

Aggregate Facility Study
SPP-2009-AGP1-AFS-4
For Transmission Service
Requested by
Aggregate Transmission Customers

SPP Engineering, SPP Tariff Studies

SPP AGGREGATE FACILITY STUDY (SPP-2009-AGP1-AFS-4)

January 27, 2010

Page 1 of 47

Table of Contents

1.	Executive Summary	3
2.	Introduction	4
A.	,	7
В.		9
3.	Study Methodology	10
A.	Description	10
В.		
C.	-	
D.	•	
E.		
4.	Study Results	
A.	Study Analysis Results	14
В.		
5.	Conclusion	18
6.	Appendix A	20

1. Executive Summary

Pursuant to Attachment Z1 of the Southwest Power Pool Open Access Transmission Tariff (OATT), 1371 MW of long-term transmission service requests have been restudied in this Aggregate Facility Study (AFS). 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 Z2 provides for facility upgrade cost recovery by stating that "Transmission Customers paying Directly Assigned Upgrade Costs for Service Upgrades or that are in excess of the Safe Harbor Cost Limit for Network Upgrades associated with new or changed Designated Resources and Project Sponsors paying Directly Assigned Upgrade Costs for Sponsored Upgrades shall receive revenue credits in accordance with Attachment Z2. Generation Interconnection Customers paying for Network Upgrades shall receive credits for new transmission service using the facility as specified in Attachment Z1."

The total assigned facility upgrade Engineering and Construction (E &C) cost determined by the AFS is \$42 Million. Additionally an indeterminate amount of assigned E & C cost for 3rd party facility upgrades are assignable to the customer. The total upgrade levelized revenue requirement for all transmission requests is \$104 Million. This is based on full allocation of levelized revenue requirements for upgrades to customers without consideration of base plan funding. AFS data table 3 reflects the allocation of upgrade costs to each request without potential base plan funding based on either the requested reservation period or the deferred reservation period if applicable. Total upgrade levelized revenue requirements for all transmission requests after consideration of potential base plan funding is \$25 Million.

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

The Transmission Provider will tender a Letter of Intent on January 27th, 2010. This will open a 15-day window for Customer response. To remain in the Aggregate Transmission Service Study (ATSS), the Transmission Provider must receive from the Transmission Customer (Customer) by February 11th, 2010, an executed Letter of Intent. The Letter of Intent will list options the Customer must choose to clarify their commitment to remain in the ATSS. The only action required on OASIS is to WITHDRAW the request or leave the request in STUDY mode.

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

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

2. Introduction

On January 21, 2005, the Federal Energy Regulatory Commission accepted Southwest Power Pool's proposed aggregate transmission study procedures in Docket ER05-109 to become effective February 1, 2005. On August 8, 2008, Southwest Power Pool filed with the Federal Energy Regulatory Commission in Docket ER08-1379-000 to pair open seasons closing during

the period January 1, 2008 through January 31, 2010, with an effective date of August 9, 2008. The 2008-AG3 open season commenced on June 1, 2008 and closed September 30, 2008. The 2009-AG1 open season commenced on October 1, 2008 and closed January 31, 2009. Based on the preceding, all requests for long-term transmission service received prior to October 1, 2008 for 2008 AG3 and February 1, 2009 for 2009 AG1 with a signed study agreement have been included in the first paired Aggregate Transmission Service Study (ATSS) of 2009. This report SPP-2009-AGP1-AFS-4 signals the completion of the fourth stage of the AFS.

Approximately 1371 MW of long-term transmission service has been restudied in this Aggregate Facility Study (AFS) with over \$42 Million in transmission upgrades being proposed. The results of the AFS are detailed in Tables 1 through 6. A highly tangible benefit of studying transmission requests aggregately under the SPP OATT Attachment Z1 is the sharing of costs among customers using the same facility. The detailed results show individual upgrade costs by study as well as potential base plan allowances as determined by Attachments J and Z1. The following URL can be used to access the SPP OATT:

(http://www.spp.org/Publications/SPP_Tariff.pdf). In order to understand the extent to which base plan upgrades may be applied to both point-to-point and network transmission services, it is necessary to highlight the definition of Designated Resource. Per Section 1.9a of the SPP OATT, a Designated Resource is "[a]ny designated generation resource owned, purchased or leased by a Transmission Customer to serve load in the SPP Region. Designated Resources do not include any resource, or any portion thereof, that is committed for sale to third parties or otherwise cannot be called upon to meet the Transmission Customer's load on a non-interruptible basis." Therefore, not only network service, but also point-to-point service has potential for base plan funding if the conditions for classifying upgrades associated with designated resources as base plan upgrades as defined in Section III.B of Attachment J are met.

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

- 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 Z1 Section VI.A, Point-to-Point customers pay the higher of the monthly transmission access charge (base rate) or the monthly revenue requirement associated with the assigned facility upgrades including any prepayments for redispatch required during construction.

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

Transmission Customers paying for a directly assigned network upgrade shall receive credits for new transmission service using the facility as specified in Attachment Z2.

Facilities identified as limiting the requested Transmission Service have been reviewed to determine the required in-service date of each Network Upgrade. The year that each Network Upgrade is required to accommodate a request is determined by interpolating between the

applicable model years given the respective loading data. Both previously assigned facilities and the facilities assigned to this request for Transmission Service were evaluated.

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

Some constraints identified in the AFS were not assigned to the Customer as the Transmission Provider determined that upgrades are not required due to various reasons or the Transmission Owner has construction plans pending for these upgrades. These facilities are listed by reservation in Table 3. This table also includes constrained facilities in the current planning horizon that limit the rollover rights of the Transmission Customer. Table 6 lists possible redispatch pairs to allow start of service prior to completion of assigned network upgrades. Table 7 (if applicable) lists deferment of expansion plan projects with different upgrades with the new required in service date as a result of this AFS.

A. Financial Analysis

The AFS utilizes the allocated customer E & C cost in a present worth analysis to determine the monthly levelized revenue requirement of each facility upgrade over the term of the reservation. In some cases, network upgrades cannot be completed within the requested reservation period, thus deferred reservation periods will be utilized in the present worth analysis. If the Customer chose Option 2, Redispatch, in the Letter of Intent sent coincident with the initial AFS, the present worth analysis of revenue requirements will be based on the deferred term with

redispatch in the subsequent AFS. The upgrade levelized revenue requirement includes interest, depreciation, and carrying costs.

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

In the event that the engineering and construction of a previously assigned Network Upgrade may be accelerated, with no additional upgrades, to accommodate a new request for Transmission Service, then the levelized present worth of only the incremental expenses though the reservation period of the new request, excluding depreciation, shall be assigned to the new request. These incremental expenses, excluding depreciation, include 1) the levelized difference in present worth of the engineering and construction expenses given the change in date to complete construction to account for additional interest expense and reduced engineering and construction expense due to inflation, 2) the levelized present worth of all expediting fees, and 3) the levelized present worth of the incremental annual carrying charges, excluding depreciation and interest, during the new reservation period taking into account both a) the reservation in which the project was originally assigned, and b) a reservation, if any, in which the project was previously accelerated.

Achievable Base Plan Avoided Revenue Requirements in the case of a Base Plan upgrade being displaced or deferred by an earlier in service date for a Requested Upgrade shall be determined per Attachment J, Section VII.B methodology. A deferred Base Plan upgrade being defined as a different requested network upgrade needed at an earlier date that negates the need for the initial

base plan upgrade within the planning horizon. A displaced Base Plan upgrade being defined as the same network upgrade being displaced by a requested upgrade needed at an earlier date. Assumption of a 40 year service life is utilized for Base Plan funded projects unless provided otherwise by the Transmission Owner. A present worth analysis of revenue requirements on a common year basis between the Base Plan and Requested Upgrades was performed to determine avoided Base Plan revenue requirements due to the displacement or deferral of the Base Plan upgrade by the Requested Upgrade. The difference in present worth between the Base Plan and Requested Upgrades is assigned to the transmission requests impacting this upgrade based on the displacement or deferral.

B. Third Party Facilities

For third-party facilities listed in Table 3 and Table 5, the Transmission Customer is responsible for funding the necessary upgrades of these facilities per Section 21.1 of the Transmission Provider's OATT. In this AFS, third-party facilities were identified. Total engineering and construction cost estimates for required third-party facility upgrades are indeterminate. The Transmission Provider will undertake reasonable efforts to assist the Transmission Customer in making arrangements for necessary engineering, permitting, and construction of the third-party facilities. Third-party facility upgrade engineering and construction cost estimates are not utilized to determine the present worth value of levelized revenue requirements for SPP system network upgrades.

All modeled facilities within the Transmission Provider system were monitored during the development of this Study as well as certain facilities in first-tier neighboring systems. Third-party facilities must be upgraded when it is determined that they are overloaded while accommodating the requested Transmission Service. An agreement between the Customer and 3rd Party Owner detailing the mitigation of the 3rd party impact must be provided to the Transmission Provider prior to tendering of a Transmission Service Agreement. These facilities

also include those owned by members of the Transmission Provider who have not placed their facilities under the Transmission Provider's OATT. Upgrades on the Southwest Power Administration network requires prepayment of the upgrade cost prior to construction of the upgrade.

Third-party facilities are evaluated for only those requests whose load sinks within the SPP footprint. The Customer must arrange for study of 3rd party facilities for load that sinks outside the SPP footprint with the applicable Transmission Providers.

3. Study Methodology

A. Description

The facility study 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 performed 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 105% and 90%. Transmission Owner voltage monitoring criteria is used if more restrictive. The SPS Tuco 230 kV bus voltage is monitored at 92.5% due to predetermined system stability limitations. The WERE Wolf Creek 345 kV bus voltage is monitored at 103.5% and 98.5% due to transmission operating procedure.

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 115 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, and WAPA. 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 seven seasonal models to study the aggregate transfers of 1371 MW over a variety of requested service periods. The SPP STEP 2009 Build 3 Cases 2010 Summer Peak (10SP), 2010/11 Winter Peak (11WP), 2011 Summer Peak (11SP), 2011/12 Winter Peak (11WP), 2014 Summer Peak (14SP), 2014/15 Winter Peak (14WP), and 2019 Summer Peak (19SP) were used to study the impact of the requested service on the transmission system. The Spring Peak models apply to April and May, the Summer Peak models apply to June through September, the Fall Peak models apply to October and November, and the Winter Peak models apply to December through March.

The chosen base case models were modified to reflect the most current modeling information. Five groups of requests were developed from the aggregate of 1371 MW in order to minimize counter flows among requested service. Each request was included in at least two of the four groups depending on the requested path. All requests were included in group five. From the seven seasonal models, five system scenarios were developed. Scenario 1 includes SWPP

OASIS transmission requests not already included in the SPP 2009 Series Cases flowing in a West to East direction with ERCOTN HVDC Tie South to North, ERCOTE HVDC Tie East to West, SPS exporting, and SPS importing from the Lamar HVDC Tie. Scenario 2 includes transmission requests not already included in the SPP 2009 Series Cases flowing in an East to West direction with ERCOTN HVDC tie North to South, ERCOTE HVDC tie East to West, SPS importing, and SPS exporting to the Lamar HVDC Tie. Scenario 3 includes transmission requests not already included in the SPP 2009 Series Cases flowing in a South to North direction with ERCOTN HVDC tie South to North, ERCOTE HVDC tie East to West, SPS exporting, and SPS exporting to the Lamar HVDC Tie. Scenario 4 includes transmission requests not already included in the SPP 2009 Series Cases flowing in a North to South direction with ERCOTN HVDC tie North to South, ERCOTE HVDC tie East to West, SPS importing, and SPS importing from the Lamar HVDC tie. Scenario 5 include all transmission not already included in the SPP 2009 Series Cases with ERCOTN North to South, ERCOTE East to West, SPS importing and SPS exporting to the Lamar HVDC tie. The system scenarios were developed to minimize counter flows from previously confirmed, higher priority requests not included in the MDWG Base Case.

C. Transmission Request Modeling

Network Integration Transmission Service requests are modeled as Generation to Load transfers in addition to Generation to Generation transfers. The Generation to Load modeling is accomplished by developing a pre-transfer case by redispatching the existing designated network resource(s) down by the new designated network resource request amount and scaling down the applicable network load by the same amount proportionally. The post-transfer case for comparison is developed by scaling the network load back to the forecasted amount and dispatching the new designated network resource being requested. Network Integration Transmission Service requests are modeled as Generation to Load transfers in addition to Generation because the requested Network Integration Transmission Service is a

request to serve network load with the new designated network resource and the impacts on transmission system are determined accordingly. If the Network Integration Transmission Service request application clearly documents that the existing designated network resource(s) is being replaced or undesignated by the new designated network resource then MW impact credits will be given to the request as is done for a redirect of existing transmission service. Point-To-Point Transmission Service requests are modeled as Generation to Generation transfers. Generation to Generation transfers are accomplished by developing a post-transfer case for comparison by dispatching the request source and redispatching the request sink.

D. Transfer Analysis

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

E. <u>Curtailment and Redispatch Evaluation</u>

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

completion of any assigned network upgrades. Curtailment of existing confirmed service is evaluated to provide only interim service. Curtailment of existing confirmed service is only evaluated at the request of the transmission customer.

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

4. Study Results

A. Study Analysis Results

Tables 1 through 6 contain the steady-state analysis results of the AFS. Table 1 identifies the participating long-term transmission service requests included in the AFS. This table lists

deferred start and stop dates both with and without redispatch (based on customer selection of redispatch if available), the minimum annual allocated ATC without upgrades and season of first impact. Table 2 identifies total E & C cost allocated to each Transmission Customer, letter of credit requirements, third party E & C cost assignments, potential base plan E & C funding (lower of allocated E & C or Attachment J Section III B criteria), total revenue requirements for assigned upgrades without consideration of potential base plan funding, point-to-point base rate charge, total revenue requirements for assigned upgrades with consideration of potential base plan funding, and final total cost allocation to the Transmission Customer. In addition, Table 2 identifies SWPA upgrade costs which require prepayment in addition to other allocated costs. 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, credits to be paid for previously assigned AFS or GI network upgrades, and any third party upgrades required. Table 4 lists all upgrade requirements with associated solutions needed to provide transmission service for the AFS, Minimum ATC per upgrade with season of impact, Earliest Date Upgrade is required (DUN), Estimated Date the upgrade will be completed and in service (EOC), and Estimated E & C cost. Table 5 lists identified Third-Party constrained facilities. Table 6 identifies potential redispatch pairs available to relieve the aggregate impacts on identified constraints to prevent deferral of start of service. Table 7 (if applicable) identifies deferred expansion plan projects that were replaced with requested upgrades at earlier dates.

The potential base plan funding allowable is contingent upon meeting each of the conditions for classifying upgrades associated with designated resources as base plan upgrades as defined in Section III.B of Attachment J. If the additional capacity of the new or changed designated resource exceeds the 125% resource to load forecast for the year of start of service, the requested resource is not eligible for base plan funding of required network upgrades and the full cost of the upgrades is assignable to the customer. Additionally, if the request is for wind generation, the

total requested capacity of wind generation plus existing wind generation capacity shall not exceed 20% of the Customer's projected system peak responsibility in the first year the Designated Resource is planned to be used by the Customer. If the 5 year term and 125% resource to load criteria are met, (as well as the 20% wind resource to load criteria for wind generation requests) the requested capacity is multiplied by \$180,000 to determine the potential base plan funding allowable. The Maximum Potential Base Plan Funding Allowable may be less than the potential base plan funding allowable due to the E & C Cost allocated to the customer being lower than the potential amount allowable to the customer. The customer is responsible for any assigned upgrade costs in excess of Potential Base Plan Engineering and Construction Funding Allowable. Network upgrades required for wind generation requests located in a zone other than the customer POD shall be allocated as 67% Base Plan Region wide charge and 33% directly assigned to the customer.

