

Aggregate Facility Study SPP-2009-AGP2-AFS-4 For Transmission Service Requested by Aggregate Transmission Customers

SPP Engineering, SPP Transmission Service Studies

SPP AGGREGATE FACILITY STUDY (SPP-2009-AGP2-AFS-4)
July 23, 2010

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1. Executive Summary

Pursuant to Attachment Z1 of the Southwest Power Pool Open Access Transmission Tariff (OATT), 2977 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 \$73 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 \$175 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 \$40 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 applicable.

The Transmission Provider will tender a Letter of Intent on July 23rd, 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 August 7th, 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 2009-AG2 open season commenced on February 1, 2009 and closed May 31, 2009. The 2009-AG3 open season commenced on June 1, 2009 and closed September 30, 2009. Based on the preceding, all requests for long-term transmission service received prior to June 1, 2009 for 2009 AG-2 and October 1, 2009 for 2009 AG-3 with a signed study agreement have been included in the second paired Aggregate Transmission Service Study (ATSS) of 2009. Approximately 2977 MW of long-term transmission service has been restudied in this Aggregate Facility Study (AFS) with over \$73 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:

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

According to Attachment 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 applicable. 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. <u>Description</u>

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 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 2977 MW over a variety of requested service periods. The SPP STEP 2010 Build 2 Cases 2011 Summer Peak (11SP), 2011/12 Winter Peak (11WP), 2011 Summer Peak (12SP), 2012/13 Winter Peak (12WP), 2016 Summer Peak (16SP), 2016/17 Winter Peak (16WP), and 2021 Summer Peak (21SP) 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 current modeling information. One group of requests was developed from the aggregate of 2977 MW in order to model the requested service. From the seven seasonal models, two system scenarios were developed. Scenario 0 includes projected usage of transmission included in the SPP 2010 Series Cases. Scenario 5 includes all transmission not already included in the SPP 2010 Series Cases.

C. Transmission Request Modeling

Network Integration Transmission Service requests are modeled as Generation to Load transfers in addition to Generation to Generation transfers. Network Integration Transmission Service requests are modeled as Generation to Load transfers in addition to Generation 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. 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. Curtailment and Redispatch Evaluation

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

and any Transmission Customer's use of the Transmission System to serve its designated load. Redispatch was evaluated to provide only interim service during the time frame prior to completion of any assigned network upgrades. Curtailment of existing confirmed service is evaluated to provide only interim service. Curtailment of existing confirmed service is only evaluated at the request of the transmission customer.

SPP determined potential relief pairs to relieve the incremental MW impact on limiting facilities as identified in Table 6. Using the selected cases where the limiting facilities were identified, potential incremental and decremental units were identified by determining the generation amount available for increasing and decreasing from the units generation amount, maximum generation amount, and minimum generation amount. If the incremental or decremental amount was greater than 1 MW, the unit was considered as a potential incremental or decremental unit. Generation shift factors were calculated for the potential incremental and decremental units using Managing and Utilizing System Transmission (MUST). 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 July 23rd, 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

August 7th, 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 fully base plan funded. The amount of the letter of credit will be adjusted down on an annual basis to reflect cost recovery based on revenue allocation.. 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 slop	e decoupled Newton-Raphson solution (FDNS)
Tap adjustment – Step	pping
Area interchange cont	rol – Tie lines and loads
Var limits – Apply im	mediately
Solution options - X	Phase shift adjustment
_	Flat start
_	Lock DC taps
_	Lock switched shunts
ACCC CASES:	
Solutions – AC contir	igency checking (ACCC)
MW mismatch tolerar	nce - 0.5
System intact rating –	Rate A
Contingency case rati	
Percent of rating – 10	0
Output code – Summa	•
Min flow change in o	verload report – 3mw
Excld cases w/ no ove	erloads form report – YES
Exclude interfaces from	m report – NO
Perform voltage limit	check – YES
	capacity table – 60000
Cutoff threshold for a	vailable capacity table – 99999.0
Min. contng. case Vlt	g chng for report – 0.02
Sorted output – None	
Newton Solution:	
Tap adjustment – Step	pping
Area interchange cont	rol – Tie lines and loads (Disabled for generator outages)
Var limits - Apply im	mediately
Solution options - \underline{X}	Phase shift adjustment
_	Flat start
_	Lock DC taps
_	Lock switched shunts

SPP AGGREGATE FACILITY STUDY (SPP-2009-AGP2-AFS-4)

