON GAS TURBINE 2	1	52.0 52.0	-0.24267	WERE	JEFFREY ENERGY CENTER UNIT 2 JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.01419	-0.25686 -0.25686	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 2 BPU - CITY OF MCPHERSON GAS TURBINE 2	1	52.0 52.0	-0.24267	WERE	LAWRENCE ENERGY CENTER UNIT 4 LAWRENCE ENERGY CENTER UNIT 5	1	60.0	0.00821	-0.25088 -0.25128	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 2 BPU - CITY OF MCPHERSON GAS TURBINE 2	1	52.0 52.0	-0.24267	WERE	TECUMSEH ENERGY CENTER UNIT 7 TECUMSEH ENERGY CENTER UNIT 8	1	40.0	0.00935	-0.25202 -0.25202	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 2 BPU - CITY OF MCPHERSON GAS TURBINE 2 BPU - CITY OF MCPHERSON GAS TURBINE 2	1	52.0 52.0		WERE	EVANS ENERGY CENTER UNIT 2 WACO	1	110.0	-0.00015	-0.24252 -0.24132	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 2 BPU - CITY OF MCPHERSON GAS TURBINE 2	1	52.0 52.0	-0.24267	WERE	CITY OF WELLINGTON CITY OF WINFIELD	1	14.3	-0.00086	-0.24182 -0.24181 -0.24214	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 2 BPU - CITY OF MCPHERSON GAS TURBINE 2	1	52.0 52.0	-0.24267	WERE	CHANUTE GENERATION SUB	1	24.5	0.00121	-0.24388 -0.24388	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 3 BPU - CITY OF MCPHERSON GAS TURBINE 3	1	50.0 50.0	-0.24267	WERE	JEFFREY ENERGY CENTER UNIT 1 JEFFREY ENERGY CENTER UNIT 2	1	470.0	0.01351 0.01419	-0.25618 -0.25686	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 3 BPU - CITY OF MCPHERSON GAS TURBINE 3	1	50.0 50.0		WERE	JEFFREY ENERGY CENTER UNIT 3 LAWRENCE ENERGY CENTER UNIT 4	1	470.0	0.01419 0.00821	-0.25686 -0.25088	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 3 BPU - CITY OF MCPHERSON GAS TURBINE 3	1	50.0 50.0		WERE	LAWRENCE ENERGY CENTER UNIT 5 TECUMSEH ENERGY CENTER UNIT 7	1	225.8 40.0	0.00861	-0.25128	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 3 BPU - CITY OF MCPHERSON GAS TURBINE 3	1	50.0 50.0	-0.24267 -0.24267	WERE	TECUMSEH ENERGY CENTER UNIT 8 EVANS ENERGY CENTER UNIT 2	1	40.0	0.00935	-0.25202 -0.25202 -0.24252	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 3 BPU - CITY OF MCPHERSON GAS TURBINE 3	1	50.0 50.0	-0.24267	WERE	WACO CITY OF WELLINGTON	1	18.0	-0.00135	-0.24132 -0.24181	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 3 BPU - CITY OF MCPHERSON GAS TURBINE 3	1	50.0	-0.24267	WERE	CITY OF WINFIELD CHANUTE GENERATION SUB	1	24.6	-0.00053	-0.24181 -0.24214 -0.24388	4 4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 3 BPU - CITY OF MCPHERSON GAS TURBINE 4	1	50.0 50.0 79.0		WERE	CITY OF ERIE JEFFREY ENERGY CENTER UNIT 1	1	24.3 20.0 470.0		-0.24388 -0.25	4
WERE WERE	BPU - CITY OF MCPHERSON GAS TURBINE 4 BPU - CITY OF MCPHERSON GAS TURBINE 4 BPU - CITY OF MCPHERSON GAS TURBINE 4	1	79.0 79.0 79.0	-0.23649 -0.23649 -0.23649	WERE	JEFFREY ENERGY CENTER UNIT 1 JEFFREY ENERGY CENTER UNIT 2 JEFFREY ENERGY CENTER UNIT 3	1	470.0 470.0 470.0	0.01351 0.01419 0.01419	-0.25 -0.25068 -0.25068	4 4 4 4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 4 BPU - CITY OF MCPHERSON GAS TURBINE 4 BPU - CITY OF MCPHERSON GAS TURBINE 4	1	79.0	-0.23649 -0.23649 -0.23649	WERE	LAWRENCE ENERGY CENTER UNIT 4 LAWRENCE ENERGY CENTER UNIT 4	1	60.0 225.8	0.00821 0.00861	-0.25068 -0.2447 -0.2451	4 4 4 4