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

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

Example A:

E & C allocated for upgrades is 74 million with revenue requirements of 140 million and PTP base rate of 101 million. Potential base plan funding is 47 million with the difference of 27

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

Example B:

E & C allocated for upgrades is 74 million with revenue requirements of 140 million and PTP base rate of 101 million. Potential base plan funding is 10 million with the difference of 64 million E & C assignable to the customer. If the revenue requirements for this assignable portion is 128 million and the PTP base rate is 101 million the customer will pay the higher "OR" pricing of 128 million revenue requirements to be paid back to the Transmission Owners and the remaining revenue requirements of (140-128) or 12 million will be paid by base plan funding.

Example C:

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

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

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

B. Study Definitions

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

5. Conclusion

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

The Transmission Provider will tender a Letter of Intent on January 27th, 2010. This will open a 15-day window for Customer response. To remain in the Aggregate Transmission Service Study (ATSS), the Transmission Provider must receive from the Transmission Customer (Customer) by February 11th, 2010, an executed Letter of Intent. The Letter of Intent will list options the Customer must choose to clarify their commitment to remain in the ATSS. The only action required on OASIS is to WITHDRAW the request or leave the request in STUDY mode.

The Transmission Provider must receive an unconditional and irrevocable letter of credit in the amount of the total allocated Engineering and Construction costs assigned to the Customer. This letter of credit is not required for those facilities that are base plan funded or funded by Point to Point base rate. 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 notifications to construct network upgrades to the constructing Transmission Owner after filing of necessary service agreements at FERC.

6. Appendix A

PSS/E CHOICES IN RUNNING LOAD FLOW PROGRAM AND ACCC

BASE CASES:	
Solutions - Fixed slo	pe decoupled Newton-Raphson solution (FDNS)
Tap adjustment – Ste	
Area interchange cor	ntrol – Tie lines and loads
Var limits – Apply ir	nmediately
	X Phase shift adjustment
•	Flat start
	Lock DC taps
	Lock switched shunts
ACCC CASES:	
Solutions – AC conti	ngency checking (ACCC)
MW mismatch tolera	ance - 0.5
Contingency case rat	ing – Rate B
Percent of rating – 10	00
Output code – Summ	· ·
•	overload report – 3mw
	rerloads form report – YES
Exclude interfaces fr	-
Perform voltage limi	
	e capacity table – 60000
	available capacity table – 99999.0
_	tg chng for report -0.02
Sorted output – None	2
Newton Solution:	
Tap adjustment – Ste	
	ntrol – Tie lines and loads
Var limits - Apply au	
-	X Phase shift adjustment
·	_ Flat start
	_ Lock DC taps
	_ Lock switched shunts

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

Customer	Study Number	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date without interim redispatch	Deferred Stop Date without interim redispatch	Start Date with interim redispatch	Stop Date with interim redispatch	Minimum Allocated ATC (MW) withing reservation period Season of Minimum Allocated ATC within reservation period
AEPM	AG1-2009-021	1565734		CSWS	101	1/1/2010	1/1/2030	6/1/2013	6/1/2033	5/1/2010	5/1/2030	0 10SP
AEPM	AG1-2009-022	1565735		CSWS	99	1/1/2010	1/1/2030	6/1/2013	6/1/2033	5/1/2010	5/1/2030	0 10SP
AEPM	AG1-2009-027	1567573	CSWS	CSWS	580	6/1/2012	6/1/2022	6/1/2013	6/1/2023	6/1/2012	6/1/2022	0 14SP
KBPU	AG1-2009-017D	1561537	WR	KACY	2	8/1/2009	8/1/2029	5/1/2010	5/1/2030	5/1/2010	5/1/2030	0 10SP
KEPC	AG1-2009-053	1568258	WR	WR	25	10/1/2009	10/1/2029	6/1/2013	6/1/2033	10/1/2012	10/1/2032	0 10SP
KEPC	AG1-2009-054	1568259		WR	7	10/1/2009	10/1/2029	10/31/2010	10/31/2030	5/1/2010	5/1/2030	0 10SP
KEPC	AG1-2009-055	1568260		WR	14	10/1/2009	10/1/2029	10/1/2012	10/1/2032	10/1/2012	10/1/2032	0 10SP
KMEA	AG3-2008-025	1518801	NPPD	KCPL	7	5/1/2009	5/1/2014	5/1/2010	5/1/2015	5/1/2010	5/1/2015	0 09SP
KMEA	AG3-2008-028	1518806		SECI	1	5/1/2009	5/1/2014	5/1/2010	5/1/2015	5/1/2010	5/1/2015	0 09SP
KMEA	AG3-2008-030	1518831	NPPD	SECI	1	5/1/2010	5/1/2015	4/1/2011	4/1/2016	4/1/2011	4/1/2016	0 10SP
KMEA	AG3-2008-033	1518838		WR	1	5/1/2010	5/1/2015	5/1/2010	5/1/2015	5/1/2010	5/1/2015	0 10SP
KMEA	AG3-2008-037	1518842		SECI	5	10/1/2009	10/1/2014	10/1/2012	10/1/2017	10/1/2012	10/1/2017	0 10SP
KMEA	AG3-2008-039	1518845		SECI	1	10/1/2009	10/1/2014	5/1/2010	5/1/2015	5/1/2010	5/1/2015	0 10SP
KMEA	AG1-2009-005	1541894	GRDA	SECI	3	8/1/2009	8/1/2027	4/1/2011	4/1/2029	4/1/2011	4/1/2029	0 10SP
KMEA	AG1-2009-050	1568248		WR	2	1/1/2010	1/1/2015	4/1/2011	4/1/2016	4/1/2011	4/1/2016	0 10SP
KMEA	AG1-2009-056	1568267		SECI	13	5/1/2010	5/1/2015	6/1/2013	6/1/2018	6/1/2013	6/1/2018	0 10SP
KMEA	AG1-2009-056	1568268	SECI	SECI	13	5/1/2010	5/1/2015	6/1/2013	6/1/2018	6/1/2013	6/1/2018	0 10SP
NTEC	AG1-2009-029	1567817		CSWS	335	1/1/2015	1/1/2040	1/1/2015	1/1/2040	1/1/2015	1/1/2040	0 19SP
OMPA	AG1-2009-023	1566503	OKGE	SPA	61	6/1/2010	6/1/2015	6/1/2012	6/1/2017	6/1/2010	6/1/2015	0 10SP
OMPA	AG1-2009-026	1566944		WFEC	10	9/1/2010	9/1/2025	9/1/2010	9/1/2025	9/1/2010	9/1/2025	0 11SP
SPRM	AG1-2009-020	1562368		SPA	25	1/1/2010	1/1/2029	6/1/2014	6/1/2033	5/1/2010	5/1/2029	0 10SP
SPSM	AG3-2008-019	1518657	SPS	SPS	65	6/1/2011	6/1/2031	6/1/2013	6/1/2033	6/1/2013	6/1/2033	0 11SP

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

Customer	Study Number	Reservation	Engineering and Construction Cost of Upgrades Allocated to Customer for Revenue Requirements	¹ Letter of Credit Amount Required	² Potential Base Plan Engineering and Construction Funding Allowable	Notes	⁴ Additional Engineering and Construction Cost for 3rd Party Upgrades	WITHOUT Potential Base Plan Funding Allocation	Term of Reservation WITH Potential Base Plan Funding Allocation	Reservation Period	⁴ Total Cost of Reservation Assignable to Customer Contingent Upon Base Plan Funding
AEPM	AG1-2009-021	1565734					\$ -	\$ 21,055,096			\$ 5,922,973
AEPM	AG1-2009-022	1565735					\$ -	\$ 7,972,905			\$ 175,567
AEPM KBPU	AG1-2009-027 AG1-2009-017D	1567573	\$ 8,690,545	\$	8,690,545	1	\$ -	\$ 20,856,146	•	\$ -	Schedule 9 Charges
KEPC		1561537	\$ 0.000.000	\$ 0.400.000	\$ 4,000,000		\$	\$ 22,339,865	\$ 0.740,000	\$ 484,800	
KEPC	AG1-2009-053	1568258	\$ 6,963,398 \$ 728.890				÷ .	Ψ 22,000,000		\$	\$ 6,748,089
KEPC	AG1-2009-054 AG1-2009-055	1568259 1568260		7	\$ 728,890		, ·	\$ 1,886,655		-	Schedule 9 Charges \$ 4,311,447
KMEA			\$ 4,223,629				\$ -	\$ 13,552,812		\$ -	\$ 4,311,447 Schedule 9 Charges
KMEA	AG1-2009-005	1541894			\$ 18,689	1	, ·	\$ 53,000		\$ 007,000	
	AG1-2009-050	1568248			\$	/	\$ -	\$ 29,558			
KMEA	AG1-2009-056	1568267	\$ 3,374,739		\$ 2,340,000		\$ -	\$ 5,931,614			\$ 1,818,710
KMEA	AG1-2009-056	1568268	\$ 3,382,782	\$	\$	6	\$ -	\$ 5,948,954	,,		\$ 5,948,954
KMEA	AG3-2008-025	1518801	\$	\$.	\$		\$ -	\$.	\$	\$ -	Schedule 9 Charges
KMEA	AG3-2008-028	1518806			\$		\$ -	\$ 1,777			
KMEA	AG3-2008-030	1518831	\$ 9,496	\$ \$	9,496		\$ -	\$ 16,461	•	\$.	Schedule 9 Charges
KMEA	AG3-2008-033	1518838		\$.	\$		\$ -	\$	\$	\$ 143,940	
KMEA	AG3-2008-037	1518842	\$ 462,689		462,689		\$ -	\$ 871,139		\$ -	Schedule 9 Charges
KMEA	AG3-2008-039	1518845	\$ 1,064		\$		\$	\$ 1,777		\$ 266,102	
NTEC	AG1-2009-029	1567817	\$ 289,843	3 \$	- \$ 289,843		Indeterminate			\$ -	Schedule 9 Charges
OMPA	AG1-2009-023	1566503		\$	- \$		\$ -	\$	\$	\$ -	Schedule 9 Charges
OMPA	AG1-2009-026	1566944	\$ 50,000	<u> </u>	- \$ 50,000		\$	\$ 107,517	•	\$ -	Schedule 9 Charges
SPRM	AG1-2009-020	1562368		- \$	- \$		Indeterminate		\$ -	- \$ -	Schedule 9 Charges
SPSM	AG3-2008-019	1518657	\$ 694,837		\$ 694,837		\$	\$ 2,172,405		\$ -	Schedule 9 Charges
Grand Total			\$ 41,709,833	3	\$ 30,833,674			\$ 104,269,910	\$ 24,958,852		

Note 1: Letter of Credit required for financial security for transmission owner for network upgrades is determined by allocated engineering and construction costs less engineering and construction costs for upgrades when network customer is the transmission owner less the E & C allocation of expedited projects. Letter of Credit is not required for upgrades fully funded by PTP base rate or base plabased on meeting OATT Attachment J requirements for base plan funding.

based on meeting OATT Attachment J requirements for base plan funding.

Note 2: If potential base plan funding is applicable, this value is the lesser of the Engineering and Construction costs of assignable upgrades or the value of base plan funding calculated pursuant to Attachment J, Section III B criteria. Allocation of base plan funding is contingent upon verification of customer agreements meeting Attachment J, Section III B criteria. Not applicable if Point-to-Point base rate exceeds revenue requirements.

Note 3: Revenue Requirements (RR) are based upon deferred end dates if applicable. Deferred dates are based upon customer's choice to pursue redispatch. Achievable Base Plan Avoided RR in the case of a Base P upgrade being displaced or deferred by an earlier in service date for a Requested Upgrade shall be determined per Attachment J, Section VII.C methodology. Assumption of a 40 year service life is utilized for Base Plan funded projects. A present worth analysis of RR on a common year basis between the Base Plan and Requested Upgrades was performed to determine avoided Base Plan RR due to the displacement or deferral. If the displacement nor recremental increases in present worth of a Requested Upgrade s was increased in present worth of a Requested Upgrade is assigned to the transmission requestes impacting the upgrade by the upgrade is assigned to the transmission requestes impacting the upgrade by the upgrade the upgrade cost is made due to the displacement to an earlier start date.

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

Outstitler is responsible for regulating redupation costs if applicable. Outstitler is also responsible to pay clears on previously assigned upgrades that are impacted by their request and the impacted by their request if another request that shares the upgrade is now full base plan funded resulting in a different RR.

Note 5: RR with base plan funding may increase or decrease even if no base plan funding is applicable to a particular request if another request that shares the upgrade is now full base plan funded resulting in a different RR.

Note 6: Mutually Exclusive with Request 1568267.

Note 7: Insufficient Data to determine base plan funding potential for this request. Note 8: Request subsequently withdrawn

Customer Study Number AEPM AG1-2009-021

						Requested	Date Without		Plan Funding	Point-to-Point		Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Stop Date	Redispatch	Redispatch	Allowable	Base Rate	C Cost	Requirements
AEPM	1565734	WFEC	CSWS	101	1/1/2010	1/1/2030	6/1/2013	6/1/2033	\$ 7,014,622	\$ -	\$ 9,937,289	\$ 21,055,181
									\$ 7,014,622	\$ -	\$ 9.937,289	\$ 21,055,181

					Base Plan	Directly			
			Earliest Service	Redispatch	Funding for	Assigned for	Allocated E & C	Total E & C	Total Revenue
Reservation Upgrade Name	DUN	EOC	Date	Available	Wind	Wind	Cost	Cost	Requirements
1565734 CACHE4 138.00 - PARADISE 138KV CKT 1	6/1/2015	6/1/2015			\$ 5,258,667	\$ 2,629,333	\$ 7,888,000	\$ 7,888,000	\$ 15,978,123
EASTON REC - PIRKEY 138KV CKT 1	6/1/2012	6/1/2012			\$ 195,987	\$ -	\$ 195,987	\$ 2,000,000	\$ 558,175
G03-05T 138.00 - PARADISE 138KV CKT 1	6/1/2015	6/1/2015			\$ 586,667	\$ 293,333	\$ 880,000	\$ 880,000	\$ 1,790,797
RIVERSIDE STATION - TULSA POWER STATION 138KV CKT 1	6/1/2012	6/1/2012			\$ 45,299	\$ -	\$ 45,299	\$ 800,000	\$ 135,438
SOUTHWEST SHREVEPORT - SPRINGRIDGE PAN-HARR REC 138KV CKT 1	6/1/2012	6/1/2013		Yes	\$ 651,409	\$ -	\$ 651,409	\$ 7,200,000	\$ 1,819,902
TEXAS EASTMAN - WHITNEY 138KV CKT 1	6/1/2012	6/1/2013		Yes	\$ 276,594	\$ -	\$ 276,594	\$ 2,800,000	\$ 772,746
				Total	\$ 7.014.622	\$ 2,922,667	\$ 0,037,280	\$ 21.568.000	\$ 21,055,181