 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	AG3-2009-042	73453875	CSWS	CSWS	49	1/1/2011	1/1/2031	10/1/2013	10/1/2033	1/1/2011	1/1/2031	0	11SP
AEPM	AG3-2009-043	73453863	CSWS	CSWS	50	1/1/2011	1/1/2031	10/1/2013	10/1/2033	1/1/2011	1/1/2031	0	11SP
CRGL	AG3-2009-032	73194190	WR	AECI	201	1/1/2011	1/1/2016	6/1/2012	6/1/2017	1/1/2011	1/1/2016	0	11SP
GRDX	AG3-2009-033	73453318	GRDA	SPA	20	6/30/2010	6/30/2038	6/1/2016	6/1/2044	11/1/2010	11/1/2038	0	11SP
KMEA	AG3-2009-037	73453392	NPPD	WR	1	9/30/2010	9/30/2015	11/1/2010	11/1/2015	11/1/2010	11/1/2015	0	11SP
KMEA	AG3-2009-038	73453272	NPPD	SECI	1	4/30/2010	4/30/2015	11/1/2010	11/1/2015	11/1/2010	11/1/2015	0	10SP
KMEA	AG3-2009-039	73453537	NPPD	WR	1	4/30/2011	4/30/2016	4/30/2011	4/30/2016	4/30/2011	4/30/2016	0	11SP
KMEA	AG3-2009-040	73453187	NPPD	WR	1	4/30/2011	4/30/2016	4/30/2011	4/30/2016	4/30/2011	4/30/2016	0	11SP
KPP	AG2-2009-003	1607046	WR	WR	6	3/1/2010	3/1/2015	11/1/2010	11/1/2015	11/1/2010	11/1/2015	0	10SP
KPP	AG3-2009-024	73447072	WPEK	WR	13	6/1/2010	6/1/2020	11/1/2010	11/1/2020	11/1/2010	11/1/2020	0	10SP
KPP	AG3-2009-024	73450023	WPEK	WR	13	6/1/2010	6/1/2020	1/1/2015	1/1/2025	11/1/2010	11/1/2020	0	10SP
KPP	AG3-2009-024	73450028		WPEK	13	6/1/2010	6/1/2020	11/1/2010	11/1/2020	11/1/2010	11/1/2020		10SP
KPP	AG3-2009-025	73447046	NPPD	WR	1	6/1/2010	6/1/2020	11/1/2010	11/1/2020	11/1/2010	11/1/2020	0	10SP
KPP	AG3-2009-025	73450014		WR	1	6/1/2010	6/1/2020	11/1/2010	11/1/2020	11/1/2010	11/1/2020		10SP
KPP	AG3-2009-025	73450018		WPEK	1	6/1/2010	6/1/2020	11/1/2010	11/1/2020	11/1/2010	11/1/2020		10SP
KPP	AG3-2009-026	73446841		WR	396	6/1/2010	6/1/2020	11/1/2010	11/1/2020	11/1/2010	11/1/2020	-	10SP
KPP	AG3-2009-026	73446862		WR	13	6/1/2010	6/1/2020	11/1/2010	11/1/2020	11/1/2010	11/1/2020		10SP
KPP	AG3-2009-026	73446872		WPEK	20	6/1/2010	6/1/2020	11/1/2010	11/1/2020	11/1/2010	11/1/2020		10SP
KPP	AG3-2009-027	73446884	WR	WR	13	6/1/2010	6/1/2020	11/1/2010	11/1/2020	11/1/2010	11/1/2020		10SP
KPP	AG3-2009-027	73446928	WR	WR	396	6/1/2010	6/1/2020	11/1/2010	11/1/2020	11/1/2010	11/1/2020	0	10SP
KPP	AG3-2009-027	73449987	WR	WPEK	20	6/1/2010	6/1/2020	11/1/2010	11/1/2020	11/1/2010	11/1/2020	0	10SP
KPP	AG3-2009-028	73447001	WPEK	WR	396	6/1/2010	6/1/2020	11/1/2010	11/1/2020	11/1/2010	11/1/2020	0	10SP
KPP	AG3-2009-028	73449996	WPEK	WPEK	20	6/1/2010	6/1/2020	11/1/2010	11/1/2020	11/1/2010	11/1/2020		10SP
KPP	AG3-2009-028	73450005		WR	12	6/1/2010	6/1/2020	11/1/2010	11/1/2020	11/1/2010	11/1/2020	-	10SP
KPP	AG3-2009-030	74236802	KCPL	WR	45	4/1/2010	1/1/2015	1/1/2015	10/1/2019	11/1/2010	8/1/2015		10SP
KPP	AG3-2009-030		KCPL	WR	45	4/1/2010	1/1/2015	11/1/2010	8/1/2015	11/1/2010	8/1/2015		10SP
KPP	AG3-2009-030	74236821	KCPL	WPEK	45	4/1/2010	1/1/2015	11/1/2010	8/1/2015	11/1/2010	8/1/2015	0	10SP

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

MIDW	AG3-2009-016	73440251	WR	WR	5	5/31/2011	5/31/2016	12/1/2012	12/1/2017	5/31/2011	5/31/2016	0 11SP
MIDW	AG3-2009-017	73440203	WR	WR	10	5/31/2011	5/31/2016	12/1/2012	12/1/2017	5/31/2011	5/31/2016	0 11SP
MOWR	AG2-2009-002	1607977	OPPD	MPS	10	12/1/2009	12/1/2014	11/1/2010	11/1/2015	11/1/2010	11/1/2015	0 10SP
OKGE	AG3-2009-014	73439915	OKGE	OKGE	152	12/31/2010	12/31/2030	1/1/2015	1/1/2035	12/31/2010	12/31/2030	0 11SP
OKGE	AG3-2009-015	73439927	OKGE	OKGE	130	9/29/2010	9/29/2030	1/1/2015	1/1/2035	11/1/2010	11/1/2030	0 11SP
OMPA	AG2-2009-001	1607006	OKGE	OKGE	3	4/30/2010	4/30/2025	11/1/2010	11/1/2025	11/1/2010	11/1/2025	0 10SP
OMPA	AG3-2009-019	73441050	GRDA	CSWS	15	6/1/2011	6/1/2040	10/1/2013	10/1/2042	6/1/2011	6/1/2040	0 11SP
OMPA	AG3-2009-019	73441055	GRDA	OKGE	15	6/1/2011	6/1/2040	6/1/2011	6/1/2040	6/1/2011	6/1/2040	0 11SP
OMPA	AG3-2009-019	73441061	GRDA	CSWS	10	6/1/2014	6/1/2040	6/1/2014	6/1/2040	6/1/2014	6/1/2040	0 21SP
OMPA	AG3-2009-019	73441065	GRDA	OKGE	10	6/1/2014	6/1/2040	6/1/2014	6/1/2040	6/1/2014	6/1/2040	0 21SP
OMPA	AG3-2009-019	73441073	GRDA	WFEC	10	6/1/2014	6/1/2040	6/1/2014	6/1/2040	6/1/2014	6/1/2040	0 21SP
OMPA	AG3-2009-019	73441080	GRDA	WFEC	15	6/1/2011	6/1/2040	6/1/2011	6/1/2040	6/1/2011	6/1/2040	0 11SP
OPPM	AG3-2009-021	73450809	OPPD	OPPD	60	6/29/2010	1/1/2032	11/1/2010	6/1/2032	11/1/2010	6/1/2032	0 11SP
OPPM	AG3-2009-023	73449634	NPPD	OPPD	41	8/31/2011	9/30/2031	6/1/2015	7/1/2035	8/31/2011	9/30/2031	0 12SP
PPMI	AG3-2009-035	73448030	SPS	AMRN	100	1/1/2013	1/1/2018	1/1/2013	1/1/2018	1/1/2013	1/1/2018	0 16SP
PPMI	AG3-2009-036	73448026	WR	AMRN	100	1/1/2012	1/1/2017	6/1/2013	6/1/2018	1/1/2012	1/1/2017	0 12SP
SPSM	AG3-2009-013	73437686	CSWS	SPS	200	1/1/2012	1/1/2019	6/1/2013	6/1/2020	1/1/2012	1/1/2019	0 12SP
WFEC	AG3-2009-003	1614798	WFEC	WFEC	123	3/31/2010	3/31/2029	1/1/2015	1/1/2034	11/1/2010	11/1/2029	0 10SP
WFEC	AG3-2009-004	1614799	WFEC	WFEC	75	3/31/2010	3/31/2024	11/1/2010	11/1/2024	11/1/2010	11/1/2024	0 10SP
WFEC	AG3-2009-031	73436312	WFEC	SPS	100	5/31/2012	5/31/2042	1/1/2015	1/1/2045	5/31/2012	5/31/2042	0 12SP

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Note 1: Start and Stop Dates with interim redispatch are determined based on customers choosing option to pursue redispatch to start service at Requested Start and Stop Dates or earliest date possible.