WERE WERE	BPU - CITY OF MCPHERSON GAS TURBINE 4 BPU - CITY OF MCPHERSON GAS TURBINE 4 BPU - CITY OF MCPHERSON GAS TURBINE 4	1	79.0 79.0 79.0	-0.23649	WERE	TECUMSEH ENERGY CENTER UNIT 5 TECUMSEH ENERGY CENTER UNIT 7 TECUMSEH ENERGY CENTER UNIT 8	1	225.8 40.0 48.0	0.00861 0.00935 0.00935	-0.2451 -0.24584 -0.24584	4 4 4 4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 4	1	79.0	-0.23649	WERE	EVANS ENERGY CENTER UNIT 2	1	110.0	-0.00015	-0.23634	4 4 4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 4 BPU - CITY OF MCPHERSON GAS TURBINE 4	1	79.0 79.0	-0.23649 -0.23649	WERE	WACO CITY OF WELLINGTON	1	18.0 14.3	-0.00135 -0.00086	-0.23514 -0.23563	4

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WERE	BPU - CITY OF MCPHERSON GAS TURBINE 4	1	79.0	-0.23649		CITY OF WINFIELD	1	24.6	-0.00053	-0.23596	4
WERE	BPU - CITY OF MCPHERSON GAS TURBINE 4 BPU - CITY OF MCPHERSON GAS TURBINE 4	1	79.0 79.0	-0.23649 -0.23649	WERE	CHANUTE GENERATION SUB CITY OF ERIE	1	24.5 20.0	0.00121	-0.2377 -0.2377	4
THE RE			Maximum	0.20048	Sink			Maximum	0.00121	-0.2311	4
Source Control			Increment		Control			Decrement			Redispatch
Area	Source	Source Id	(MW)	GSF	Area	Sink	Sink Id	(MW)	GSF	Factor	Amount (MW)
WERE	HUTCHINSON ENERGY CENTER UNIT 1	1	18.0	-0.18686	WERE	LAWRENCE ENERGY CENTER UNIT 4	1	60.0	0.00821	-0.19507	5
WERE	HUTCHINSON ENERGY CENTER UNIT 1 HUTCHINSON ENERGY CENTER UNIT 1	1	18.0	-0.18686	WERE	LAWRENCE ENERGY CENTER UNIT 5 TECUMSEH ENERGY CENTER UNIT 7	1	225.8 40.0	0.00861	-0.19547 -0.19621	5
WERE	HUTCHINSON ENERGY CENTER UNIT 1	1	18.0	-0.18686		TECUMSEH ENERGY CENTER UNIT 8	1	48.0	0.00935	-0.19621	5
WERE	HUTCHINSON ENERGY CENTER UNIT 1	1	18.0	-0.18686		EVANS ENERGY CENTER UNIT 2	1	110.0	-0.00015		5
WERE	HUTCHINSON ENERGY CENTER UNIT 1 HUTCHINSON ENERGY CENTER UNIT 1	1	18.0	-0.18686		WACO	1	18.0	-0.00135		5
WERE	HUTCHINSON ENERGY CENTER UNIT 1	1	18.0	-0.18686	WERE	CITY OF WELLINGTON	1	14.3	-0.00086	-0.186	5
WERE	HUTCHINSON ENERGY CENTER UNIT 1 HUTCHINSON ENERGY CENTER UNIT 1	1	18.0	-0.18686 -0.18686		CITY OF WINFIELD CHANUTE GENERATION SUB	1	24.6 24.5	-0.00053 0.00121		5
WERE	HUTCHINSON ENERGY CENTER UNIT 1	1	18.0	-0.18686		CITY OF ERIE	1	24.3	0.00121		5
WERE	HUTCHINSON ENERGY CENTER UNIT 2	1	18.0	-0.18686		LAWRENCE ENERGY CENTER UNIT 4	1	60.0	0.00821		5
WERE	HUTCHINSON ENERGY CENTER UNIT 2	1	18.0	-0.18686		LAWRENCE ENERGY CENTER UNIT 5	1	225.8	0.00861	-0.19547	5
WERE	HUTCHINSON ENERGY CENTER UNIT 2	1	18.0	-0.18686	WERE	TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.00935	-0.19621	5
WERE	HUTCHINSON ENERGY CENTER UNIT 2 HUTCHINSON ENERGY CENTER UNIT 2	1	18.0 18.0	-0.18686 -0.18686	WERE	TECUMSEH ENERGY CENTER UNIT 8 EVANS ENERGY CENTER UNIT 2	1	48.0 110.0	0.00935	-0.19621 -0.18671	5