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.											
				Earliest Service	Redispatch						
Reservation	Upgrade Name	DUN	EOC	Date	Available						
1565734	RUSSETT - RUSSETT 138KV CKT 1 OKGE	12/1/2011	12/1/2011								

Reliability Projects - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.										
				Earliest Service	Redispatch					
Reservation	Upgrade Name	DUN	EOC	Date	Available					
1565734	ALTUS SW - NAVAJO 69KV CKT 1	6/1/2015	6/1/2015							
	FARMERS ELECTRIC REC-CLOVIS - FRIODRW1 115.00 115KV CKT 1	6/1/2015	6/1/2015							
	FRIO-DRAW - POTTER 345 KV	6/1/2015	6/1/2015							
	POTTER - ANADARKO 345 KV	6/1/2015	6/1/2015							

Credits may be	required for the following network upgrades directly assigned to transmission customers in previous a	ggregate stud	y.		
				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1565734	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345 KV WFEC	7/1/2012	7/1/2012		
	HUGO POWER PLANT 345/138KV TRANSFORMER CKT 1	7/1/2012	7/1/2012		
	NORTHWEST - WOODWARD 246KV CKT 1	1/1/2010	1/1/2010		

Customer Study Number AEPM AG1-2009-022

Customer	Reservation	POR		Requested Amount	Requested Start Date	Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
				Alliount								
AEPM	1565735	CSWS	CSWS	99	1/1/2010	1/1/2030	6/1/2013	6/1/2033	\$ 2,794,063	\$ -	\$ 2,865,934	\$ 7,973,138

						Base Plan	Directly			
				Earliest Service	Redispatch	Funding for	Assigned for	Allocated E & C	Total E & C	Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Wind	Wind	Cost	Cost	Requirements
1565735	BOWERS INTERCHANGE 115/69KV TRANSFORMER CKT 2 Accelerated	6/1/2014	6/1/2014			\$ 61,691	\$ 30,846	\$ 92,537	\$ 410,449	\$ 220,839
	CHERRY6 230.00 - Harrington Station East Bus 230KV CKT 1	6/1/2011	6/1/2013		Yes	\$ 82,050	\$ 41,025	\$ 123,075	\$ 500,000	\$ 305,908
	EASTON REC - PIRKEY 138KV CKT 1	6/1/2012	6/1/2012			\$ 425,256	\$ -	\$ 425,256	\$ 2,000,000	\$ 1,211,139
	RIVERSIDE STATION - TULSA POWER STATION 138KV CKT 1	6/1/2012	6/1/2012			\$ 96,289	\$ -	\$ 96,289	\$ 800,000	\$ 287,891
	SOUTHWEST SHREVEPORT - SPRINGRIDGE PAN-HARR REC 138KV CKT 1	6/1/2012	6/1/2013		Yes	\$ 1,532,925	\$ -	\$ 1,532,925	\$ 7,200,000	\$ 4,282,675
	TEXAS EASTMAN - WHITNEY 138KV CKT 1	6/1/2012	6/1/2013		Yes	\$ 595,852	\$ -	\$ 595,852	\$ 2,800,000	\$ 1,664,687
					Total	\$ 2,794,063	\$ 71.871	\$ 2,865,934	\$ 13 710 449	\$ 7,973,138

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

| Earliest Service|Redispatch

Reservation	Upgrade Name	DUN	EOC	Date	Available
1565735	RUSSETT - RUSSETT 138KV CKT 1 OKGE	12/1/2011	12/1/2011		

				Earliest Service	Redispatch
	Upgrade Name	DUN	EOC	Date	Available
1565735	CHERRY SUB 230/115 KV TRANSFORMER CKT 1	6/1/2017	6/1/2017		
	FARMERS ELECTRIC REC-CLOVIS - FRIODRW1 115.00 115KV CKT 1	6/1/2015	6/1/2015		
	FRIO-DRAW - POTTER 345 KV	6/1/2015	6/1/2015		
	HASTINGS 115 KV CONVERSION	6/1/2011	6/1/2013		Yes
	NEWHART INTERCHANGE PROJECT	6/1/2011	6/1/2013		Yes
	NICHOLS - RANDALL - AMARILLO SOUTH 230 KV CKT 1	6/1/2011	6/1/2013		
	POTTER - ANADARKO 345 KV	6/1/2015	6/1/2015		
	RANDALL 230/115 KV TRANSFORMER CKT 2	6/1/2011	6/1/2013		Yes
	STILWELL - WEST GARDNER 345KV CKT 1	6/1/2012	6/1/2012		

Construction P	ending - The requested service is contingent upon completion of the following upgrades. Cost is not as	ssignable to th	e transmissio	n customer.	
				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1565735	NORTHWEST INTERCHANGE - SUNSET SUB 115KV CKT 1	6/1/2017	6/1/2017		

Credits may be	required for the following network upgrades directly assigned to transmission customers in previous a	iggregate stud			
				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1565735	BANN - RED SPRINGS REC 138KV CKT 1	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345 KV WFEC	7/1/2012			
	HUGO POWER PLANT 345/138KV TRANSFORMER CKT 1	7/1/2012	7/1/2012		
	NORTHWEST - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 1	1/1/2010	1/1/2010	· · ·	· ·
	WOODWARD - WOODWARD EHV 138KV CKT 2	1/1/2010	1/1/2010		
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010		

Customer Study Number AEPM AG1-2009-027

Customer	Reservation	POR				Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
AEPM	1567573	CSWS	CSWS	580	6/1/2012	6/1/2022	6/1/2013	6/1/2023	\$ 8,690,545	\$ -	\$ 8,690,545	\$ 20,856,662
									\$ 8,690,545	\$ -	\$ 8,690,545	\$ 20,856,662

				Earliest Service	Redispatch	Allo	cated E & C	Tot	al E & C	Tot	tal Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cos	t	Cos	t	Req	quirements
1567573	EASTON REC - PIRKEY 138KV CKT 1	6/1/2012	6/1/2012			\$	1,378,757	\$	2,000,000	\$	3,353,762
	RIVERSIDE STATION - TULSA POWER STATION 138KV CKT 1	6/1/2012	6/1/2012			\$	368,569	\$	800,000	\$	941,176
	SOUTHWEST SHREVEPORT - SPRINGRIDGE PAN-HARR REC 138KV CKT 1	6/1/2012	6/1/2013		Yes	\$	5,015,666	\$	7,200,000	\$	11,963,914
	TEXAS EASTMAN - WHITNEY 138KV CKT 1	6/1/2012	6/1/2013		Yes	\$	1,927,553	4	2,800,000	\$	4,597,810
					Total	\$	8 690 545	Ś	12 800 000	\$	20.856.662

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

					Earliest Service	Redispatch
Reservation	Upgrade Name		DUN	EOC	Date	Available
1567573	FARMERS ELECTRIC REC-CLOVIS - FRIODRW1 115.00	115KV CKT 1	6/1/2015	6/1/2015		
	FRIO-DRAW - POTTER 345 KV		6/1/2015	6/1/2015		
	POTTER - ANADARKO 345 KV		6/1/2015	6/1/2015		

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

					Earliest Service	Redispatch
	Reservation	Upgrade Name	DUN	EOC	Date	Available
ſ	1567573	ARCADIA - REDBUD 345KV CKT 3	6/1/2018	6/1/2018		
ſ		ARCADIA (ARCADIA2) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2012	6/1/2013		Yes
ſ		BROKEN ARROW NORTH - SOUTH TAP - ONETA 138KV CKT 1	6/1/2015	6/1/2015		
ſ		BRYANT - MEMORIAL 138KV CKT 1	6/1/2012	6/1/2019		

	BRYANT - MEMORIAL 138KV CKT 1	6/1/2012	6/1/2019		
Credits may be	required for the following network upgrades directly assigned to transmission customers in previous a	iggregate stud	ty.		
				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1567573	BANN - RED SPRINGS REC 138KV CKT 1	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345 KV WFEC	7/1/2012	7/1/2012		
	HUGO POWER PLANT 345/138KV TRANSFORMER CKT 1	7/1/2012	7/1/2012		

Customer KBPU Study Number AG1-2009-017D

Customer	Reservation	POR	POD	Requested Amount		Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
KBPU	1561537	WR	KACY	2	8/1/2009	8/1/2029	5/1/2010	5/1/2030	\$ -	\$ 484,800	\$ -	\$ -

				Earliest Service	Redispatch	Allocated E & C	Total E & C	Total Revenue	
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Cost	Requirements	
1561537	None					\$ -	\$ -	\$	
					Total	\$.	\$.	\$	л.

Expansion Pla	n - The requested service is contingent upon completion of the following upgrades. Cost is not assigna	ble to the tran	smission cust	omer.	
				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1561537	South Harper 161 kV cut-in to Stilwell-Archie JCT 161 kV line	6/1/2010	6/1/2011		

Reliability Proje	cts - The requested service is contingent upon completion of the following upgrades. Cost is not assig	nable to the tr			
				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1561537	PLATTE CITY - SMITHVILLE 161KV CKT 1	6/1/2010	10/1/2010		
	STILWELL - WEST GARDNER 345KV CKT 1	6/1/2012	6/1/2012		
	SUB 124 - AURORA H.T SUB 383 - MONETT 161KV CKT 1	6/1/2015	6/1/2015		

Construction Pe	ending - The requested service is contingent upon completion of the following upgrades. Cost is not a	ssignable to th	e transmissio	n customer.	
				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1561537	KCI - Platte City 161kV Ckt 1	6/1/2010	6/1/2011		
		•			

Credits may be	required for the following network upgrades directly assigned to transmission customers in previous a	ggregate stud	ty.		
				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available

Customer Study Number KEPC AG1-2009-053

Customer	Reservation	POR		Requested Amount	Requested Start Date	Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
KEPC	1568258	WR	WR	25	10/1/2009	10/1/2029	6/1/2013	6/1/2033	\$ 4,860,000	\$ -	\$ 6,963,398	\$ 22,339,865
									\$ 4,860,000	٠.	\$ 6,963,398	\$ 22,339,865

				Earliest Service	Redispatch	Allo	cated E & C	Lota	al E & C	I ot	al Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cos	t	Cost		Req	uirements
1568258	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerated	6/1/2012	6/1/2013			\$	32,867	\$	307,370	\$	112,140
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerated	6/1/2012	6/1/2013			\$	25,991	\$	243,064	\$	87,551
	FLETCHER - HOLCOMB 115KV CKT 1 Accelerated	6/1/2013	6/1/2013			\$	90,906	\$	257,421	\$	287,832
	HARPER - MILAN TAP 138KV CKT 1 #1 Accelerated	6/1/2012	6/1/2012			\$	4,521	\$	42,282	\$	16,990
	JUDSON LARGE - SPEARVILLE 115 KV CKT 2	6/1/2014	6/1/2014			\$	6,809,113	\$	11,981,250	\$	21,835,352
					Total	S	6 963 398	ŝ	12 831 387	S	22 339 865

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1568258	HOLCOMB - PLYMELL 115KV CKT 1	6/1/2010	10/31/2010		Yes
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 MIDW	6/1/2015			
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 WERE	6/1/2015			
	HUNTSVILLE - ST JOHN 115KV CKT 1	6/1/2015	6/1/2015		
	PIONEER TAP - PLYMELL 115KV CKT 1	6/1/2010	10/31/2010		Yes

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1568258	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	6/1/2011	6/1/2013		
	CLINTON JUNCTION - ELK CITY 138KV CKT 1	6/1/2015	6/1/2015		
	FARMERS ELECTRIC REC-CLOVIS - FRIODRW1 115.00 115KV CKT 1	6/1/2015	6/1/2015		
	FRIO-DRAW - POTTER 345 KV	6/1/2015	6/1/2015		
	GILL ENERGY CENTER EAST - GILLJCT2 69.000 69KV CKT 1	6/1/2011			
	HARPER - MILAN TAP 138KV CKT 1 #2	6/1/2015	6/1/2015		
	HEIZER - MULLERGREN 115 KV CKT 1	6/1/2010	6/1/2011	4/1/2011	Yes
	JOHNSON CORNER - PIONEER 115 KV CKT 1	6/1/2015	6/1/2015		
	JOHNSON CORNER 115 KV CAP	6/1/2015	6/1/2015		
	JOHNSON CORNER 115 KV CAP #2	6/1/2015	6/1/2015		
	KINSLEY 115KV Capacitor	6/1/2011	6/1/2011		
	Line - Gill - Interstate 138 kV	6/1/2016	6/1/2016		
	PAWNEE 115KV Capacitor	6/1/2011	6/1/2011		
	POTTER - ANADARKO 345 KV	6/1/2015	6/1/2015		
	STILWELL - WEST GARDNER 345KV CKT 1	6/1/2012	6/1/2012		

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

				Earliest Service	Redispatch
					Available
1568258	JEWELL - SMITH CENTER 115KV CKT 1	6/1/2018	6/1/2018		
	SPEARVILLE - WOLF 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012	Yes
	SPEARVILLE - WOLF 345 KV CKT 1 SUNC	6/1/2010	6/1/2013	10/1/2012	Yes
	WOLF - AXTELL 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012	Yes
	WOLF - AXTELL 345 KV CKT 1 NPPD	6/1/2010	6/1/2013	10/1/2012	Yes
	WOLF 345/230 KV TRANSFORMER	6/1/2010	6/1/2013	10/1/2012	Yes

Planned Projects

Reservation	Upgrade Name	DUN	EOC	Date	Available
1568258	EVANS ENERGY CENTER SOUTH - GODDARD - CLEARWATER 138KV CKT 1	6/1/2010	6/1/2012		Yes

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1568258	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2011	6/1/2013		
	FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	FLATRDG3 138.00 - HARPER 138KV CKT 1	12/1/2009	6/1/2013		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345 KV WFEC	7/1/2012	7/1/2012		
	HUGO POWER PLANT 345/138KV TRANSFORMER CKT 1	7/1/2012	7/1/2012		
	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1	6/1/2006	6/1/2008		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	MEDICINE LODGE - PRATT 115KV CKT 1	12/1/2009	6/1/2013		
	NORTHWEST - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - IODINE 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 2	1/1/2010	1/1/2010		
	WOODWARD 246/128KV TRANSCORMER CKT 1	1/1/2010	1/1/2010		

Customer Study Number KEPC AG1-2009-054

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
KEPC	1568259	WR	WR	7	10/1/2009	10/1/2029	10/31/2010	10/31/2030	\$ 728,890	\$ -	\$ 728,890	\$ 1,886,655
									\$ 728,890	\$ -	\$ 728,890	\$ 1,886,655

				Earliest Service	Redispatch	Allocate	ed E & C	Tota	IE&C	Total	Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Cost		Requi	rements
1568259	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerated	6/1/2012	6/1/2013			\$	7,564	\$	307,370	\$	20,732
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerated	6/1/2012	6/1/2013			\$	5,981	\$	243,064	\$	16,901
	FLETCHER - HOLCOMB 115KV CKT 1 Accelerated	6/1/2013	6/1/2013			\$	33,283	\$	257,421	\$	91,559
	HARPER - MILAN TAP 138KV CKT 1 #1 Accelerated	6/1/2012	6/1/2012			\$	1,040	\$	42,282	\$	3,140
	JUDSON LARGE - SPEARVILLE 115 KV CKT 2	6/1/2014	6/1/2014			\$	681,022	\$	11,981,250	\$	1,754,322
					T-1-1	^	700 000	٩	40 004 007	^	4 000 000