Note 2: Start dates with and without redispatch are based on the assumed completion dates of previous Aggregate Transmission Service Studies currently being conducted. Actual start dates may differ from the potential start dates upon completion of the previous studies.

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	A	Letter of Credit Amount equired	Plar and	otential Base a Engineering Construction ling Allowable	Notes	En Con	^t Additional gineering and struction Cost or 3rd Party Upgrades	Ass WI	Total Revenue equirements for signed Upgrades Over Term of Reservation THOUT Potential se Plan Funding Allocation	Res P	Total Revenue quirements for Assigned ogrades Over Term of servation WITH otential Base Plan Funding Allocation	Bas	int-to-Point se Rate Over eservation Period		
AEPM	AG3-2009-042	73453875			-	\$	2,722,205		\$	-	\$	7,841,186	\$	-	\$	-	Schedule 9 &	
AEPM	AG3-2009-043	73453863	\$ 2,777,795	5 \$	-	\$	2,777,795		\$	-	\$	8,001,311	\$	-	\$	-	Schedule 9 &	11 Charges
CRGL	AG3-2009-032	73194190	\$	- \$	-	\$	-			Indeterminate	\$	-	\$	-	\$	11,891,160	\$	11,891,160
GRDX	AG3-2009-033	73453318	\$	- \$	-	\$	-		\$	4,600,000	\$	-	\$	-	\$	7,929,600	\$	7,929,600
KMEA	AG3-2009-037	73453392	\$	- \$	-	\$	-		\$	-	\$	-	\$	-	\$	175,860	\$	175,860
KMEA	AG3-2009-038	73453272	\$	- \$	-	\$	-		\$	-	\$	-	\$	-	\$	266,102	\$	266,102
KMEA	AG3-2009-039	73453537	\$	- \$	_	\$	_		\$	_	\$	_	\$	-	\$	175,860	\$	175,860
KMEA	AG3-2009-040	73453187	\$	- \$	_	\$	-		\$	-	\$	-	\$		\$	175,860	\$	175,860
KPP	AG2-2009-003	1607046	\$	- \$	_	\$			\$		\$	_	\$	_	\$,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Schedule 9 &	
KPP	AG3-2009-024	73446872	\$	- \$	_	\$		10	\$		\$	_	\$		\$		Schedule 9 &	
KPP	AG3-2009-024	73447072	\$	- ψ		\$		6	\$		\$	_	\$		\$		Schedule 9 &	
KPP	AG3-2009-024	73450023	\$ 4,151,640	Ψ	1,926,640	\$	2,225,000	- 0	\$		\$	9,119,115	\$	4,231,882	\$		\$	4,231,882
KPP	AG3-2009-024	73450028	\$ 4,131,040	- \$	1,020,040	\$	2,223,000	6	\$		\$	3,113,113	\$	4,231,002	\$		Schedule 9 &	
KPP	AG3-2009-025	73447046	•	- \$		\$		8	\$		\$	_	\$		\$		Schedule 9 &	
KPP	AG3-2009-025	73450014			268,191	\$	324.000	7	\$		\$	1,303,134	\$	590,162	\$		\$	590.162
KPP	AG3-2009-025	73450018		· \$	200,101	\$	- 021,000	8	\$		\$	1,000,101	\$		\$		Schedule 9 &	
KPP	AG3-2009-026	73446841	\$ 10,079,489		-	\$	10,079,489	9,14	\$	6,414,600	\$	20,615,553	\$		\$	-	Schedule 9 &	
KPP	AG3-2009-026	73446862	\$	- \$	_	\$	-	10	\$	-	\$	-	\$		\$	-	Schedule 9 &	
KPP	AG3-2009-027	73446884	\$	- \$	-	\$	-	10	\$	-	\$	-	\$	-	\$	-	Schedule 9 &	
KPP	AG3-2009-027	73446928	\$	- \$	_	\$	-	10	\$		\$	-	\$		\$		Schedule 9 &	
KPP	AG3-2009-027	73449987	\$	- \$	_	\$		10	\$		\$	_	\$		\$		Schedule 9 &	
KPP	AG3-2009-028	73447001	\$	- \$	_	\$		10	\$		\$	_	\$		\$		Schedule 9 &	
KPP	AG3-2009-028	73449996	\$	- \$	-	\$	-	10	\$	-	\$	-	\$	-	\$	-	Schedule 9 &	
KPP	AG3-2009-028	73450005	\$	- \$	-	\$	-	10	\$	-	\$	-	\$	-	\$	-	Schedule 9 &	
KPP	AG3-2009-030	74236802	\$ 17,214,123	3 \$	9,114,123	\$	8.100.000		\$	_	\$	30,411,701	\$	16,101,662	\$	_	\$	16,101,662
KPP	AG3-2009-030	74236811	\$	- \$	-	\$	-	12	\$	-	\$	-	\$	-	\$	-	Schedule 9 &	
KPP	AG3-2009-030	74236821	\$	- \$	-	\$	-	12	\$	-	\$	_	\$	_	\$	_	Schedule 9 &	
MIDW	AG3-2009-016	73440251	\$ 285,160		_	\$	285,160		\$	-	\$	418.306	\$	-	\$	-	Schedule 9 &	
MIDW	AG3-2009-017	73440203	\$ 7,407		_	\$	7.407		\$		\$	10,684	\$		\$		Schedule 9 &	
MOWR	AG2-2009-002	1607977	\$ 7,407	ψ \$		\$	7,407		\$		\$	10,004	\$		\$	1,023,600	\$	1.023.600
OKGE	AG3-2009-014	73439915	\$ 10.112.724	4 \$	365,125	\$	9.747.599		\$		\$	38,024,798	\$	1,372,903	\$	1,023,000	\$	1,372,903
OKGE	AG3-2009-015	73439927	\$ 10,103,469		1,394,758	\$	8.708.710		\$		\$	34,119,250	\$	4.710.075	\$		\$	4,710,075
OMPA	AG2-2009-001	1607006	\$ 63.457		-,00-1,700	\$	63.457		\$		\$	142,146	\$	-1,7 10,070	\$		Schedule 9 &	, .,
OMPA	AG3-2009-019	73441050	\$ 548,034		_	\$	548,034		\$		\$	2,182,192	\$		\$		Schedule 9 &	
OMPA	AG3-2009-019	73441055	\$	- \$		\$		14	\$		\$	2,102,102	\$	-	\$		Schedule 9 &	
OMPA	AG3-2009-019	73441061	\$ 174.566			\$	174.566		\$		\$	718,794	\$	-	\$		Schedule 9 &	
OMPA	AG3-2009-019	73441065		- \$		\$		13	\$		\$	7 10,704	\$	-	\$		Schedule 9 &	
OMPA	AG3-2009-019	73441073	•	- \$		\$		13	\$		\$	_	\$	-	\$		Schedule 9 &	
OMPA	AG3-2009-019	73441080	•	- \$	_	\$	-	14	\$	-	\$	_	\$		\$	-	Schedule 9 &	