WERE	HUTCHINSON ENERGY CENTER UNIT 2	1	18.0	-0.18686	WERE	WACO	1	18.0	-0.00135	-0.18551	5
WERE	HUTCHINSON ENERGY CENTER UNIT 2	1	18.0	-0.18686	WERE	CITY OF WELLINGTON	1	14.3	-0.00086	-0.186	5
WERE	HUTCHINSON ENERGY CENTER UNIT 2	1	18.0	-0.18686	WERE	CITY OF WINFIELD	1	24.6	-0.00053	-0.18633	5
WERE	HUTCHINSON ENERGY CENTER UNIT 2	1	18.0	-0.18686		CHANUTE GENERATION SUB	1	24.5	0.00121		5
WERE	HUTCHINSON ENERGY CENTER UNIT 2	1	18.0	-0.18686 -0.18686		CITY OF ERIE	1	20.0	0.00121	-0.18807 -0.19507	5
WERE	HUTCHINSON ENERGY CENTER UNIT 3 HUTCHINSON ENERGY CENTER UNIT 3 HUTCHINSON ENERGY CENTER UNIT 3	1	31.0	-0.18686		LAWRENCE ENERGY CENTER UNIT 4	1	225.8	0.00821	-0.19507	5
WERE	HUTCHINSON ENERGY CENTER UNIT 3	1	31.0	-0.18686		LAWRENCE ENERGY CENTER UNIT 5 TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.00935	-0.19547	5
WERE	HUTCHINSON ENERGY CENTER UNIT 3	1	31.0	-0.18686	WERE	TECUMSEH ENERGY CENTER UNIT 8	1	48.0	0.00935	-0.19621	5
WERE	HUTCHINSON ENERGY CENTER UNIT 3	1	31.0	-0.18686	WERE	EVANS ENERGY CENTER UNIT 2	1	110.0	-0.00015	-0.18671	5
WERE	HUTCHINSON ENERGY CENTER UNIT 3 HUTCHINSON ENERGY CENTER UNIT 3 HUTCHINSON ENERGY CENTER UNIT 3	1	31.0	-0.18686		WACO	1	18.0	-0.00135	-0.18551	5
WERE	HUTCHINSON ENERGY CENTER UNIT 3	1	31.0 31.0	-0.18686 -0.18686	WERE	CITY OF WELLINGTON CITY OF WINFIELD	1	14.3 24.6	-0.00086 -0.00053	-0.186 -0.18633	5
WERE	HUTCHINSON ENERGY CENTER UNIT 3 HUTCHINSON ENERGY CENTER UNIT 3	1	31.0	-0.18686	WERE	CHANUTE GENERATION SUB	1	24.6	0.00053	-0.18633	5
WERE	HUTCHINSON ENERGY CENTER UNIT 3	1	31.0	-0.18686	WERE	CITY OF ERIE	1	20.0	0.00121	-0.18807	5
WERE	HUTCHINSON ENERGY CENTER UNIT 4 HUTCHINSON ENERGY CENTER UNIT 4	1	149.1	-0.18717	WERE	LAWRENCE ENERGY CENTER UNIT 4	1	60.0	0.00821	-0.19538	5
WERE	HUTCHINSON ENERGY CENTER UNIT 4	1	149.1	-0.18717	WERE	LAWRENCE ENERGY CENTER UNIT 5	1	225.8	0.00861		5
WERE	HUTCHINSON ENERGY CENTER UNIT 4	1	149.1	-0.18717	WERE	TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.00935	-0.19652	5
WERE	HUTCHINSON ENERGY CENTER UNIT 4 HUTCHINSON ENERGY CENTER UNIT 4	1	149.1 149.1	-0.18717 -0.18717	WERE	TECUMSEH ENERGY CENTER UNIT 8	1	48.0 110.0	0.00935	-0.19652	5
	HUTCHINSON ENERGY CENTER UNIT 4 HUTCHINSON ENERGY CENTER UNIT 4	1	149.1	-0.18717		EVANS ENERGY CENTER UNIT 2 WACO	1	18.0	-0.00015 -0.00135	-0.18702 -0.18582	5
	HUTCHINSON ENERGY CENTER UNIT 4	1	149.1	-0.18717		CITY OF WELLINGTON	1	14.3	-0.00086	-0.18631	5
	HUTCHINSON ENERGY CENTER UNIT 4	1	149.1	-0.18717	WERE	CITY OF WINFIELD	1	24.6			5
WERE	HUTCHINSON ENERGY CENTER UNIT 4	1	149.1	-0.18717		CHANUTE GENERATION SUB	1	24.5	0.00121	-0.18838	5
WERE	HUTCHINSON ENERGY CENTER UNIT 4	1	149.1	-0.18717		CITY OF ERIE	1	20.0	0.00121		5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 1 HUTCHINSON ENERGY CENTER GAS TURBINE 1	1	52.0 52.0	-0.18704 -0.18704		LAWRENCE ENERGY CENTER UNIT 4 LAWRENCE ENERGY CENTER UNIT 5	1	60.0 225.8	0.00821		5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 1	1	52.0	-0.18704		TECHNSEH ENERGY CENTER UNIT 7	1	40.0	0.00935		5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 1	1	52.0	-0.18704		TECUMSEH ENERGY CENTER UNIT 7 TECUMSEH ENERGY CENTER UNIT 8	1	48.0	0.00935		5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 1	1	52.0	-0.18704	WERE	EVANS ENERGY CENTER UNIT 2	1	110.0	-0.00015	-0.18689	5