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1568259	HOLCOMB - PLYMELL 115KV CKT 1	6/1/2010	10/31/2010		Yes
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 MIDW	6/1/2015	6/1/2015		
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 WERE	6/1/2015			
	HUNTSVILLE - ST JOHN 115KV CKT 1	6/1/2015	6/1/2015		
	PIONEER TAP - PLYMELL 115KV CKT 1	6/1/2010	10/31/2010		Yes

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1568259	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	6/1/2011			
	CLINTON JUNCTION - ELK CITY 138KV CKT 1	6/1/2015	6/1/2015		
	FARMERS ELECTRIC REC-CLOVIS - FRIODRW1 115.00 115KV CKT 1	6/1/2015	6/1/2015		
	FRIO-DRAW - POTTER 345 KV	6/1/2015	6/1/2015		
	GILL ENERGY CENTER EAST - GILLJCT2 69.000 69KV CKT 1	6/1/2011			
	HARPER - MILAN TAP 138KV CKT 1 #2	6/1/2015	6/1/2015		
	HEIZER - MULLERGREN 115 KV CKT 1	6/1/2010	6/1/2011	4/1/2011	
	JOHNSON CORNER - PIONEER 115 KV CKT 1	6/1/2015	6/1/2015		
	JOHNSON CORNER 115 KV CAP	6/1/2015	6/1/2015		
	JOHNSON CORNER 115 KV CAP #2	6/1/2015	6/1/2015		
	KINSLEY 115KV Capacitor	6/1/2011	6/1/2011		
	Line - Gill - Interstate 138 kV	6/1/2016	6/1/2016		
	PAWNEE 115KV Capacitor	6/1/2011	6/1/2011		
	POTTER - ANADARKO 345 KV	6/1/2015	6/1/2015		
	STILWELL - WEST GARDNER 345KV CKT 1	6/1/2012	6/1/2012		

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1568259	JEWELL - SMITH CENTER 115KV CKT 1	6/1/2018	6/1/2018		
	SPEARVILLE - WOLF 345 KV CKT 1 MIDW	6/1/2010			
	SPEARVILLE - WOLF 345 KV CKT 1 SUNC	6/1/2010	6/1/2013	10/1/2012	
	WOLF - AXTELL 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012	
	WOLF - AXTELL 345 KV CKT 1 NPPD	6/1/2010	6/1/2013	10/1/2012	
	WOLE 345/230 KV TRANSFORMER	6/1/2010	6/1/2013	10/1/2012	

Planned Projects

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1568259	EVANS ENERGY CENTER SOUTH - GODDARD - CLEARWATER 138KV CKT 1	6/1/2010	6/1/2012		

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1568259	FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	MEDICINE LODGE - PRATT 115KV CKT 1	12/1/2009	6/1/2013		
	NORTHWEST - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

Customer Study Number KEPC AG1-2009-055

Customer	Reservation	POR		Requested Amount	Requested Start Date	Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue
KEPC	1568260	WR	WR	14	10/1/2009		10/1/2012				\$ 4,223,629	
									\$ 2,880,000	\$ -	\$ 4,223,629	\$ 13,552,812

				Earliest Service	Redispatch	Allo	cated E & C	Lota	I E & C	I ot	al Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cos	it	Cost		Req	uirements
1568260	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerated	6/1/2012	6/1/2013			\$	28,485	\$	307,370	\$	97,189
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerated	6/1/2012	6/1/2013			\$	22,526	\$	243,064	\$	75,879
	FLETCHER - HOLCOMB 115KV CKT 1 Accelerated	6/1/2013	6/1/2013			\$	76,466	\$	257,421	\$	242,111
	HARPER - MILAN TAP 138KV CKT 1 #1 Accelerated	6/1/2012	6/1/2012			\$	3,918	\$	42,282	\$	14,724
	JUDSON LARGE - SPEARVILLE 115 KV CKT 2	6/1/2014	6/1/2014			\$	4,092,234	\$	11,981,250	\$	13,122,909
					Total	S	4 223 629	ŝ	12 831 387	S	13.552.812

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1568260	HOLCOMB - PLYMELL 115KV CKT 1	6/1/2010	10/31/2010		Yes
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 MIDW	6/1/2015	6/1/2015		
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 WERE	6/1/2015			
	HUNTSVILLE - ST JOHN 115KV CKT 1	6/1/2015	6/1/2015		
	PIONEER TAP - PLYMELL 115KV CKT 1	6/1/2010	10/31/2010		Yes

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1568260	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	6/1/2011	6/1/2013		
	CLINTON JUNCTION - ELK CITY 138KV CKT 1	6/1/2015	6/1/2015		
	FARMERS ELECTRIC REC-CLOVIS - FRIODRW1 115.00 115KV CKT 1	6/1/2015	6/1/2015		
	FRIO-DRAW - POTTER 345 KV	6/1/2015	6/1/2015		
	GILL ENERGY CENTER EAST - GILLJCT2 69.000 69KV CKT 1	6/1/2011	6/1/2013		
	HARPER - MILAN TAP 138KV CKT 1 #2	6/1/2015	6/1/2015		
	HEIZER - MULLERGREN 115 KV CKT 1	6/1/2010	6/1/2011	4/1/2011	Yes
	JOHNSON CORNER - PIONEER 115 KV CKT 1	6/1/2015	6/1/2015		
	JOHNSON CORNER 115 KV CAP	6/1/2015	6/1/2015		
	JOHNSON CORNER 115 KV CAP #2	6/1/2015	6/1/2015		
	KINSLEY 115KV Capacitor	6/1/2011	6/1/2011		
	Line - Gill - Interstate 138 kV	6/1/2016	6/1/2016		
	PAWNEE 115KV Capacitor	6/1/2011	6/1/2011		
	POTTER - ANADARKO 345 KV	6/1/2015	6/1/2015		
	STILWELL - WEST GARDNER 345KV CKT 1	6/1/2012	6/1/2012		

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

				Earliest Service	Redispatch
Reservation					Available
1568260	JEWELL - SMITH CENTER 115KV CKT 1	6/1/2018	6/1/2018		
	SPEARVILLE - WOLF 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012	Yes
	SPEARVILLE - WOLF 345 KV CKT 1 SUNC	6/1/2010	6/1/2013	10/1/2012	Yes
	WOLF - AXTELL 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012	Yes
	WOLF - AXTELL 345 KV CKT 1 NPPD	6/1/2010	6/1/2013	10/1/2012	Yes
	WOLF 345/230 KV TRANSFORMER	6/1/2010	6/1/2013	10/1/2012	Yes

Planned Projects

Reservation	Upgrade Name	DUN	EOC	Date	Available
1568260	EVANS ENERGY CENTER SOUTH - GODDARD - CLEARWATER 138KV CKT 1	6/1/2010	6/1/2012		Yes

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

| Earliest Service|Redispatch

Reservation	Upgrade Name	DUN	EOC	Date	Available
1568260	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2011	6/1/2013		
	FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345 KV WFEC	7/1/2012	7/1/2012		
	HUGO POWER PLANT 345/138KV TRANSFORMER CKT 1	7/1/2012	7/1/2012		
	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1	6/1/2006	6/1/2008		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	MEDICINE LODGE - PRATT 115KV CKT 1	12/1/2009	6/1/2013		
	NORTHWEST - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - IODINE 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 2	1/1/2010	1/1/2010		
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010		

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
KMEA	1541894	GRDA	SECI	3	8/1/2009	8/1/2027	4/1/2011	4/1/2029	\$ 18,689	\$ -	\$ 18,689	\$ 53,000
									\$ 18,689		\$ 18,689	\$ 53,000

				Earliest Service	Redispatch	Allocate	dE&C	Total F	- & C	Total Revenu	Je
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Cost		Requirements	s
1541894	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerated	6/1/2012	6/1/2013			\$	9,692	\$	307,370	\$ 27,0)34
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerated	6/1/2012	6/1/2013			\$	7,664	\$	243,064	\$ 21,8	371
	HARPER - MILAN TAP 138KV CKT 1 #1 Accelerated	6/1/2012	6/1/2012			\$	1,333	\$	42,282	\$ 4,0)95
	•		•		Total	\$	18,689	\$	592,716	\$ 53,0	000

Expansion Plan - 7	The requested service is contir	gent upon completion of t	he following upgrades. O	Cost is not assignable to	the transmission customer.

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1541894	AFTON (AFTAUTO1) 161/69/13.8KV TRANSFORMER CKT 1	6/1/2010	6/1/2011		
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 MIDW	6/1/2015	6/1/2015		
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 WERE	6/1/2015	6/1/2015		
	HUNTSVILLE - ST JOHN 115KV CKT 1	6/1/2015	6/1/2015		

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

				Earliest Service	Redispatch
		DUN	EOC	Date	Available
1541894	AFTON - FAIRLAND EDE TAP 69KV CKT 1	12/1/2014	12/1/2014		
	BROOKLINE - SUMMIT 345 kV CKT 1	6/1/2012	6/1/2014		
	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	6/1/2011	6/1/2013		
	FARMERS ELECTRIC REC-CLOVIS - FRIODRW1 115.00 115KV CKT 1	6/1/2015	6/1/2015		
	FRIO-DRAW - POTTER 345 KV	6/1/2015	6/1/2015		
	HARPER - MILAN TAP 138KV CKT 1 #2	6/1/2015	6/1/2015		
	HEIZER - MULLERGREN 115 KV CKT 1	6/1/2010	6/1/2011	4/1/2011	
	JOHNSON CORNER - PIONEER 115 KV CKT 1	6/1/2015	6/1/2015		
	JOHNSON CORNER 115 KV CAP	6/1/2015	6/1/2015		
	JOHNSON CORNER 115 KV CAP #2	6/1/2015	6/1/2015		
	KINSLEY 115KV Capacitor	6/1/2011	6/1/2011		
	Multi - Stateline - Joplin - Reinmiller conversion	6/1/2015	6/1/2015		
	PAWNEE 115KV Capacitor	6/1/2011	6/1/2011		
	POTTER - ANADARKO 345 KV	6/1/2015	6/1/2015		
	PRYOR JUNCTION (PRY-JCT1) 115/69/13.8KV TRANSFORMER CKT 1	6/1/2011	6/1/2012		

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1541894	ARCADIA - REDBUD 345KV CKT 3	6/1/2018	6/1/2018		
	BARTLESVILLE SOUTHEAST - NORTH BARTLESVILLE 138KV CKT 1	12/1/2010	6/1/2011		
	EAST MANHATTAN - JEFFREY ENERGY CENTER 230KV CKT 1	6/1/2019			
	JEWELL - SMITH CENTER 115KV CKT 1	6/1/2018	6/1/2018		
	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3 Accelerated	6/1/2010	6/1/2012		
	SPEARVILLE - WOLF 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012	
	SPEARVILLE - WOLF 345 KV CKT 1 SUNC	6/1/2010	6/1/2013	10/1/2012	
	WOLF - AXTELL 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012	
	WOLF - AXTELL 345 KV CKT 1 NPPD	6/1/2010	6/1/2013	10/1/2012	
	WOLF 345/230 KV TRANSFORMER	6/1/2010	6/1/2013	10/1/2012	

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1541894	FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	MEDICINE LODGE - PRATT 115KV CKT 1	12/1/2009	6/1/2013		
	SUB 110 - ORONOGO JCT - SUB 167 - RIVERTON 161KV CKT 1	6/1/2011	6/1/2011		

*34.5 kV System Impacts and Upgrades have yet to be determined

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
KMEA	1568248	SECI	WR	2	1/1/2010	1/1/2015	4/1/2011	4/1/2016	\$ -	\$ 287.880	\$ 14.945	\$ 29.558

				Earliest Service	Redispatch	Allocate	d E & C	Total E &	& C	Total Re	euneve
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Cost		Requirer	nents
1568248	FLETCHER - HOLCOMB 115KV CKT 1 Accelerated	6/1/2013	6/1/2013			\$	14,945	\$ 2	257,421	\$	29,558
	•				Total	S	14.945	\$ 2	257.421	S	29.558

Evnansion Plan	The requested service is contingent upon completion of the following upgrades	Cost is not assignable to the transmission custom

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1568248	EAST MANHATTAN - NW MANHATTAN 230/115KV	6/1/2010	12/1/2011		
	HOLCOMB - PLYMELL 115KV CKT 1	6/1/2010	10/31/2010		
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 MIDW	6/1/2015	6/1/2015		
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 WERE	6/1/2015	6/1/2015		
	PIONEER TAP - PLYMELL 115KV CKT 1	6/1/2010	10/31/2010		

Reliability Projects - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission of	
	ustomer

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1568248	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	6/1/2011	6/1/2013		
	FARMERS ELECTRIC REC-CLOVIS - FRIODRW1 115.00 115KV CKT 1	6/1/2015	6/1/2015		
	FRIO-DRAW - POTTER 345 KV	6/1/2015	6/1/2015		
	HEIZER - MULLERGREN 115 KV CKT 1	6/1/2010	6/1/2011	4/1/2011	
	HITCHLAND INTERCHANGE 230/115KV TRANSFORMER CKT 1	6/1/2010	6/1/2011		
	JOHNSON CORNER - PIONEER 115 KV CKT 1	6/1/2015	6/1/2015		
	JOHNSON CORNER 115 KV CAP	6/1/2015	6/1/2015		
	JOHNSON CORNER 115 KV CAP #2	6/1/2015	6/1/2015		
	POTTER - ANADARKO 345 KV	6/1/2015	6/1/2015		

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1568248	MEDICINE LODGE 138/115KV TRANSFORMER CKT 1 Accelerated	6/1/2010	6/1/2013		
	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3 Accelerated	6/1/2010	6/1/2012		

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1568248	DEARING 138KV Capacitor	6/1/2012	6/1/2012		
	FLATRDG3 138.00 - HARPER 138KV CKT 1	12/1/2009	6/1/2013		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	NORTHWEST - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

Customer	Reservation	POR	POD		Requested Start Date	Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
KMEA	1568267	SECI	SECI	13	5/1/2010					\$ -	\$ 3,374,739	
KMEA	1568268	SECI	SECI	13	5/1/2010	5/1/2015	6/1/2013	6/1/2018	\$	\$ -	\$ 3,382,782	\$ 5,948,954
									\$ 2,340,000	\$ -	\$ 6,757,521	\$ 11,880,568

				Earliest Service	Redispatch	Allo	cated E & C	Tota	IE&C	Tot	al Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	t	Cost		Rec	uirements
1568267	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerated	6/1/2012	6/1/2013			\$	103,580	\$	307,370	\$	215,733
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerated	6/1/2012	6/1/2013			\$	81,910	\$	243,064	\$	182,198
	HARPER - CITY OF ANTHONY 138 KV CKT 1	6/1/2010	6/1/2012			\$	3,175,000	\$	6,350,000	\$	5,500,992
	HARPER - MILAN TAP 138KV CKT 1 #1 Accelerated	6/1/2012	6/1/2012			\$	14,249	\$	42,282	\$	32,691
					Total	\$	3,374,739	\$	6,942,716	\$	5,931,614
1568268	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerated	6/1/2012	6/1/2013			\$	107,752	\$	307,370	\$	224,422
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerated	6/1/2012	6/1/2013			\$	85,208	\$	243,064	\$	189,534
	HARPER - CITY OF ANTHONY 138 KV CKT 1	6/1/2010	6/1/2012			\$	3,175,000	\$	6,350,000		5,500,992
	HARPER - MILAN TAP 138KV CKT 1 #1 Accelerated	6/1/2012	6/1/2012			\$	14,822	\$	42,282	\$	34,00€
					Total	Ś	3 382 782	ŝ	6 942 716	Ś	5 948 954

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1568267	EAST MANHATTAN - NW MANHATTAN 230/115KV	6/1/2010	12/1/2011		
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 MIDW	6/1/2015	6/1/2015		
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 WERE	6/1/2015	6/1/2015		
	HUNTSVILLE - ST JOHN 115KV CKT 1	6/1/2015	6/1/2015		
1568268	EAST MANHATTAN - NW MANHATTAN 230/115KV	6/1/2010	12/1/2011		
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 MIDW	6/1/2015	6/1/2015		
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 WERE	6/1/2015	6/1/2015		
	HUNTSVILLE - ST JOHN 115KV CKT 1	6/1/2015	6/1/2015		

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

				Earliest Service	Redispatch
		DUN	EOC	Date	Available
1568267	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	6/1/2011	6/1/2013		
	FARMERS ELECTRIC REC-CLOVIS - FRIODRW1 115.00 115KV CKT 1	6/1/2015	6/1/2015		
	FRIO-DRAW - POTTER 345 KV	6/1/2015	6/1/2015		
	HARPER - MILAN TAP 138KV CKT 1 #2	6/1/2015	6/1/2015		
	KINSLEY 115KV Capacitor	6/1/2011	6/1/2011		
	PAWNEE 115KV Capacitor	6/1/2011	6/1/2011		
	POTTER - ANADARKO 345 KV	6/1/2015	6/1/2015		
1568268	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	6/1/2011	6/1/2013		
	HARPER - MILAN TAP 138KV CKT 1 #2	6/1/2015	6/1/2015		
	KINSLEY 115KV Capacitor	6/1/2011	6/1/2011		
	PAWNEE 115KV Capacitor	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.