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

OPPM	AG3-2009-021	73450809	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
OPPM	AG3-2009-023	73449634	-	\$ -	\$ -		Indeterminate	\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
PPMI	AG3-2009-035	73448030	4,603,968	\$ 4,603,968	\$		\$ -	\$ 5,791,818	5,791,818	\$ 5,916,000	
PPMI	AG3-2009-036	73448026	6,451,922	\$ 6,451,922	\$		\$ -	\$ 7,551,718	\$ 7,551,718	\$ 5,916,000	\$ 7,551,718
SPSM	AG3-2009-013	73437686	107,961	\$ -	\$ 107,961	15	\$ 4,000,198	\$ 210,603	\$ -	\$ -	Schedule 9 & 11 Charges
WFEC	AG3-2009-003	1614798	\$ 3,054,107	\$ -	\$ 3,054,107		\$ -	\$ 8,578,952	\$ -	\$ -	Schedule 9 & 11 Charges
WFEC	AG3-2009-004	1614799	\$	\$ -	\$		\$ -	\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
WFEC	AG3-2009-031	73436312	\$ 88,283	\$ -	\$ 88,283	15	\$ 1,999,802	\$ 304,489	\$ -	\$ -	Schedule 9 & 11 Charges
Grand Total			\$ 73,138,499		\$ 49,013,773			\$ 175,345,750	\$ 40,350,220		

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 required for upgrades assigned to PTP requests. The amount of the letter of credit will be adjusted down on an annual basis to reflect cost recovery based on revenue allocation. This letter of credit is not required for those facilities that are fully base plan funded. The Letter Of Credit Amount listed is 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 II 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 Plan upgrade being displaced or deferred by an earlier in service date for a Requested Upgrade shall be determined per Attachment J, Section VII.C methodology. Assumption of a 40 year service life is utilized for Base Plan funded projects. A present worth analysis of RR on a common year basis between the Base Plan and Requested Upgrades was performed to determine avoided Base Plan RR due to the displacement or deferral of the Base Plan upgrade by the Requested Upgrade. The incremental increase in present worth of a Requested Upgrade on a common year basis as a Base Plan upgrade is assigned to the transmission requests impacting the upgrade based on the displacement or deferral. If the displacement analysis results in lower RR due to the shorter amortization period of the requested upgrade when compared to a base plan amortization period, then no direct assignment of the upgrade cost is made due to the displacement to an earlier start date.

Note 4: For 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 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 applicable.

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 amortization period for the upgrade and thus different RR.

Note 6: Mutually exclusive with 73450023

Note 7 1.8MW new resource

Note 8: Mutually exclusive with 73450018

Note 9: New 0.9MW SPA Purchase and 21.4MW of city generation in Westar to KPP Load in WERE, MIDW, and MKEC Zones plus new 14.5MW of city generation in MKEC, 5MW of KPP Westar Purchase, 0.3MW of KPP WAPA Purchase to KPP Load in WERE and MIDW zones plus 18.2 MW of new KPP Westar and MIDW Designated Resources to KPP Load in MKEC zone

Note 10: Mutually exclusive with 73446841

Note 11: Mutually exclusive with 74236802

Note 12: Mutually exclusive with 74236802

Note 13: Mutually exclusive with 73441061

Note 14: Mutually exclusive with 73441050

Note 15: Direct Assigned Network Upgrades

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

Customer			POD		Start Date	Requested Stop Date	Date Without Redispatch		Plan Funding Allowable	Point-to-Point Base Rate	Cost	Total Revenue Requirements
AEPM	73453875	CSWS	CSWS	49	1/1/2011	1/1/2031	10/1/2013	10/1/2033	\$ 2,722,205	\$	\$ 2,722,205	\$ 7,841,186
									\$ 2,722,205	\$ -	\$ 2,722,205	\$ 7,841,186

					Base Plan				
			Earliest	Redispatch	Funding for	Directly Assigned	Allocated E & C	Total E & C	Total Revenue
Reservation Upgrade Name	DUN	EOC	Service Date	Available	Wind	for Wind	Cost	Cost	Requirements
73453875 DIANA (DIANA 3) 345/138/13.8KV TRANSFORMER CKT 3	6/1/2012	6/1/2013	10/1/2012		\$ 2,722,205	\$ -	\$ 2,722,205	\$ 5,500,000	\$ 7,841,186
				Total	\$ 2,722,205	\$ -	\$ 2,722,205	\$ 5,500,000	\$ 7,841,186

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73453875	DIANA - PERDUE 138KV CKT 1	6/1/2013	6/1/2014	10/1/2013	Yes
	EASTON REC - KNOX LEE 138KV CKT 1	6/1/2012	6/1/2012		
	EASTON REC - PIRKEY 138KV CKT 1	6/1/2012	6/1/2012		
	PIRKEY - WHITNEY 138KV CKT 1	6/1/2013	6/1/2013		
	SOLITHWEST SHREVEPORT - SPRINGRIDGE PAN-HARR REC 138KV CKT 1	6/1/2013	6/1/2013		

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

| Earliest

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73453875	52ND & DELAWARE WEST TAP - RIVERSIDE STATION 138KV CKT 1	6/1/2011	6/1/2012		
	ARCADIA (ARCADIA2) 345/138/13.8KV TRANSFORMER CKT 1 Accelerated	6/1/2011	6/1/2014	10/1/2013	
	TEXAS EASTMAN - WHITNEY 138KV CKT 1	10/1/2012	6/1/2013	10/1/2013	

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73453875	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		

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

Customer	Reservation	POR	POD	Requested Amount	Start Date	Requested Stop Date	Date Without Redispatch	Redispatch	Plan Funding Allowable	Point-to-Point Base Rate	Cost	Total Revenue Requirements
AEPM	73453863	CSWS	CSWS	50	1/1/2011	1/1/2031	10/1/2013	10/1/2033	\$ 2,777,795	\$	\$ 2,777,795	\$ 8,001,311
									\$ 2,777,795	\$ -	\$ 2,777,795	\$ 8,001,311