	HUTCHINSON ENERGY CENTER GAS TURBINE 1	1	52.0	-0.18704		WACO	1	18.0	-0.00135	-0.18569	5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 1	1	52.0	-0.18704		CITY OF WELLINGTON	1	14.3	-0.00086		5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 1 HUTCHINSON ENERGY CENTER GAS TURBINE 1	1	52.0 52.0	-0.18704 -0.18704		CITY OF WINFIELD CHANUTE GENERATION SUB	1	24.6 24.5	-0.00053	-0.18651 -0.18825	5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 1	1	52.0	-0.18704		CITY OF ERIE	1	24.3	0.00121	-0.18825	5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 2	1	50.0	-0.18704		LAWRENCE ENERGY CENTER UNIT 4	1	60.0	0.00821	-0.19525	5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 2	1	50.0	-0.18704	WERE	LAWRENCE ENERGY CENTER UNIT 5	1	225.8	0.00861	-0.19565	5
	HUTCHINSON ENERGY CENTER GAS TURBINE 2	1	50.0	-0.18704	WERE	TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.00935		5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 2	1	50.0	-0.18704	WERE	TECUMSEH ENERGY CENTER UNIT 8	1	48.0	0.00935	-0.19639	5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 2	1	50.0 50.0	-0.18704 -0.18704	WERE	EVANS ENERGY CENTER UNIT 2 WACO	1	110.0 18.0	-0.00015		5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 2 HUTCHINSON ENERGY CENTER GAS TURBINE 2	1	50.0	-0.18704		CITY OF WELLINGTON	1	14.3	-0.00135	-0.18569 -0.18618	5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 2	1	50.0	-0.18704	WERE	CITY OF WINFIELD	1	24.6	-0.00053		5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 2	1	50.0	-0.18704	WERE	CHANUTE GENERATION SUB	1	24.5	0.00121	-0.18825	5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 2 HUTCHINSON ENERGY CENTER GAS TURBINE 3 HUTCHINSON ENERGY CENTER GAS TURBINE 3	1	50.0	-0.18704		CITY OF FRIE	1	20.0	0.00121	-0.18825	5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 3	1	52.0 52.0	-0.18704 -0.18704		LAWRENCE ENERGY CENTER UNIT 4 LAWRENCE ENERGY CENTER UNIT 5	1	60.0 225.8	0.00821		5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 3	1	52.0	-0.18704		TECUMSEH ENERGY CENTER UNIT 5	1	225.8	0.00861		d 8
WERE	HUTCHINGON ENERGY CENTER GAS TURBINE 3 HUTCHINSON ENERGY CENTER GAS TURBINE 3 HUTCHINSON ENERGY CENTER GAS TURBINE 3 HUTCHINSON ENERGY CENTER GAS TURBINE 3	1	52.0	-0.18704		TECUMSEH ENERGY CENTER UNIT 8	1	40.0	0.00935		5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 3	1	52.0	-0.18704	WERE	EVANS ENERGY CENTER UNIT 2	1	110.0	-0.00015	-0.18689	5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 3	1	52.0	-0.18704	WERE	WACO	1	18.0	-0.00135		5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 3	1	52.0	-0.18704		CITY OF WELLINGTON	1	14.3	-0.00086		5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 3 HUTCHINSON ENERGY CENTER GAS TURBINE 3	1	52.0 52.0	-0.18704 -0.18704		CITY OF WINFIELD CHANUTE GENERATION SUB	1	24.6 24.5	-0.00053 0.00121		5