		1		Earliest Service	Redispatch
	Upgrade Name	DUN	EOC	Date	Available
1568267	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2010	6/1/2013		
	MEDICINE LODGE 138/115KV TRANSFORMER CKT 1 Accelerated	6/1/2010	6/1/2013		
	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3 Accelerated	6/1/2010	6/1/2012		
	SPEARVILLE - WOLF 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012	
	SPEARVILLE - WOLF 345 KV CKT 1 SUNC	6/1/2010	6/1/2013	10/1/2012	
	WOLF - AXTELL 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012	
	WOLF - AXTELL 345 KV CKT 1 NPPD	6/1/2010	6/1/2013	10/1/2012	
	WOLF 345/230 KV TRANSFORMER	6/1/2010	6/1/2013	10/1/2012	
1568268	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2010	6/1/2013		
	MEDICINE LODGE 138/115KV TRANSFORMER CKT 1 Accelerated	6/1/2010			
	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3 Accelerated	6/1/2010	6/1/2012		
	SPEARVILLE - WOLF 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012	
	SPEARVILLE - WOLF 345 KV CKT 1 SUNC	6/1/2010	6/1/2013	10/1/2012	
	WOLF - AXTELL 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012	
	WOLF - AXTELL 345 KV CKT 1 NPPD	6/1/2010	6/1/2013	10/1/2012	
	WOLF 345/230 KV TRANSFORMER	6/1/2010	6/1/2013	10/1/2012	

Planned	Pro	ec	t

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1568267	EVANS ENERGY CENTER SOUTH - GODDARD - CLEARWATER 138KV CKT 1	6/1/2010	6/1/2012		
1568268	EVANS ENERGY CENTER SOUTH - GODDARD - CLEARWATER 138KV CKT 1	6/1/2010	6/1/2012		

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1568267	FLATRDG3 138.00 - HARPER 138KV CKT 1	12/1/2009	6/1/2013		
1568268	FLATRDG3 138.00 - HARPER 138KV CKT 1	12/1/2009	6/1/2013		

^{*34.5} kV System Impacts and Upgrades have yet to be determined

Customer	Reservation	POR		Requested Amount		Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
KMEA	1518801	NPPD	KCPL	7	5/1/2009	5/1/2014	5/1/2010	5/1/2015	\$	\$ -	\$ -	\$ -

				Earliest Service	Redispatch	Allocated E & C	Total E & C	Total Revenue	
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Cost	Requirements	
1518801	None					\$ -	\$ -	\$ -	
					Total	\$.	\$.	\$	л.

Reliability Proje	Reliability Projects - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.										
				Earliest Service	Redispatch						
Reservation	Upgrade Name	DUN	EOC	Date	Available						
1518801	CANADAY - LEXINGTON 115KV CKT 1	12/1/2010	6/1/2013								
	HITCHLAND INTERCHANGE 230/115KV TRANSFORMER CKT 1	6/1/2010	6/1/2011								
	PLATTE CITY - SMITHVILLE 161KV CKT 1	6/1/2010	10/1/2010								
	STILWELL - WEST GARDNER 345KV CKT 1	6/1/2012	6/1/2012								

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1518801	KCI - Platte City 161kV Ckt 1	6/1/2010	6/1/2011		
	SPEARVILLE - WOLF 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012	
	SPEARVILLE - WOLF 345 KV CKT 1 SUNC	6/1/2010	6/1/2013	10/1/2012	
	WOLF - AXTELL 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012	
	WOLF - AXTELL 345 KV CKT 1 NPPD	6/1/2010	6/1/2013	10/1/2012	
	MOLE 24F/220 KV TRANSCORMER	6/4/2010	6/4/2042	10/1/2012	

Credits may b	e required for the following network upgrades directly assigned to transmission customers in previous	aggregate stud									
	Tredits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study. Earliest Service Redispatch										
Reservation	Upgrade Name	DUN	EOC	Date	Available						
151880	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006								
	NORTHWEST - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010								

Customer	Reservation	POR			Requested Start Date	Requested	Date Without	Plan Funding	Point-to-Point		Total Revenue
KMEA	1518806		SECI	1	5/1/2009				\$ 266,102	\$ 1,064	\$ 1,777
	•							\$ -	\$ 266,102	\$ 1.064	\$ 1,777

				Earliest Service	Redispatch	Allocated E & C	Total	IE&C	Total Revenue	3
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Cost		Requirements	
1518806	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerated	6/1/2012	6/1/2013			\$ 552	\$	307,370	\$ 87	0
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerated	6/1/2012	6/1/2013			\$ 436	\$	243,064	\$ 77	'5
	HARPER - MILAN TAP 138KV CKT 1 #1 Accelerated	6/1/2012	6/1/2012			\$ 76	\$	42,282	\$ 13:	12
	•				Total	\$ 1.064	S	592,716	\$ 1.77	7

Expansion Plan	- The requested	service is contingent u	inon completion	of the following	ungrades	Cost is not as	signabl	e to the tran	smission cust	omer

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1518806	HOLCOMB - PLYMELL 115KV CKT 1	6/1/2010	10/31/2010		
	PIONEER TAP - PLYMELL 115KV CKT 1	6/1/2010	10/31/2010		

Reliability Proje	cts - The requested service is contingent upon completion of the following upgrades. Cost is not assign	gnable to the ti	ransmission c	ustomer.	
				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
	CANADAY - LEXINGTON 115KV CKT 1	12/1/2010	6/1/2013		
	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	6/1/2011	6/1/2013		
	HEIZER - MULLERGREN 115 KV CKT 1	6/1/2010	6/1/2011	4/1/2011	
	KINSLEY 115KV Capacitor	6/1/2011	6/1/2011		
	OGALLALA 230/115KV TRANSFORMER CKT 2	6/1/2010	6/1/2013	10/1/2012	
	PAWNEE 115KV Capacitor	6/1/2011	6/1/2011		

Construction Pe	ending - The requested service is contingent upon completion of the following upgrades. Cost is not as	ssignable to th									
Earliest Service Redispatch											
Reservation	Upgrade Name	DUN	EOC	Date	Available						
1518806	SPEARVILLE - WOLF 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012							
	SPEARVILLE - WOLF 345 KV CKT 1 SUNC	6/1/2010	6/1/2013	10/1/2012							

Credits may b	e required for the following network upgrades directly assigned to transmission customers in previous	aggregate stud	ly.		
	Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study. Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study. Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study. Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study. Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study. Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study. Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study. Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study. Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study. Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study. Credits may be required for the following network upgrades directly assigned to the following network upgrades directly assi				
Reservation	Upgrade Name	DUN	EOC	Date	Available
151880	FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	NORTHWEST - WOODWARD 245KV CKT 1	1/1/2010	1/1/2010		

Customer	Reservation	POR			Requested Start Date	Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
KMEA	1518831	NPPD	SECI	1	5/1/2010	5/1/2015	4/1/2011	4/1/2016	\$ 9,496		\$ 9,496	\$ 16,461
									\$ 9,496	\$ -	\$ 9,496	\$ 16,461

				Earliest Service	Redispatch	Allocated E & C	Total E & C	Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Cost	Requirements
1518831	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerated	6/1/2012	6/1/2013			\$ 3,199	\$ 307,370	\$ 5,475
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerated	6/1/2012	6/1/2013			\$ 2,530	\$ 243,064	\$ 4,806
	HARPER - MILAN TAP 138KV CKT 1 #1 Accelerated	6/1/2012	6/1/2012			\$ 440	\$ 42,282	\$ 829
	JUDSON LARGE - SPEARVILLE 115 KV CKT 2	6/1/2014	6/1/2014			\$ 3,327	\$ 11,981,250	\$ 5,351
					Total	\$ 9,496	\$ 12,573,966	\$ 16.461

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1518831	HOLCOMB - PLYMELL 115KV CKT 1	6/1/2010	10/31/2010		
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 MIDW	6/1/2015	6/1/2015		
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 WERE	6/1/2015	6/1/2015		
	HUNTSVILLE - ST JOHN 115KV CKT 1	6/1/2015	6/1/2015		
	PIONEER TAP - PLYMELL 115KV CKT 1	6/1/2010	10/31/2010		

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

			Earliest Service	Redispatch
	DUN	EOC	Date	Available
CANADAY - LEXINGTON 115KV CKT 1	12/1/2010	6/1/2013		
CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	6/1/2011	6/1/2013		
FARMERS ELECTRIC REC-CLOVIS - FRIODRW1 115.00 115KV CKT 1	6/1/2015	6/1/2015		
FRIO-DRAW - POTTER 345 KV	6/1/2015	6/1/2015		
HARPER - MILAN TAP 138KV CKT 1 #2	6/1/2015	6/1/2015		
HEIZER - MULLERGREN 115 KV CKT 1	6/1/2010	6/1/2011	4/1/2011	
JOHNSON CORNER - PIONEER 115 KV CKT 1	6/1/2015	6/1/2015		
JOHNSON CORNER 115 KV CAP	6/1/2015	6/1/2015		
JOHNSON CORNER 115 KV CAP #2	6/1/2015	6/1/2015		
KINSLEY 115KV Capacitor	6/1/2011	6/1/2011		
OGALLALA 230/115KV TRANSFORMER CKT 2	6/1/2010	6/1/2013	10/1/2012	
PAWNEE 115KV Capacitor	6/1/2011	6/1/2011		
POTTED - ANADARKO 246 KV	6/1/2016	6/1/2016		

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1518831	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3 Accelerated	6/1/2010	6/1/2012		
	SPEARVILLE - WOLF 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012	
	SPEARVILLE - WOLF 345 KV CKT 1 SUNC	6/1/2010			
	WOLF - AXTELL 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012	
	WOLF - AXTELL 345 KV CKT 1 NPPD	6/1/2010		10/1/2012	
	WOLF 345/230 KV TRANSFORMER	6/1/2010	6/1/2013	10/1/2012	

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1518831	FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	MEDICINE LODGE - PRATT 115KV CKT 1	12/1/2009	6/1/2013		

^{*34.5} kV System Impacts and Upgrades have yet to be determined

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

Customer	Reservation	POR		Requested Amount	Requested Start Date	Requested	Date Without	Plan Funding	Point-to-Point	Total Revenue Requirements
KMEA	1518838	NPPD	WR	1	5/1/2010	5/1/2015		\$ -	\$ 143,940	\$ \$ -
									\$ 143,940	

				Earliest Service	Redispatch	Allocated E & C	Total E & C	Total Revenue	
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Cost	Requirements	
1518838	None					\$	\$ -	\$ -	3
					Total	ς .	٠.	\$	л.

Reliability Projects - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer. Earliest Service Redispetch Earliest Service Redispetch DUN					
				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1518838	CANADAY - LEXINGTON 115KV CKT 1	12/1/2010	6/1/2013		
	HITCHLAND INTERCHANGE 230/115KV TRANSFORMER CKT 1	6/1/2010	6/1/2011		

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
	BARTLESVILLE SOUTHEAST - NORTH BARTLESVILLE 138KV CKT 1	12/1/2010			
	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2010	6/1/2013		
	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3 Accelerated	6/1/2010	6/1/2012		
	SPEARVILLE - WOLF 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012	
	SPEARVILLE - WOLF 345 KV CKT 1 SUNC	6/1/2010	6/1/2013	10/1/2012	
	WOLF - AXTELL 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012	
	WOLF - AXTELL 345 KV CKT 1 NPPD	6/1/2010	6/1/2013	10/1/2012	
	WOLF 345/230 KV TRANSFORMER	6/1/2010	6/1/2013	10/1/2012	

Planned Project	ts				
				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1518838	EVANS ENERGY CENTER SOUTH - GODDARD - CLEARWATER 138KV CKT 1	6/1/2010	6/1/2012		

Credits may be	required for the following network upgrades directly assigned to transmission customers in previous a	ggregate stud	ty.		
				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1518838	DEARING 138KV Capacitor	6/1/2012	6/1/2012		

^{*34.5} kV System Impacts and Upgrades have yet to be determined

				Requested	Requested	Requested		Date Without	Plan Funding	Point-to-Point		
Customer	Reservation	POR	POD	Amount	Start Date	Stop Date	Redispatch	Redispatch	Allowable	Base Rate	C Cost	Requirements
KMEA	1518842	SECI	SECI	5	10/1/2009	10/1/2014	10/1/2012	10/1/2017	\$ 462,689	\$ -	\$ 462,689	\$ 871,139
	•								\$ 462,689	\$ -	\$ 462,689	\$ 871,139

				Earliest Service	Redispatch	Allocate	ed E & C	Tota	IE&C	Total	Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Cost		Requir	rements
151884	2 CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerated	6/1/2012	6/1/2013			\$	13,128	\$	307,370	\$	25,749
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerated	6/1/2012	6/1/2013			\$	10,381	\$	243,064	\$	22,002
	FLETCHER - HOLCOMB 115KV CKT 1 Accelerated	6/1/2013	6/1/2013			\$	41,821	\$	257,421	\$	90,294
	HARPER - MILAN TAP 138KV CKT 1 #1 Accelerated	6/1/2012	6/1/2012			\$	1,806	\$	42,282	\$	3,902
	JUDSON LARGE - SPEARVILLE 115 KV CKT 2	6/1/2014	6/1/2014			\$	395,553	\$	11,981,250	\$	729,192
					Total	\$	462.689	\$	12.831.387	S	871.139

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1518842	HOLCOMB - PLYMELL 115KV CKT 1	6/1/2010	10/31/2010		
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 MIDW	6/1/2015			
	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 WERE	6/1/2015			
	HUNTSVILLE - ST JOHN 115KV CKT 1	6/1/2015	6/1/2015		
	PIONEER TAP - PLYMELL 115KV CKT 1	6/1/2010	10/31/2010		