					Base Plan				
			Earliest	Redispatch	Funding for	Directly Assigned	Allocated E & C	Total E & C	Total Revenue
	DUN	EOC	Service Date	Available	Wind	for Wind	Cost	Cost	Requirements
73453863 DIANA (DIANA 3) 345/138/13.8KV TRANSFORMER CKT 3	6/1/2012	6/1/2013	10/1/2012		\$ 2,777,795	\$ -	\$ 2,777,795	\$ 5,500,000	\$ 8,001,311
				Total	\$ 2,777,795	\$ -	\$ 2,777,795	\$ 5,500,000	\$ 8,001,311

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73453863	DIANA - PERDUE 138KV CKT 1	6/1/2013	6/1/2014	10/1/2013	Yes
	EASTON REC - KNOX LEE 138KV CKT 1	6/1/2012	6/1/2012		
	EASTON REC - PIRKEY 138KV CKT 1	6/1/2012	6/1/2012		
	PIRKEY - WHITNEY 138KV CKT 1	6/1/2013	6/1/2013		
	SOUTHWEST SHREVEPORT - SPRINGRIDGE PAN-HARR REC 138KV CKT 1	6/1/2013	6/1/2013		

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

					Earliest	Redispatch
	Reservation	Upgrade Name	DUN	EOC	Service Date	Available
[73453863	52ND & DELAWARE WEST TAP - RIVERSIDE STATION 138KV CKT 1	6/1/2011	6/1/2012		
		ARCADIA (ARCADIA2) 345/138/13.8KV TRANSFORMER CKT 1 Accelerated	6/1/2011	6/1/2014	10/1/2013	
ſ		TEXAS EASTMAN - WHITNEY 138KV CKT 1	10/1/2012	6/1/2013	10/1/2013	

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73453863	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		

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

Customer Study Number CRGL AG3-2009-032

Customer	Reservation	POR	POD	Amount	Start Date	Requested Stop Date		Date Without Redispatch	Plan Funding Allowable	Point-to-Point Base Rate	Cost	Total Revenue Requirements
CRGL	73194190	WR	AECI	201	1/1/2011	1/1/2016	6/1/2012	6/1/2017	\$ -	\$ 11,891,160	\$ -	\$ -

						Total E & C	Total Revenue
Reservation	Upgrade Name	EOC	Service Date	Available	Cost	Cost	Requirements
7319419	None				\$ -	\$ -	\$ -
				Total	\$.	\$	٥ .

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

Reservation Upgrade Name DUN EOC Service Date Available 73194190 ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3 6/1/2011 6/1/2012 Yes

Third Party Limitations.							
				Earliest			1
				Service Start	Redispatch	Allocated E &	Total E & C
Reservation Upgrade Name		DUN	EOC	Date	Available	C Cost	Cost
73194190 8BYLBUT 500.0	0 - WEBRE 500KV CKT 1	10/1/2013	10/1/2013			\$ -	\$
					Total	\$ -	S

 Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study.
 Earliest Redispatch
 Redispatch Service Date
 Redispatch Available

 73194190 | HUGO POWER PLANT - VALLIANT 345 KV AEPW
 7/1/2012
 7/1/2012
 7/1/2012

 HUGO POWER PLANT - VALLIANT 345 KV WFEC
 7/1/2012
 7/1/2012
 7/1/2012

 HUGO POWER PLANT 345/138KV TRANSFORMER CKT 1
 7/1/2012
 7/1/2012
 7/1/2012

 LACYGNE - WEST GARDNER 345KV CKT 1
 6/1/2006
 6/1/2006
 6/1/2006
 6/1/2006

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

Customer Study Number GRDX AG3-2009-033

Customer	Reservation	POR	POD	Requested Amount	Start Date	Requested Stop Date	Date Without Redispatch		Plan Funding Allowable	Point-to-Point Base Rate	Cost	Total Revenue Requirements
GRDX	73453318	GRDA	SPA	20	6/30/2010	6/30/2038	6/1/2016	6/1/2044	\$	\$ 7,929,600	\$ -	\$
									\$ -	\$ 7,929,600	\$ -	\$

			Earliest	Redispatch	Allocated E & C	Total E & C	Total Revenue
Reservation Upgrade Name	DUN	EOC	Service Date	Available	Cost	Cost	Requirements
73453318 None					\$ -	\$ -	\$ -
				Total	\$ -	\$ -	\$ -

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

Reservation Upgrade Name

73453318 Multi - Centerton - Osage Creek 345 kV

Multi - Flint Creek - Centerton 345 kV and Centerton-East Centerton 161 kV

6/1/2011 6/1/2014 Yes

Third Party Limitations.

				Earliest			
				Service Start	Redispatch	Allocated E &	Total E & C
Reservation	Upgrade Name	DUN	EOC	Date	Available	C Cost	Cost
73453318	JONESBORO - JONESBORO 161KV CKT 1 SWPA	6/1/2017	6/1/2017			\$ -	\$ -
	TRUMANN - TRUMANN WEST AECC 161KV CKT 1	6/1/2017	6/1/2017			\$ 4,600,000	\$ 4,600,000
	XFR - Paragould 161/69 kV Auto 1 & 2	6/1/2011	6/1/2013		Yes	\$	\$ -
					Total	\$ 4,600,000	\$ 4,600,000

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

Reservation Upgrade Name DUN EOC Service Date Available

73453318 LACYGNE - WEST GARDNER 345KV CKT 1 6/1/2006 6/1/2006

SUB 110 - ORONOGO JCT. - SUB 167 - RIVERTON 161KV CKT 1 6/1/2011 6/1/2011 6/1/2011

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

Customer	Reservation	POR	POD	Requested Amount		Requested Stop Date	Redispatch	Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
KMEA	73453392	NPPD	WR	1	9/30/2010	9/30/2015	11/1/2010	11/1/2015	\$ -	\$ 175,860	\$ -	3

			Earliest	Redispatch	Allocated E & C	Total E & C	Total Revenue
Reservation Upgrade Name	DUN	EOC	Service Date	Available	Cost	Cost	Requirements
73453392 None					\$ -	\$ -	\$ -
				Total	\$ -	٠.	\$

Expansion Plan	1 - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to	the transmiss	sion customer.		
				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73453392	EAST MANHATTAN - NW MANHATTAN 230/115KV	6/1/2011	12/1/2011		

Construction Pe	ending - The requested service is contingent upon completion of the following upgrades. Cost is not assigna-	able to the tran	nsmission cust	omer.	
				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73453392	Line - E. Manhattan - JEC 230 kV	6/1/2012	12/1/2012		

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

Reservation Upgrade Name DUN EOC Service Date Available

73453392 FLATRDG3 138.00 - HARPER 138KV CKT 1 12/1/2009 6/1/2013 6/1/2006 6/1/2006

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

Customer	Reservation	POR	POD	Requested Amount		Requested		Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue Requirements
KMEA	73453272	NPPD	SECI	1	4/30/2010	4/30/2015	11/1/2010	11/1/2015	\$ -	\$ 266,102	\$ -	\$ -

						Total E & C	Total Revenue
		EOC	Service Date	Available	Cost	Cost	Requirements
73453272	None				\$ -	\$ -	\$ -
				Total	\$.	\$	٥ .