WERE	HUTCHINSON ENERGY CENTER GAS TURBINE 3	1	52.0		WERE	CITY OF ERIE	1	20.0	0.00121	-0.18825	5
WERE	HUTCHINSON ENERGY CENTER GAS TRUBINE 4	1	78.0	-0.18704	WERE	LAWRENCE ENERGY CENTER UNIT 4	1	60.0	0.00821	-0.19525	5
WERE	HUTCHINSON ENERGY CENTER GAS TRUBINE 4	1	78.0	-0.18704	WERE	LAWRENCE ENERGY CENTER UNIT 5	1	225.8	0.00861	-0.19565	5
WERE	HUTCHINSON ENERGY CENTER GAS TRUBINE 4	1	78.0	-0.18704	WERE	TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.00935	-0.19639	5
WERE	HUTCHINSON ENERGY CENTER GAS TRUBINE 4	1	78.0	-0.18704	WERE	TECUMSEH ENERGY CENTER UNIT 8	1	48.0 110.0	0.00935	-0.19639	5
WERE	HUTCHINSON ENERGY CENTER GAS TRUBINE 4 HUTCHINSON ENERGY CENTER GAS TRUBINE 4	1	78.0	-0.18704 -0.18704	WERE	EVANS ENERGY CENTER UNIT 2 WACO	1	110.0	-0.00015 -0.00135	-0.18689 -0.18569	5
WERE	HUTCHINSON ENERGY CENTER GAS TRUBINE 4	1	78.0	-0.18704	WERE	CITY OF WELLINGTON	1	14.3	-0.00086	-0.18618	5
	HUTCHINSON ENERGY CENTER GAS TRUBINE 4	1	78.0	-0.18704	WERE	CITY OF WINFIELD	1	24.6	-0.00053	-0.18651	5
WERE	HUTCHINSON ENERGY CENTER GAS TRUBINE 4	1	78.0	-0.18704		CHANUTE GENERATION SUB	1	24.5	0.00121	-0.18825	5
WERE	HUTCHINSON ENERGY CENTER GAS TRUBINE 4	1	78.0	-0.18704		CITY OF ERIE	1	20.0	0.00121	-0.18825	5
WERE	PAWNEE (KMEA Municipal Larned) PAWNEE (KMEA Municipal Larned)	KL KL		-0.09963	WERE	JEFFREY ENERGY CENTER UNIT 1 JEFFREY ENERGY CENTER UNIT 2	1	470.0 470.0	0.01351	-0.11314 -0.11382	8
WERE	PAWNEE (KMEA Municipal Larned)	KL		-0.09963		JEFFREY ENERGY CENTER UNIT 2 JEFFREY ENERGY CENTER UNIT 3	1	470.0	0.01419		8
WERE	PAWNEE (KMEA Municipal Larned)	KL		-0.09963		LAWRENCE ENERGY CENTER UNIT 4	1	470.0	0.00821	-0.10784	8
WERE	PAWNEE (KMEA Municipal Larned)	KL		-0.09963		LAWRENCE ENERGY CENTER UNIT 5	1	225.8	0.00861	-0.10824	8
WERE	PAWNEE (KMEA Municipal Larned)	KL		-0.09963		TECUMSEH ENERGY CENTER UNIT 7	1	40.0	0.00935	-0.10898	8
WERE	PAWNEE (KMEA Municipal Larned)	KL		-0.09963		TECUMSEH ENERGY CENTER UNIT 8	1	48.0	0.00935	-0.10898	8
WERE	PAWNEE (KMEA Municipal Lamed)	KL		-0.09963	WERE	EVANS ENERGY CENTER UNIT 2	1	110.0	-0.00015	+0.09948	9
WERE	PAWNEE (KMEA Municipal Larned) PAWNEE (KMEA Municipal Larned)	KL KL		-0.09963	WERE	WACO CITY OF WELLINGTON	1	18.0 14.3	-0.00135 -0.00086	-0.09828 -0.09877	9
WERE	PAWNEE (KMEA Municipal Lamed) PAWNEE (KMEA Municipal Lamed)	KL		-0.09963	WERE	CITY OF WINFIELD	1	24.6	-0.00053	-0.09877	9
WERE	PAWNEE (KMEA Municipal Larned)	KL		-0.09963	WERE	CHANUTE GENERATION SUB	1	24.5	0.00121	-0.10084	9
WERE	PAWNEE (KMEA Municipal Larned)	KL		-0.09963	WERE	CITY OF ERIE	1	20.0			9
Maximum Decreme	nt and Maximum Increment were determined from the Souce and Sink O	perating Points	s in the study n	nodels whe	re limiting fa	cility was identified.					

 WERE
 PAWNEE (KMEA Municipal Lamed)
 KL
 -0.09963 [WERE
 CITY OF ERIE

 Maximum Decrement and Maximum Increment were determined 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