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

				Earliest Service	Redispatch
		DUN	EOC	Date	Available
1518842	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	6/1/2011	6/1/2013		
	FARMERS ELECTRIC REC-CLOVIS - FRIODRW1 115.00 115KV CKT 1	6/1/2015	6/1/2015		
	FRIO-DRAW - POTTER 345 KV	6/1/2015	6/1/2015		
	HARPER - MILAN TAP 138KV CKT 1 #2	6/1/2015	6/1/2015		
	HEIZER - MULLERGREN 115 KV CKT 1	6/1/2010	6/1/2011	4/1/2011	
	HITCHLAND INTERCHANGE 230/115KV TRANSFORMER CKT 1	6/1/2010			
	JOHNSON CORNER - PIONEER 115 KV CKT 1	6/1/2015	6/1/2015		
	JOHNSON CORNER 115 KV CAP	6/1/2015			
	JOHNSON CORNER 115 KV CAP #2	6/1/2015	6/1/2015		
	KINSLEY 115KV Capacitor	6/1/2011	6/1/2011		
1	PAWNEE 115KV Capacitor	6/1/2011	6/1/2011	l	
	POTTER - ANADARKO 345 KV	6/1/2015	6/1/2015		

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1518842	SPEARVILLE - WOLF 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012	
	SPEARVILLE - WOLF 345 KV CKT 1 SUNC	6/1/2010	6/1/2013	10/1/2012	
	WOLF - AXTELL 345 KV CKT 1 MIDW	6/1/2010			
	WOLF - AXTELL 345 KV CKT 1 NPPD	6/1/2010	6/1/2013	10/1/2012	
	MOLE 346/330 KV TRANSCORMER	6/1/2010	6/1/2012	10/1/2012	

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1518842	FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	MEDICINE LODGE - PRATT 115KV CKT 1	12/1/2009	6/1/2013		
	NORTHWEST - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

Customer	Reservation	POR			Requested Start Date	Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue
KMEA	1518845	NPPD	SECI	1	10/1/2009	10/1/2014	5/1/2010	5/1/2015	\$ -	\$ 266,102	\$ 1,064	\$ 1,777
									\$ -	\$ 266,102	\$ 1,064	\$ 1,777

				Earliest Service	Redispatch	Allocated E & 0	C Total	al E & C	Total Revenue	1
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Cos	t	Requirements	
1518845	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerated	6/1/2012	6/1/2013			\$ 552	2 \$	307,370	\$ 870	0
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerated	6/1/2012	6/1/2013			\$ 436	3 \$	243,064	\$ 775	5
	HARPER - MILAN TAP 138KV CKT 1 #1 Accelerated	6/1/2012	6/1/2012			\$ 76	3 \$	42,282	\$ 132	2
	•				Total	\$ 1.064	1 \$	592,716	\$ 1,777	7

Expansion Plan	- The requested service is contingent upon completion of the following upgrades. Cost is not assigna	ble to the tran	smission cust	omer.
				Farliest S

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1518845	HOLCOMB - PLYMELL 115KV CKT 1	6/1/2010	10/31/2010		
	PIONEER TAP - PLYMELL 115KV CKT 1	6/1/2010	10/31/2010		

Reliability Proje	teliability Projects - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.									
				Earliest Service	Redispatch					
		DUN	EOC	Date	Available					
	CANADAY - LEXINGTON 115KV CKT 1	12/1/2010	6/1/2013							
	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	6/1/2011	6/1/2013							
	HEIZER - MULLERGREN 115 KV CKT 1	6/1/2010	6/1/2011	4/1/2011						
	KINSLEY 115KV Capacitor	6/1/2011	6/1/2011							
	OGALLALA 230/115KV TRANSFORMER CKT 2	6/1/2010	6/1/2013	10/1/2012						
	PAWNEE 115KV Capacitor	6/1/2011	6/1/2011							

Construction P	onstruction Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.										
				Earliest Service	Redispatch						
Reservation	Upgrade Name	DUN	EOC	Date	Available						
1518845	SPEARVILLE - WOLF 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012							
	SPEARVILLE - WOLF 345 KV CKT 1 SUNC	6/1/2010	6/1/2013	10/1/2012							
	WOLF - AXTELL 345 KV CKT 1 MIDW	6/1/2010	6/1/2013	10/1/2012							
	WOLF - AXTELL 345 KV CKT 1 NPPD	6/1/2010	6/1/2013	10/1/2012							
	WOLF 345/230 KV TRANSFORMER	6/1/2010	6/1/2013	10/1/2012							

Credits may be	required for the following network upgrades directly assigned to transmission customers in previous a	iggregate stud	ly.		
				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1518845	FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	NORTHWEST - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

Customer Study Number NTEC AG1-2009-029

Customer	Reservation	POR				Requested	Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
NTEC	1567817	CSWS	CSWS	335	1/1/2015	1/1/2040		\$ 289,843	\$ -	\$ 289,843	\$ 1,472,229
	•	•	•					\$ 289,843	\$ -	\$ 289,843	\$ 1,472,229

				Earliest Service	Redispatch	Allocated	E&C	Total E	£&C	Total	Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Cost		Requir	irements
1567817	RIVERSIDE STATION - TULSA POWER STATION 138KV CKT 1	6/1/2012	6/1/2012			\$ 28	39,843	\$	800,000	\$	1,472,229
	•				Total	\$ 28	20 843	\$	800.000	\$	1 472 220

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

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1567817	MINEOLA - NORTH MINEOLA 69KV CKT 1	6/1/2015	6/1/2015		

Reliability Proje	ects - The requested service is contingent upon completion of the following upgrades. Cost is not assig	nable to the to			
				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1567817	BIG SANDY - HAWKINS 69KV CKT 1	6/1/2015	6/1/2015		
	BIG SANDY - PERDUE 69KV CKT 1	6/1/2015	6/1/2015		
	FARMERS ELECTRIC REC-CLOVIS - FRIODRW1 115.00 115KV CKT 1	6/1/2015	6/1/2015		
	FRIO-DRAW - POTTER 345 KV	6/1/2015	6/1/2015		
	GEORGIA-PACIFIC - KEATCHIE REC 138KV CKT 1	6/1/2015	6/1/2015		
	Line - Canadian River - McAlester City 138 kV	6/1/2015	6/1/2015		
	MARSHALL (MARSH 1) 138/69/12.47KV TRANSFORMER CKT 1	6/1/2015	6/1/2015		
	MARSHALL (MARSH 2) 138/69/12.47KV TRANSFORMER CKT 2	6/1/2015	6/1/2015		
	POTTER - ANADARKO 345 KV	6/1/2015	6/1/2015		
	XFR - Canadian River 345/138 kV transformer	6/1/2015	6/1/2015		

Credits may be	required for the following network upgrades directly assigned to transmission customers in previous a	ggregate stud	ly.		
				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1567817	BANN - RED SPRINGS REC 138KV CKT 1	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345 KV WFEC	7/1/2012	7/1/2012		
	HUGO POWER PLANT 345/138KV TRANSFORMER CKT 1	7/1/2012	7/1/2012		

Third Party Lim	itations.						
				Earliest Service		Allocated E &	Total E & C
Reservation	Upgrade Name	DUN	EOC	Start Date	Available	C Cost	Cost
1567817	ARKANSAS NUCLEAR ONE - RUSSELLVILLE NORTH 161KV CKT 1	1/1/2015	1/1/2015			\$ -	\$ -
	DARDANELLE - RUSSELLVILLE SOUTH 161KV CKT 1 SWPA	6/1/2010	6/1/2011			\$ -	\$ -
	RUSSELLVILLE EAST - RUSSELLVILLE NORTH 161KV CKT 1	1/1/2015	1/1/2015			\$ -	\$ -
	RUSSELLVILLE EAST - RUSSELLVILLE SOUTH 161KV CKT 1	6/1/2010	6/1/2010			\$ -	\$ -
					Total	\$ -	\$ -

^{*}An affected system study will need to be performed

Customer Study Number OMPA AG1-2009-023

Customer	Reservation	POR				Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
OMPA	1566503	OKGE	SPA	61	6/1/2010	6/1/2015	6/1/2012	6/1/2017	\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	S -	\$ -

				Earliest Service	Redispatch	Allocated E & C	Total E & C	Total Revenue	
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Cost	Requirements	
1566503	None					\$ -	\$ -	\$ -	
					Total	\$.	\$.	\$	л.

Expansion Plan	- The requested service is contingent upon completion of the following upgrades. Cost is not assigna	ble to the tran	smission cust	omer.	
				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1566503	RUSSETT - RUSSETT 138KV CKT 1 OKGE	12/1/2011	12/1/2011		

				Earliest Service	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
1566503	FARMERS ELECTRIC REC-CLOVIS - FRIODRW1 115.00 115KV CKT 1	6/1/2015	6/1/2015		
	FRIO-DRAW - POTTER 345 KV	6/1/2015			
	HITCHLAND INTERCHANGE 230/115KV TRANSFORMER CKT 1	6/1/2010	6/1/2011		Yes
	OMPA-PONCA CITY - OSAGE 69KV CKT 1	6/1/2011	6/1/2012		Yes
	POTTER - ANADARKO 345 KV	6/1/2015	6/1/2015		
	CTILWELL - WEST CARDNER 246KV CKT 4	6/1/2012	6/1/2012		

				Earliest Service	Redispatch
		DUN	EOC	Date	Available
1566503	FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	FT SUPPLY 138/69KV TRANSFORMER CKT 1	12/1/2006			
	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1	6/1/2006	6/1/2008		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006			
,	NORTHWEST - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010	l	
	SUB 110 - ORONOGO JCT SUB 167 - RIVERTON 161KV CKT 1	6/1/2011	6/1/2011		
	WOODWARD - IODINE 138KV CKT 1	1/1/2010	1/1/2010	l	
	WOODWARD - WOODWARD EHV 138KV CKT 1	1/1/2010	1/1/2010		
,	WOODWARD - WOODWARD EHV 138KV CKT 2	1/1/2010	1/1/2010	l	
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010		

Customer Study Number OMPA AG1-2009-026

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
OMPA	1566944	OKGE	WFEC	10	9/1/2010	9/1/2025	5		\$ 50,000	\$ -	\$ 50,000	\$ 107,534
									\$ 50,000		\$ 50,000	\$ 107.534

				Earliest Service	Redispatch	Allocate	ed E & C	Total E	& C	Total	Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Cost		Requir	ements
1566944	CAN_GAS4 138.00 - JENSEN ROAD 138KV CKT 1 OKGE	6/1/2015	6/1/2015			\$	50,000	\$	50,000	\$	107,534
					Total	S	50.000	S	50.000	S	107.534

Reliability Projects - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.										
				Earliest Service	Redispatch					
Reservation	Upgrade Name	DUN	EOC	Date	Available					
1566944	CIMARRON - JENSEN TAP 138KV CKT 1	6/1/2015	6/1/2015							
	FARMERS ELECTRIC REC-CLOVIS - FRIODRW1 115.00 115KV CKT 1	6/1/2015	6/1/2015							
	FRIO-DRAW - POTTER 345 KV	6/1/2015	6/1/2015							
	HITCHLAND INTERCHANGE 230/115KV TRANSFORMER CKT 1	6/1/2010	6/1/2011							
	JENSEN ROAD - JENSEN TAP 138KV CKT 1	6/1/2015	6/1/2015							
	OMPA-PONCA CITY - OSAGE 69KV CKT 1	6/1/2011	6/1/2012							

Construc	Construction Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.										
				Earliest Service	Redispatch						
Reservat	n Upgrade Name	DUN	EOC	Date	Available						
15	944 ARCADIA - REDBUD 345KV CKT 3	6/1/2018	6/1/2018								

Credits may be	required for the following network upgrades directly assigned to transmission customers in previous a	iggregate stud	ty.		
				Earliest Service	Redispatch
		DUN	EOC	Date	Available
1566944	FT SUPPLY 138/69KV TRANSFORMER CKT 1	12/1/2006	6/1/2008		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345 KV WFEC	7/1/2012	7/1/2012		
	HUGO POWER PLANT 345/138KV TRANSFORMER CKT 1	7/1/2012	7/1/2012		
	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1	6/1/2006	6/1/2008		
	NORTHWEST - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 2	1/1/2010	1/1/2010		
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010		

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

Customer SPRM Study Number AG1-2009-020

Customer	Reservation	POR				Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
SPRM	1562368	WR	SPA	25	1/1/2010	1/1/2029	6/1/2014	6/1/2033	\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	S -	\$ -

				Earliest Service	Redispatch	Allocated E & C	Total E & C	Total Revenue	
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Cost	Requirements	
1562368	None					\$ -	\$ -	\$ -]
					Total	٠.	\$.	ς .	1

Reliability Proje	Reliability Projects - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.									
				Earliest Service	Redispatch	1				
Reservation	Upgrade Name	DUN	EOC	Date	Available					
1562368	BROOKLINE - SUMMIT 345 kV CKT 1	6/1/2012	6/1/2014		Yes	1				
	FARMERS ELECTRIC REC-CLOVIS - FRIODRW1 115.00 115KV CKT 1	6/1/2015	6/1/2015			1				
	FRIO-DRAW - POTTER 345 KV	6/1/2015	6/1/2015			1				

FRIO-DRAW - POTTER 345 KV 61/2015 61/2

Third Party Limitations.