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

ı					Earliest	Redispatch
	Reservation	Upgrade Name	DUN	EOC	Service Date	Available
ı	73453272	OGALLALA 230/115KV TRANSFORMER CKT 2	6/1/2014	6/1/2014		

Priority Projects	s - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to	the transmiss			
				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73453272	Line - Comanche County - Medicine Lodge 345 kV dbl ckt	11/1/2010	1/1/2015		
	Line - Hitchland - Woodward 345 kV dbl ckt OKGE	11/1/2010	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl ckt SPS	11/1/2010	7/1/2014		
	Line - Medicine Lodge - Wichita 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Medicine Lodge - Wichita 345 kV dbl ckt WERE	11/1/2010	1/1/2015		
	Line - Spearville - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Spearville - Comanche County 345 kV dbl ckt SUNC	11/1/2010	1/1/2015		
	Line - Woodward - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
·	Line - Woodward - Comanche County 345 kV dbl ckt OKGE	11/1/2010	1/1/2015		
	XFR - Medicine Lodge 345/138 kV	11/1/2010	1/1/2015		

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

				Earliest	Redispatch	ı
Reservation	Upgrade Name		EOC	Service Date	Available	ı
73453272	NORTHWEST - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010			ı

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

Customer	Reservation	POR	POD			Requested	Deferred Start Date Without Redispatch	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue Requirements
KMEA	73453537	NPPD	WR	1	4/30/2011	4/30/2016			\$ -	\$ 175,860	\$ -	\$ -
									¢	\$ 175,860	¢	e

Reservation	Upgrade Name	DUN			Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
73453537	None				\$ -	\$ -	\$
				Total	\$ -	\$ -	S

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

Reservation Upgrade Name

DUN EOC Earliest Redispatch Service Date Available

73453537 | Line - E. Manhattan - JEC 230 kV 6/1/2012 12/1/2012

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

Reservation Upgrade Name DUN EOC Service Date Available

73453537 FLATRDG3 138.00 - HARPER 138KV CKT 1 12/1/2009 6/1/2013 6/1/2006 6/1/2006

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

Customer	Reservation	POR	POD	Requested Amount		Requested Stop Date	Date Without	Deferred Stop Date Without Redispatch	Plan Funding	Point-to-Point		Total Revenue Requirements
KMEA	73453187	NPPD	WR	1	4/30/2011	4/30/2016			\$ -	\$ 175,860	\$ -	\$ -
									\$ -	\$ 175.860	\$ -	\$ -

Reservation	Upgrade Name	DUN			· · · · · · · · · · · · · · · · · · ·	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
73453187		DOIN	LOO	OCIVICE DATE	Available	\$ -	\$ -	\$
					Total	\$ -	\$	\$

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

Reservation Upgrade Name

DUN EOC Earliest Redispatch Service Date Available

73453187 | Line - E. Manhattan - JEC 230 kV 6/1/2012 12/1/2012

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

Reservation Upgrade Name DUN EOC Service Date Available

73453187 FLATRDG3 138.00 - HAPPER 138KV CKT 1 12/1/2009 6/1/2013

LACYGNE - WEST GARDNER 345KV CKT 1 6/1/2006 6/1/2006

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

Customer Study Number KPP AG2-2009-003

Customer	Reservation	POR	POD	Requested Amount	Start Date	Requested Stop Date	Redispatch	Date Without Redispatch	Plan Funding Allowable	Point-to-Point		Total Revenue Requirements
KPP	1607046	WR	WR	6	3/1/2010	3/1/2015	11/1/2010	11/1/2015	\$ -	\$ -	\$ -	\$

			Earliest	Redispatch	Allocated E & C	Total E & C	Total Revenue
Reservation	Upgrade Name	EOC	Service Date	Available	Cost	Cost	Requirements
1607046	None				\$ -	\$ -	\$ -
		Total	\$ -	\$ -	\$ -		

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

					Earliest	Redispatch
Ŀ	Reservation	Upgrade Name	DUN	EOC	Service Date	Available
	1607046	EAST MANHATTAN - NW MANHATTAN 230/115KV	6/1/2011	12/1/2011		

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
1607046	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		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	MEDICINE LODGE - PRATT 115KV CKT 1	12/1/2009	6/1/2013		
	MEDICINE LODGE 138/115KV TRANSFORMER CKT 1 Displacement	12/1/2009	6/1/2013		

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

Customer	Reservation	POR	POD			Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
KPP	73447072	WPEK	WR	13	6/1/2010	6/1/2020	11/1/2010	11/1/2020	\$ -	\$ -	\$ -	\$ -
KPP	73450023	WPEK	WR	13	6/1/2010	6/1/2020	1/1/2015	1/1/2025	\$ 2,225,000	\$ -	\$ 4,151,640	\$ 9,119,115
KPP	73450028	WPEK	WPEK	13	6/1/2010	6/1/2020	11/1/2010	11/1/2020	\$ -	\$ -	\$ -	\$ -
									\$ 2,225,000	\$ -	\$ 4,151,640	\$ 9,119,115

				Earliest	Redispatch	Allo	cated E & C	Tot	al E & C	Tota	al Revenue
Reservation	Upgrade Name	DUN	EOC	Service Date	Available	Cos	t	Cos	t	Req	uirements
73450023	BELL - PECK 69KV CKT 1	6/1/2011	6/1/2014			\$	796,209	\$	6,701,700	\$	1,450,376
	CHAPMAN JUNCTION 115KV	12/1/2010	12/1/2010			\$	272,385	\$	2,750,000	\$	616,670
	CITY OF WINFIELD - TIMBER JUNCTION 69KV CKT 1	6/1/2011	6/1/2012		Yes	\$	1,531,977	\$	11,557,700	\$	3,731,753
	CLAY CENTER JUNCTION 115KV	12/1/2010	12/1/2010			\$	153,031	65	1,545,000	\$	341,114
	CLAY CENTER JUNCTION 115KV Capacitor	6/1/2017	6/1/2017			\$	49,037	65	318,543	\$	72,831
	CRESWELL - OAK 69KV CKT 1	6/1/2011	6/1/2013		Yes	\$	268,379	65	1,500,000	\$	521,189
	RICHLAND - UDALL 69KV CKT 1	6/1/2011	6/1/2014		Yes	\$	873,564		6,699,200		1,928,155
	TIMBER JUNCTION - UDALL 69KV CKT 1	6/1/2011	6/1/2014		Yes	\$	207,059	69	1,587,900	\$	457,027
					Total	\$	4.151.640	\$	32.941.500	\$	9.119.115