				Earliest Service	Redispatch	Allocated E &	Total E & C	
Reservation	Upgrade Name	DUN	EOC	Start Date	Available	C Cost	Cost	
1562368	EVERTON - HARRISON-EAST 161KV CKT 1	6/1/2010	6/1/2010			\$ -	\$	-
	HILLTOP - ST JOE 161KV CKT 1	6/1/2010	6/1/2010			\$ -	\$	-
	SPRINGFIELD (SPF X1) 161/69/13.8KV TRANSFORMER CKT 1	6/1/2015	6/1/2015			\$ -	\$	-
					Total	\$ -	\$	-

^{*}An affected system study will need to be performed

Customer	Reservation	POR	POD			Requested	Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
SPSM	1518657		SPS	65	6/1/2011	6/1/2031				\$ 694,837	\$ 2,172,590

				Earliest Service	Redispatch	Allocat	ed E & C	I otal E	& C	I otal Revenue	
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Cost		Requirements	
1518657	BOWERS INTERCHANGE 115/69KV TRANSFORMER CKT 2 Accelerated	6/1/2014	6/1/2014			\$	317,912	\$ 4	410,449	\$ 972,261	П
	CHERRY6 230.00 - Harrington Station East Bus 230KV CKT 1	6/1/2011	6/1/2013			\$	376,925	\$!	500,000	\$ 1,200,329	j
					Total	S	694 837	\$ 5	910.449	\$ 2,172,590)

Reliability Proje	cts - The requested service is contingent upon completion of the following upgrades. Cost is not assig	gnable to the tr		
				Earliest Service
Reservation	Upgrade Name	DUN	EOC	Date
1518657	ARTESIA INTERCHANGE - CENTRAL VALLEY REC-ARTESIA 69KV CKT 1	6/1/2015	6/1/2015	
	ARTESIA INTERCHANGE - EAGLE CREEK 115KV CKT 2	6/1/2011	6/1/2013	

				Earliest Service	
	Upgrade Name	DUN		Date	Available
1518657	ARTESIA INTERCHANGE - CENTRAL VALLEY REC-ARTESIA 69KV CKT 1	6/1/2015			
	ARTESIA INTERCHANGE - EAGLE CREEK 115KV CKT 2	6/1/2011			
	ARTESIA INTERCHANGE - EAGLE_CREEK3115.00 115KV CKT 1	6/1/2015			
	BORDEN COUNTY INTERCHANGE 230/138KV TRANSFORMER CKT 1	6/1/2015	6/1/2015		
	BUCKEYE TAP - CUNNINGHAM STATION 115KV CKT 1	6/1/2013			
	CAPROCK REC UPGRADES	6/1/2015			
	CHAVES COUNTY INTERCHANGE - SAMSON SUB 115KV CKT 1	6/1/2015	6/1/2015		
	CHAVES COUNTY INTERCHANGE - URTON SUB 115KV CKT 1	6/1/2015	6/1/2015		
	CHAVES COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 2	6/1/2015	6/1/2015		
	CHERRY SUB 230/115 KV TRANSFORMER CKT 1	6/1/2017	6/1/2017		
	DEAF SMITH - PANDA 115 KV CKT 1	6/1/2011	6/1/2012		
	EAST PLANT INTERCHANGE - MANHATTAN SUB 115KV CKT 1	6/1/2011	6/1/2013		
	EDDY COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1	6/1/2015	6/1/2015		
	FARMERS ELECTRIC REC-CLOVIS - FRIODRW1 115.00 115KV CKT 1	6/1/2015	6/1/2015		
	FRIO-DRAW - POTTER 345 KV	6/1/2015	6/1/2015		
	HASTINGS 115 KV CONVERSION	6/1/2011	6/1/2013		
	JONES STATION - JONES STATION BUS #2 230KV CKT 2	6/1/2015	6/1/2015		
	LEA COUNTY ERF PROJECT	6/1/2011	6/1/2013		
	LEA COUNTY REC -MHOON - LEA COUNTY REC-LOVINGTON INTERCHANGE 69KV CKT 1	6/1/2011	6/1/2011		
	LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1	6/1/2011	6/1/2011		
	LEA COUNTY REC-PLAINS INTERCHANGE 115/69KV TRANSFORMER CKT 1	6/1/2015	6/1/2015		
	LEA COUNTY REC-SAN ANDRES INTERCHANGE 115/69KV TRANSFORMER CKT 1	6/1/2011	6/1/2011		
	MANHATTAN TAP - OSAGE SWITCHING STATION 115KV CKT 1	6/1/2011	6/1/2011		
	MIDLAND COUNTY INTERCHANGE 230/138KV TRANSFORMER CKT 1	6/1/2012	6/1/2013		
	Multi - Lea County ERF Project	6/1/2012	6/1/2013		
	NEWHART INTERCHANGE PROJECT	6/1/2011	6/1/2013		
	NICHOLS - RANDALL - AMARILLO SOUTH 230 KV CKT 1	6/1/2011	6/1/2013		
	OSAGE SWITCHING STATION - SOUTH GEORGIA INTERCHANGE 115KV CKT 1	6/1/2011	6/1/2013		
	PORTALES INTERCHANGE 115/69KV TRANSFORMER CKT 1	6/1/2012	6/1/2012		
	PORTALES INTERCHANGE 115/69KV TRANSFORMER CKT 2	6/1/2012	6/1/2012		
	POTTER - ANADARKO 345 KV	6/1/2015	6/1/2015		
	RANDALL 230/115 KV TRANSFORMER CKT 2	6/1/2011	6/1/2013		
	ROOSEVELT 230/115 KV TRANSFORMER CKT 2	6/1/2011	6/1/2013		
	SUNDOWN INTERCHANGE 230/115KV TRANSFORMER CKT 1	6/1/2015	6/1/2015		
	TUCO INTERCHANGE 230/115KV TRANSFORMER CKT 1	6/1/2015	6/1/2015		
	TUCO INTERCHANGE 230/115KV TRANSFORMER CKT 3	6/1/2015			

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.							
				Earliest Service	Redispatch		
Reservation	Upgrade Name	DUN	EOC	Date	Available		
1518657	NORTHWEST - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010				

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

Transmission Owner	Upgrade	Solution	Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)	Estimated Engineering & Construction Cost
AEPW	EASTON REC - PIRKEY 138KV CKT 1	Replace Switch at Easton and Breaker and Wavetrap at Pirkey	6/1/2012	6/1/2012	\$2,000,000.00
AEPW	RIVERSIDE STATION - TULSA POWER STATION 138KV CKT 1	Install 2% Reactor at Tulsa Power Station	6/1/2012	6/1/2012	\$800,000.00
AEPW	SOUTHWEST SHREVEPORT - SPRINGRIDGE PAN-HARR REC 138KV CKT 1	Rebuild 7.11 miles of 397.5 ACSR with 1272 ACSR	6/1/2012	6/1/2013	\$7,200,000.00
		Rebuild 2.49 miles with 1590 ACSR. Replace wavetrap &			
AEPW	TEXAS EASTMAN - WHITNEY 138KV CKT 1	jumpers @ Whitney. Replace metering CT @ Texas Eastman	6/1/2012	6/1/2013	\$2,800,000.00
MKEC	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerated	Rebuild MKEC portion of the Clearwater-Milan tap 115 kV	6/1/2012	6/1/2013	\$307,370.00
MKEC	HARPER - MILAN TAP 138KV CKT 1 #1 Accelerated	Replace Wave Trap at Harper Substation	6/1/2012	6/1/2012	\$42,282.00
		Build new 230 kV line from Jusdon Large - Spearville and			
MKEC	JUDSON LARGE - SPEARVILLE 115 KV CKT 2	operate at 115 kV	6/1/2014	6/1/2014	\$11,981,250.00
OKGE	CAN_GAS4 138.00 - JENSEN ROAD 138KV CKT 1 OKGE	Increase CT ratio at Jenson Rd to 1200 amp	6/1/2015	6/1/2015	\$50,000.00
SPS	BOWERS INTERCHANGE 115/69KV TRANSFORMER CKT 2 Accelerated	Add 2nd transformer at Bowers Interchange	6/1/2014	6/1/2014	\$410,449.00
SPS	CHERRY6 230.00 - Harrington Station East Bus 230KV CKT 1	Replace wavetrap	6/1/2011	6/1/2013	\$500,000.00
SUNC	FLETCHER - HOLCOMB 115KV CKT 1 Accelerated	Rebuild 11.1 miles of the 18.3 mile Fletcher - Holcomb 115 kV line with 954 ACSR Cardinal	6/1/2013	6/1/2013	\$257,421.00
		Build new 138 kV line from Harper to new 138 kV substation at			
SUNC	HARPER - CITY OF ANTHONY 138 KV CKT 1	the City of Anthony	6/1/2010	6/1/2012	\$6,350,000.00
WERE	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerated	Rebuild Westar portion of the Clearwater-Milan tap 115 kV	6/1/2012	6/1/2013	\$243,064.00
WFEC	CACHE4 138.00 - PARADISE 138KV CKT 1	UPGRADE CACHE4 TO PARADISE4 1113	6/1/2015	6/1/2015	\$7,888,000.00
WFEC	G03-05T 138.00 - PARADISE 138KV CKT 1	Upgrade Paradise to G03-05T to 1113	6/1/2015	6/1/2015	\$880,000.00

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

Transmission Owner	Upgrade			Estimated Date of Upgrade Completion (EOC)
		Rebuild 8.37 miles of 795 ACSR with 1590 ACSR & reset relays		
AEPW	BARTLESVILLE SOUTHEAST - NORTH BARTLESVILLE 138KV CKT 1	@ BSE	12/1/2010	6/1/2011
		Rebuild 4.33 of 795 ACSR with 1590 ACSR. Replace Oneta		
AEPW	BROKEN ARROW NORTH - SOUTH TAP - ONETA 138KV CKT 1	wavetrap & Jumpers	6/1/2015	6/1/2015
KACP	KCI - Platte City 161kV Ckt 1	Replace 800 amp wavetrap at KCI	6/1/2010	6/1/2011
		Build new 345 kV line from Knoll to interception point of		
MIDW	SPEARVILLE - WOLF 345 KV CKT 1 MIDW	Spearville to Knoll line.	6/1/2010	6/1/2013
MIDW	WOLF - AXTELL 345 KV CKT 1 MIDW	Build new 345 kV line from Knoll to interception point of Axtell to Knoll line.	6/1/2010	6/1/2013
IVIIDVV	WOLF - AXTELL 343 KV CKT T WIDW	Build new Wolf substation and install new 345/230 kV	6/1/2010	0/1/2013
MIDW	WOLE OF SOME IN THE PROPERTY OF THE PROPERTY O		0/4/0040	0/4/0040
MIDW MKEC	WOLF 345/230 KV TRANSFORMER CLIFTON - GREENLEAF 115KV CKT 1	transformer, tapping the Wolf - South Hays 230 kV line Rebuild 14.4 miles	6/1/2010 6/1/2010	6/1/2013 6/1/2013
MKEC	JEWELL - SMITH CENTER 115KV CKT 1	Replace Terminal Equipment	6/1/2018	6/1/2018
MKEC	MEDICINE LODGE 138/115KV TRANSFORMER CKT 1 Accelerated	Upgrade transformer	6/1/2010	6/1/2013
		Build new 345 kV line from Axtell to interception point of Axtell to		
	WOLE AVERT A VENEZUE A VEN	Wolf line (Kansas Border). Includes substation expansion at		
NPPD	WOLF - AXTELL 345 KV CKT 1 NPPD	Axtell and line reactor.	6/1/2010	6/1/2013
OKGE	ARCADIA - REDBUD 345KV CKT 3	Add eight mile 3rd 345 kV line from Redbud to Arcadia	6/1/2018	6/1/2018
		Add 3rd 345/138KV Auto and convert the 345kV and 138kV to a		
OKGE	ARCADIA (ARCADIA2) 345/138/13.8KV TRANSFORMER CKT 1	breaker and a half configuration.	6/1/2012	6/1/2013
OKGE	BRYANT - MEMORIAL 138KV CKT 1	Change out wavetrap to 2000A	6/1/2012	6/1/2019
SPS	NORTHWEST INTERCHANGE - SUNSET SUB 115KV CKT 1	Replace Terminal Equipment	6/1/2017	6/1/2017
		Build new 345 kV line from Spearville to interception point of		
SUNC	SPEARVILLE - WOLF 345 KV CKT 1 SUNC	Spearville to Knoll line.	6/1/2010	6/1/2013
WERE	EAST MANHATTAN - JEFFREY ENERGY CENTER 230KV CKT 1	Rebuild existing line to 345 kV operated as 230 kV	6/1/2019	6/1/2019
WERE	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3 Expedite	Add third 345-138 kV transformer at Rose Hill	6/1/2010	6/1/2012

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

Transmission Owner	Upgrade	Solution	Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)
WERE	EVANS ENERGY CENTER SOUTH - GODDARD - CLEARWATER 138KV CKT 1	Build a new 138kV line from Clearwater and a new 138kV line from Evans to serve the new Goddard substation	6/1/2010	6/1/2012

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

Transmission Owner	Upgrade	Solution	Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)
AEPW	MINEOLA - NORTH MINEOLA 69KV CKT 1	Replace North Mineola Switches & Breaker	6/1/2015	6/1/2015
GRDA	AFTON (AFTAUTO1) 161/69/13.8KV TRANSFORMER CKT 1	Add a second 50 MVA Transformer at Afton Substation.	6/1/2010	6/1/2011
MIDW	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 MIDW	Tear down and rebuild 73.4% Ownership 28.79 mile HEC- Huntsville 115 kV line and replace CT, wavetrap and relays.	6/1/2015	6/1/2015
MIDW	HUNTSVILLE - ST JOHN 115KV CKT 1	Rebuild 26.55 mile Huntsville - St. John 115 kV line and replace CT, wavetrap, breakers, and relays.	6/1/2015	6/1/2015
MIPU	South Harper 161 kV cut-in to Stilwell-Archie JCT 161 kV line	To tap Stilwell-Archie JCT 161 kV line into South Harper 161 kV sub and make it two new 161 kV sections: Stilwell-South Harper and Archie JCT- South Harper.	6/1/2010	6/1/2011
OKGE	RUSSETT - RUSSETT 138KV CKT 1 OKGE	Replace trap and increase CTR. Pending verification of relays.	12/1/2011	12/1/2011
SUNC	HOLCOMB - PLYMELL 115KV CKT 1	Rebuild Holcomb to Plymell	6/1/2010	10/31/2010
SUNC	PIONEER TAP - PLYMELL 115KV CKT 1	Rebuild Plymell to Pioneer Tap	6/1/2010	10/31/2010
WERE	EAST MANHATTAN - NW MANHATTAN 230/115KV	Tap the Concordia - East Manhattan 230kV line and add a new substation"NW Manhattan"; Add a 230kV/115kV transformer and tap the KSU - Wildcat 115kV line into NW Manhattan	6/1/2010	12/1/2011
WERE	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1 WERE	Tear down and rebuild 26.6% Ownership 28.79 mile HEC- Huntsville 115 kV line and replace CT, wavetrap and relays.	6/1/2015	6/1/2015

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

Transmission Owner	s - The requested service is contingent upon completion of the following upgrad Upgrade	Upgrade Solution		Estimated Date of Upgrade Completion (EOC)
AEPW	BIG SANDY - HAWKINS 69KV CKT 1	Rebuild 5.5 miles of 477 ACSR with 1272 ACSR.	6/1/2015	6/1/2015
AEPW AEPW	BIG SANDY - PERDUE 69KV CKT 1 CLINTON JUNCTION - ELK CITY 138KV CKT 1	Rebuild 5.4 miles of 477 ACSR with 1272 ACSR. Replace 4 switches @ Clinton Jct and reset CTs @ Elk City	6/1/2015 6/1/2015	6/1/2015 6/1/2015
AEPW	GEORGIA-PACIFIC - KEATCHIE REC 138KV CKT 1	Rebuild 12.63 miles of 795 ACSR with 1272 ACSR	6/1/2015	6/1/2015
7.2. **	SECTION TO THE NEW TOOK ON T	Convert 17 mile Canadian River - McAlester City line from 69 kV	0/1/2010	0/1/2010
AEPW	Line - Canadian River - McAlester City 138 kV	to 138 kV.	6/1/2015	6/1/2015
AEPW	MARSHALL (MARSH 1) 138/69/12.47KV TRANSFORMER CKT 1	Replace 1033 AAC Jumpers	6/1/2015	6/1/2015
AEPW	MARSHALL (MARSH 2) 138/69/12.47KV TRANSFORMER CKT 2	Replace 1033 AAC Jumpers	6/1/2015	6/1/2015
AEPW	PRYOR JUNCTION (PRY-JCT1) 115/69/13.8KV TRANSFORMER CKT 1	Replace (3) 600 A switches with 1200 A switches replace	6/1/2011	6/1/2012
AEPW	XFR - Canadian River 345/138 kV transformer	Tap Pittsburg - Muskogee 345 kV about 33 miles north of the Pittsburg station and step down to 138 kV with a 450 MVA auto.	6/1/2015	6/1/2015
EMDE	Multi - Stateline - Joplin - Reinmiller conversion	Tear down the Riverton to Joplin 59 69 kV line, rebuilding the line to 161 kV from Stateline to outside Joplin 59 sb. Tear down and rebuild Joplin 59 to Gateway to Pillsbury to Reinmiller, converting those 69 kV lines to 161 kV. Tap the 161 kV line betwe	6/1/2015	6/1/2015
EMDE	SUB 124 - AURORA H.T SUB 383 - MONETT 161KV CKT 1	CHANGE CT ratio at breaker 383	6/1/2015	6/1/2015
GRDA	AFTON - FAIRLAND EDE TAP 69KV CKT 1	Replace terminal equipment	12/1/2014	12/1/2014
KACP	PLATTE CITY - SMITHVILLE 161KV CKT 1	Interim Redispatch	6/1/2010	10/1/2010
KACP	STILWELL - WEST GARDNER 345KV CKT 1	Must upgrade Stilwell terminal equipment to 2000 amps	6/1/2012	6/1/2012
MIDW	HEIZER - MULLERGREN 115 KV CKT 1	Install 115 kV bay at Heizer and update relaying equipment	6/1/2010	6/1/2011
MIDW	KINSLEY 115KV Capacitor	Install 5 MVAR capacitors at Kinsley 115 kV	6/1/2011	6/1/2011
MIDW	PAWNEE 115KV Capacitor	Install 5 MVAR capacitors at Pawnee 115 kV	6/1/2011	6/1/2011
MKEC	HARPER - MILAN TAP 138KV CKT 1 #2	Rebuild 22.1 mile line	6/1/2015	6/1/2015
NPPD	CANADAY - LEXINGTON 115KV CKT 1	Increase clearances to 100 Deg C and upgrade terminal equipment to effect higher rating.	12/1/2010	6/1/2013
NPPD NPPD	OGALLALA 230/115KV TRANSFORMER CKT 2	Install a second 230/115 KV transformer at Ogallala	6/1/2010	6/1/2013
OKGE	CIMARRON - JENSEN TAP 138KV CKT 1	Rebuild 9.42 miles of line to 795AS33	6/1/2015	6/1/2015
OKGE	JENSEN ROAD - JENSEN TAP 138KV CKT 1	Increase 800 amp wavetrap to 1200 amp	6/1/2015	6/1/2015
OKGE	OMPA-PONCA CITY - OSAGE 69KV CKT 1	Increase 800 amp to 1200 amp	6/1/2011	6/1/2012
SPRM SPRM	BROOKLINE - SUMMIT 345 kV CKT 1 JAMES RIVER - TWIN OAKS 69KV CKT 1	Build a 345 kV line from Brookline to Summit substation and install a 345/161 kV autotransformer at Summit Reconductor 69kV line from 636 ACSR to 762.8 ACSS/TW	6/1/2012 6/1/2015	6/1/2014 6/1/2015
SPS	ARTESIA INTERCHANGE - CENTRAL VALLEY REC-ARTESIA 69KV CKT 1	reconductor Artesia- CV-Artesia 0.45 miles 4/0 to 397.5 ACSR	6/1/2015	6/1/2015
SPS SPS	ARTESIA INTERCHANGE - EAGLE CREEK 115KV CKT 2	Build 0.57 mile 2nd circuit from Artesia - Eagle Creek	6/1/2011	6/1/2013
SPS	ARTESIA INTERCHANGE - EAGLE_CREEK3115.00 115KV CKT 1 BORDEN COUNTY INTERCHANGE 230/138KV TRANSFORMER CKT 1	replace Line trap and CT Add second 230/138kV transformer at Borden County by moving old from Midland when retired.	6/1/2015	6/1/2015
SPS				
SPS	BUCKEYE TAP - CUNNINGHAM STATION 115KV CKT 1 CAPROCK REC UPGRADES	Reconductor 115 kV circuit 8.55 miles with 795 kcmil conductor Build new Midland - Borden County 345 kV line, operate at 230 kV. Add second 230/138 kV transformers at Midland and Borden County. Add 50 MVAR cap bank at Midland 138 kV and 14.4 MVAR cap bank at Caprock REC-Midkiff 138 kV	6/1/2013	6/1/2013 6/1/2015
SPS	CHAVES COUNTY INTERCHANGE - SAMSON SUB 115KV CKT 1	Reconductor 115 kV circuit 7.78 miles with 795 kcmil conductor	6/1/2015	6/1/2015
SPS	CHAVES COUNTY INTERCHANGE - URTON SUB 115KV CKT 1	Reconductor 115 kV circuit 3.7 miles with 795 kcmil conductor	6/1/2015	6/1/2015
SPS	CHAVES COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 2	Upgrade Chaves230/115 KV 225/258 MVA	6/1/2015	6/1/2015
SPS	CHERRY SUB 230/115 KV TRANSFORMER CKT 1	Tap Harrington - Potter 230 kV and step down to 115 at Cherry Sub.	6/1/2017	6/1/2017
SPS	DEAF SMITH - PANDA 115 KV CKT 1	Reconductor 115 kV circuit 1.0 miles with 4/0 AS kcmil conductor	6/1/2011	6/1/2012
SPS	EAST PLANT INTERCHANGE - MANHATTAN SUB 115KV CKT 1	Reconductor 2.24 mile 795 acsr	6/1/2011	6/1/2013
SPS	EDDY COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1	Add 2nd transformer EDDY CO 230/115 KV CKT 2	6/1/2015	6/1/2015
SPS	FARMERS ELECTRIC REC-CLOVIS - FRIODRW1 115.00 115KV CKT 1	Reconductor line Build new 345 kV line from Potter to new Frio-Draw substation at Roosevelt. Build 345/230 kV and 230/115 kV transformers at Frio Draw substation. Build new line Roosevelt N - Frio-Draw - Oasis	6/1/2015	6/1/2015
SPS	FRIO-DRAW - POTTER 345 KV	230 kV.	6/1/2015	6/1/2015
	LIACTINGS ALE IO CONVERGEN	Convert Hastings Sub to 115 kV. Build Bush - Hastings - East	01/100	0/:/22:-
SPS	HASTINGS 115 KV CONVERSION	Plant 397 ACSR.	6/1/2011	6/1/2013 6/1/2011
SPS SPS	HITCHLAND INTERCHANGE 230/115KV TRANSFORMER CKT 1 JONES STATION - JONES STATION BUS #2 230KV CKT 2	Build Hitchland - Moore 230kV and Hitchland Pringle 230kV Add new bus tie between Jones Station Bus #1 and #2	6/1/2010 6/1/2015	6/1/2011
		Build new Lea County Ancell - Gaines 69kV line, Build new Lea County TP-91 to Darby 69kV line, Build new ERF3 substation		
SPS	LEA COUNTY ERF PROJECT LEA COUNTY REC -MHOON - LEA COUNTY REC-LOVINGTON INTERCHANGE	with new 44MVA 115/69kV transformer	6/1/2011	6/1/2013
SPS	COUNTY REC-INFOON - LEA COUNTY REC-LOVING TON INTERCHANGE 69KV CKT 1 LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT	Indeterminate	6/1/2011	6/1/2011
SPS SPS	1 LEA COUNTY REC-PLAINS INTERCHANGE 115/69KV TRANSFORMER CKT 1 LEA COUNTY REC-SAN ANDRES INTERCHANGE 115/69KV TRANSFORMER	Indeterminate Indeterminate	6/1/2011 6/1/2015	6/1/2011 6/1/2015
SPS	CKT 1	Indeterminate	6/1/2011	6/1/2011
SPS	MANHATTAN TAP - OSAGE SWITCHING STATION 115KV CKT 1	Indeterminate	6/1/2011	6/1/2011
SPS	MIDLAND COUNTY INTERCHANGE 230/138KV TRANSFORMER CKT 1	Add 2nd 230/115 kV transformer at Midland	6/1/2012	6/1/2013
		Build new ERF3 substation with new 44MVA 115/69kV	***	
SPS	Multi - Lea County ERF Project	transformer. Add Newhart 230 kV bus tapping Plant X - Potter 230 kV. Build Newhart - Swisher County Interchange 230 kV. Add Newhart 115 kV bus and build new 115 kV line from Castro - Newhart - Kress.	6/1/2012	6/1/2013
		Add Newhart 230/115 kV Transformer (copy of Pecos 150 MVA).		
SPS	NEWHART INTERCHANGE PROJECT	Buil	6/1/2011	6/1/2013
SPS	NICHOLS - RANDALL - AMARILLO SOUTH 230 KV CKT 1	Rebuild Nichols - Randall 230 line, tie into Randall sub	6/1/2011	6/1/2013
SPS	OSAGE SWITCHING STATION - SOUTH GEORGIA INTERCHANGE 115KV CKT 1	Reconductor with 795 ACSR	6/1/2011	6/1/2013
SPS	PORTALES INTERCHANGE 115/69KV TRANSFORMER CKT 1	Indeterminate	6/1/2012	6/1/2012
SPS	PORTALES INTERCHANGE 115/69KV TRANSFORMER CKT 2	Indeterminate Build new 345 kV line from Potter to Midpoint Bus (Stateline) to	6/1/2012	6/1/2012
SPS	POTTER - ANADARKO 345 KV	Anadarko.	6/1/2015	6/1/2015
SPS	RANDALL 230/115 KV TRANSFORMER CKT 2	add new 230/115 kV transformer at Randall	6/1/2015	6/1/2013
SPS	ROOSEVELT 230/115 KV TRANSFORMER CKT 2	add second 230/115 KV transformer at Roosevelt	6/1/2011	6/1/2013
SPS	SUNDOWN INTERCHANGE 230/115KV TRANSFORMER CKT 1	Indeterminate	6/1/2015	6/1/2015
SPS	TUCO INTERCHANGE 230/115KV TRANSFORMER CKT 1	Add 2nd Carlsisle 230/115 kV auto	6/1/2015	6/1/2015
SPS	TUCO INTERCHANGE 230/115KV TRANSFORMER CKT 3	add 3rd transformer at Tuco	6/1/2015	6/1/2015

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

SUNC	JOHNSON CORNER - PIONEER 115 KV CKT 1	Convert 69 kV line from Pioneer to Johnson Corner to 115 kV	6/1/2015	6/1/2015
SUNC	JOHNSON CORNER 115 KV CAP	Install 115 kV 12 MVAR Cap at Johnson Corner Substation	6/1/2015	6/1/2015
		Install 2nd 115 kV 12 MVAR Cap Bat at Johnson Corner		
SUNC	JOHNSON CORNER 115 KV CAP #2	Substation	6/1/2015	6/1/2015
WERE	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	Tear down and rebuild 7.88 mile Gill-Clearwater	6/1/2011	6/1/2013
WERE	GILL ENERGY CENTER EAST - GILLJCT2 69.000 69KV CKT 1	Tear down and rebuild 7.88 mile Gill-Clearwater	6/1/2011	6/1/2013
		Replace wavetraps on Gill - Interstate 138 kV line for a new		
WERE	Line - Gill - Interstate 138 kV	rating of 232/256 MVA.	6/1/2016	6/1/2016
		Upgrade Terminal Equipment at Altus SW, 300-600A, new rating		
WFEC	ALTUS SW - NAVAJO 69KV CKT 1	conductor 53/65MVA	6/1/2015	6/1/2015

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

Transmission Owner	Upgrade	Solution	Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)
AEPW	BANN - RED SPRINGS REC 138KV CKT 1	Replace 138 kV breakers 3300 & 3310	7/1/2012	7/1/2012
AEPW	HUGO POWER PLANT - VALLIANT 345 KV AEPW	Vallient 345 KV line terminal	7/1/2012	7/1/2012
EMDE	SUB 110 - ORONOGO JCT SUB 167 - RIVERTON 161KV CKT 1	Reconductor Oronogo 59467 to Riverton 59469 with Bundled 556 ACSR 6/1/2011		6/1/2011
KACP	LACYGNE - WEST GARDNER 345KV CKT 1	KCPL Sponsored Project to Reconductor Line to be In-Service by 6/1/2006	6/1/2006	6/1/2006
MKEC	CLIFTON - GREENLEAF 115KV CKT 1	Rebuild 14.4 miles	6/1/2011	6/1/2013
MKEC	FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1	Rebuild 8.05 mile line	12/1/2009	6/1/2013
MKEC	FLATRDG3 138.00 - HARPER 138KV CKT 1	Rebuild 24.15 mile line	12/1/2009	6/1/2013
MKEC	MEDICINE LODGE - PRATT 115KV CKT 1	Rebuild 26 mile line	12/1/2009	6/1/2013
OKGE	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1	Replace bus tie with 100MVA transformer	6/1/2006	6/1/2008
OKGE	NORTHWEST - WOODWARD 345KV CKT 1	Build 120 miles of 345 kV	1/1/2010	1/1/2010
OKGE	WOODWARD - IODINE 138KV CKT 1	Tap Iodine to Woodward 138 kV line	1/1/2010	1/1/2010
OKGE	WOODWARD - WOODWARD EHV 138KV CKT 1	Build .5 miles of 138 kV and install terminal equipment	1/1/2010	1/1/2010
OKGE	WOODWARD - WOODWARD EHV 138KV CKT 2	Build .5 miles of 138 kV and install terminal equipment	1/1/2010	1/1/2010
OKGE	WOODWARD 345/138KV TRANSFORMER CKT 1	Install 345/138 kV XF	1/1/2010	1/1/2010
WERE	DEARING 138KV Capacitor	Dearing 138 kV 20 MVAR Capacitor Addition	6/1/2012	6/1/2012
WFEC	FT SUPPLY 138/69KV TRANSFORMER CKT 1	Install 2nd 70 MVA auto at Ft Supply	12/1/2006	6/1/2008
WFEC	HUGO POWER PLANT - VALLIANT 345 KV WFEC	New 19 miles 345 KV	7/1/2012	7/1/2012
WFEC	HUGO POWER PLANT 345/138KV TRANSFORMER CKT 1	New 345/138 kv Auto	7/1/2012	7/1/2012

Table 5 - Third Party Facility Constraints

Transmission Owner	UpgradeName	Solution	Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)	Estimated Engineering & Construction Cost
EES	ARKANSAS NUCLEAR ONE - RUSSELLVILLE NORTH 161KV CKT 1	Indeterminate	1/1/2015	1/1/2015	Indeterminate
EES	EVERTON - HARRISON-EAST 161KV CKT 1	Indeterminate	6/1/2010	6/1/2010	Indeterminate
EES	HILLTOP - ST JOE 161KV CKT 1	Indeterminate	6/1/2010	6/1/2010	Indeterminate
EES	RUSSELLVILLE EAST - RUSSELLVILLE NORTH 161KV CKT 1	Indeterminate	1/1/2015	1/1/2015	Indeterminate
EES	RUSSELLVILLE EAST - RUSSELLVILLE SOUTH 161KV CKT 1	Indeterminate	6/1/2010	6/1/2010	Indeterminate
EES	WELLS 500/230KV TRANSFORMER CKT 2	Indeterminate	6/1/2012	6/1/2012	Indeterminate
		Replace wave trap, disconnect switches, and breaker. Bus			
SWPA	DARDANELLE - RUSSELLVILLE SOUTH 161KV CKT 1 SWPA	will limit rating to 1560 amps.	6/1/2010	6/1/2011	Indeterminate
SWPA	SPRINGFIELD (SPF X1) 161/69/13.8KV TRANSFORMER CKT 1	Replace Springfield auto #1 with larger xfr.	6/1/2015	6/1/2015	Indeterminate