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73450023	FLATRDG3 138.00 - HARPER 138KV CKT 1	11/1/2010	6/1/2013		Yes
	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3	6/1/2011	6/1/2012		Yes

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73450023	Line - Comanche County - Medicine Lodge 345 kV dbl ckt	11/1/2010	1/1/2015		Yes
	Line - Hitchland - Woodward 345 kV dbl ckt OKGE	11/1/2010	7/1/2014		Yes
	Line - Hitchland - Woodward 345 kV dbl ckt SPS	11/1/2010	7/1/2014		Yes
	Line - Medicine Lodge - Wichita 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		Yes
	Line - Medicine Lodge - Wichita 345 kV dbl ckt WERE	11/1/2010	1/1/2015		Yes
	Line - Spearville - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		Yes
	Line - Spearville - Comanche County 345 kV dbl ckt SUNC	11/1/2010	1/1/2015		Yes
	Line - Woodward - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		Yes
	Line - Woodward - Comanche County 345 kV dbl ckt OKGE	11/1/2010	1/1/2015		Yes
	XFR - Medicine Lodge 345/138 kV	11/1/2010	1/1/2015		Yes

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73450023	FLATRDG3 138.00 - HARPER 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		

Reservations 73450023, 73450028, and 73447072 were studied as one request

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

Customer	Reservation	POR	POD			Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
KPP	73447046	NPPD	WR	1	6/1/2010	6/1/2020	11/1/2010	11/1/2020	\$ -	\$ -	\$ -	\$ -
KPP	73450014	NPPD	WR	1	6/1/2010	6/1/2020	11/1/2010	11/1/2020	\$ 324,000	\$ -	\$ 592,191	\$ 1,303,134
KPP	73450018	NPPD	WPEK	1	6/1/2010	6/1/2020	11/1/2010	11/1/2020	\$ -	\$ -	\$ -	\$ -
									\$ 324,000	\$ -	\$ 592,191	\$ 1,303,134

				Earliest	Redispatch	Alloca	ated E &	Total E & C		Total Revenu	
Reservation	Upgrade Name	DUN	EOC	Service Date	Available	C Cos	t	Cos	st	Requi	irements
73450014	BELL - PECK 69KV CKT 1	6/1/2011	6/1/2014			\$	108,863	\$	6,701,700	\$	198,305
	CHAPMAN JUNCTION 115KV	12/1/2010	12/1/2010)		\$	39,223	\$	2,750,000	\$	88,800
	CITY OF WINFIELD - TIMBER JUNCTION 69KV CKT 1	6/1/2011				\$	220,967	\$	11,557,700	\$	538,254
	CLAY CENTER JUNCTION 115KV	12/1/2010	12/1/2010)		\$	22,036	65	1,545,000	\$	49,120
	CLAY CENTER JUNCTION 115KV Capacitor	6/1/2017	6/1/2017			\$	7,061	65	600,000	\$	10,488
	CRESWELL - OAK 69KV CKT 1	6/1/2011	6/1/2013	3		\$	38,175	65	1,500,000	\$	74,136
	RICHLAND - UDALL 69KV CKT 1	6/1/2011				\$	126,000		6,699,200		278,110
	TIMBER JUNCTION - UDALL 69KV CKT 1	6/1/2011	6/1/2014			\$	29,865	\$	1,587,900	\$	65,920
					Total	\$	592,191	\$	32,941,500	\$	1,303,134

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73450014	EAST MANHATTAN - NW MANHATTAN 230/115KV	6/1/2011	12/1/2011		

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73450014	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3	6/1/2011	6/1/2012		

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73450014	Line - Comanche County - Medicine Lodge 345 kV dbl ckt	11/1/2010	1/1/2015		
	Line - Hitchland - Woodward 345 kV dbl ckt OKGE	11/1/2010	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl ckt SPS	11/1/2010	7/1/2014		
	Line - Medicine Lodge - Wichita 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Medicine Lodge - Wichita 345 kV dbl ckt WERE	11/1/2010	1/1/2015		
	Line - Spearville - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Spearville - Comanche County 345 kV dbl ckt SUNC	11/1/2010	1/1/2015		
	Line - Woodward - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Woodward - Comanche County 345 kV dbl ckt OKGE	11/1/2010	1/1/2015		
	XFR - Medicine Lodge 345/138 kV	11/1/2010	1/1/2015		

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73450014	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2011	6/1/2013		

Reservations 73450014, 73450018, and 73447046 were studied as one request

Customer	Study Number											
KPP	AG3-2009-026											
				Requested	Requested		Deferred Start Date Without				Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Start Date	Stop Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KPP	73446841	WR	WR	396	6/1/2010	6/1/2020	6/1/2014	6/1/2024	\$ 10,079,489	\$ -	\$ 10,079,489	\$ 20,615,553
KPP	73446862	WR	WR	13	6/1/2010	6/1/2020	8/1/2010	8/1/2020	\$ -	\$ -	\$ -	\$ -
KPP	73446872	WR	WPEK	20	6/1/2010	6/1/2020	6/1/2014	6/1/2024	\$ -	\$ -	\$ -	\$ -
									\$ 10,079,489	\$ -	\$ 10,079,489	\$ 20,615,553

				Earliest	Redispatch	Allocated E & C	Total E & C	Total Revenue
Reservation	Upgrade Name	DUN	EOC	Service Date	Available	Cost	Cost	Requirements
73446841	BELL - PECK 69KV CKT 1	8/1/2010	6/1/2014			\$ 2,318,727	\$ 6,701,700	\$ 4,096,429
	CHAPMAN JUNCTION 115KV	12/1/2010	12/1/2010			\$ 1,457,805	\$ 2,750,000	\$ 2,915,610
	CITY OF WINFIELD - TIMBER JUNCTION 69KV CKT 1	8/1/2010	6/1/2014		Yes	\$ 2,972,248	\$ 11,557,700	\$ 6,523,007
	CLAY CENTER JUNCTION 115KV	12/1/2010	12/1/2010			\$ 819,021	\$ 1,545,000	\$ 1,638,043
	CLAY CENTER JUNCTION 115KV Capacitor	6/1/2017	6/1/2017			\$ 262,445	\$ 318,543	
	CRESWELL - OAK 69KV CKT 1	8/1/2010	12/1/2011		Yes	\$ 152,685	\$ 1,500,000	
	RICHLAND - UDALL 69KV CKT 1	8/1/2010			Yes	\$ 1,694,834		
	TIMBER JUNCTION - UDALL 69KV CKT 1	8/1/2010	6/1/2014		Yes	\$ 401,724	\$ 1,587,900	\$ 881,639
					Total	\$ 10.079.489	\$ 32,660,043	\$ 20.615.553

Expansion Plan	1 - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to	the transmiss	sion customer.		
				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73446841	None				

Reliability Proje	cts - The requested service is contingent upon completion of the following upgrades. Cost is not assignable	to the transm	nission custom	er.	
				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73446841	None				

Construction Pe	ending - The requested service is contingent upon completion of the following upgrades. Cost is not assigna	able to the trai	nsmission cust	omer.	
				Earliest	Redispatch
Poconyation	Lingrado Namo	DUN	EOC	Service Date	Available

					Earliest	Redispatch
F	Reservation	Upgrade Name	DUN	EOC	Service Date	Available
I	73446841	None				

Direct Assigne	d Network Upgrades - The requested service is contingent upon completion of the following upgrades.						
				Earliest	Redispatch	Allocated E & C	Total E & C
Reservation	Upgrade Name	DUN	EOC	Service Date	Available	Cost	Cost
73446841	Pratt 115/34.5kV Transformer	8/1/2010	6/1/2014			\$ 2,000,000	\$ 2,000,000
	Cunningham - Pratt 34.5kV CKT 1	8/1/2010	6/1/2014			\$ 4,164,600	\$ 4,164,600
	Cunningham Voltage Regulato	8/1/2010	6/1/2014			\$ 250,000	\$ 250,000

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73446841	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		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	MEDICINE LODGE - PRATT 115KV CKT 1	12/1/2009	6/1/2013		
	MEDICINE LODGE 138/115KV TRANSFORMER CKT 1 Displacement	12/1/2009	6/1/2013		

NORTHWEST - WOODWARD 345KV CKT 1 1/1/2010 Reservations 73446841, 73446862, 73446884, 73446928, 73447001, 73446872, 73449987, and 73449996 were studied as one request 1/1/2010 1/1/2010 \$ 6,414,600 \$ 6,414,600

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

Customer		POR				Requested	Redispatch	Date Without Redispatch	Plan Funding Allowable	Point-to-Point		Total Revenue Requirements
KPP	73446884	WR	WR	13	6/1/2010	6/1/2020	11/1/2010	11/1/2020	\$ -	\$ -	\$ -	\$
KPP	73446928	WR	WR	396	6/1/2010	6/1/2020	11/1/2010	11/1/2020	\$ -	\$ -	\$ -	\$
KPP	73449987	WR	WPEK	20	6/1/2010	6/1/2020	11/1/2010	11/1/2020	\$ -	\$ -	\$ -	\$
		•		•					¢	e	¢ .	e

				Earliest	Redispatch	Allocated E & C	Total E & C	Total Revenue
Reservation	Upgrade Name	DUN	EOC	Service Date	Available	Cost	Cost	Requirements
73446884	None					\$ -	\$ -	\$ -
					Total	\$ -	\$ -	\$ -
73446928	None					\$ -	\$	\$ -
					Total	\$ -	\$ -	\$ -
73449987	None					\$ -	\$ -	\$ -
					Total	\$ -	\$ -	\$ -

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

Customer Study Number KPP AG3-2009-028

Customer	Reservation	POR	POD					Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
KPP	73447001	WPEK	WR	396	6/1/2010	6/1/2020	11/1/2010	11/1/2020	\$ -	\$ -	\$ -	\$ -
KPP	73449996	WPEK	WPEK	20	6/1/2010	6/1/2020	11/1/2010	11/1/2020	\$ -	\$ -	\$ -	\$ -
KPP	73450005	WPEK	WR	12	6/1/2010	6/1/2020	11/1/2010	11/1/2020	\$ -	\$ -	\$ -	\$ -
	•	•			•	•		•	\$ -	٠.	\$	¢ .

				Earliest	Redispatch	Allocated E & C	Total E & C	Total Revenue
Reservation	Upgrade Name	DUN	EOC	Service Date	Available	Cost	Cost	Requirements
73447001	None					\$ -	\$ -	\$ -
					Total	\$ -	\$ -	\$ -
73449996	None					\$ -	\$	\$ -
					Total	\$ -	\$ -	\$ -
73450005	None					\$ -	\$ -	\$ -
				•	Total	\$ -	\$ -	\$ -

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

Customer Study Number KPP AG3-2009-030

Customer	Reservation	POR	POD			Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
KPP	74236802	KCPL	WR	45	4/1/2010	1/1/2015	1/1/2015	10/1/2019	\$ 8,100,000	\$ -	\$ 17,214,123	\$ 30,411,701
KPP	74236811	KCPL	WR	45	4/1/2010	1/1/2015	11/1/2010	8/1/2015	\$ -	\$ -	\$ -	\$ -
KPP	74236821	KCPL	WPEK	45	4/1/2010	1/1/2015	11/1/2010	8/1/2015	\$ -	\$ -	\$ -	\$ -
									\$ 8,100,000	\$ -	\$ 17,214,123	\$ 30,411,701

				Earliest	Redispatch	Allocated E & C		Total E & C	Total Revenue
Reservation	Upgrade Name	DUN	EOC	Service Date	Available	Cost		Cost	Requirements
74236802	BELL - PECK 69KV CKT 1	6/1/2011	6/1/2014		Yes	\$ 3,477	,902	\$ 6,701,700	\$ 6,144,310
	CHAPMAN JUNCTION 115KV	12/1/2010	12/1/2010			\$ 980	,586	\$ 2,750,000	\$ 1,732,374
	CITY OF WINFIELD - TIMBER JUNCTION 69KV CKT 1	6/1/2011	6/1/2012		Yes	\$ 6,546	,328	\$ 11,557,700	\$ 11,565,212
	CLAY CENTER JUNCTION 115KV	12/1/2010	12/1/2010			\$ 550	,911	\$ 1,545,000	\$ 973,279
	CRESWELL - OAK 69KV CKT 1	6/1/2011	6/1/2013		Yes	\$ 1,040	,760	\$ 1,500,000	\$ 1,838,681
	RICHLAND - UDALL 69KV CKT 1	6/1/2011	6/1/2014		Yes	\$ 3,732	,846	\$ 6,699,200	\$ 6,594,712
	TIMBER JUNCTION - UDALL 69KV CKT 1	6/1/2011	6/1/2014		Yes	\$ 884	,790	\$ 1,587,900	\$ 1,563,133
					Total	\$ 17.214	123	\$ 32 341 500	\$ 30.411.701

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
74236802	Line - E. Manhattan - JEC 230 kV	6/1/2012	12/1/2012		
	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3	6/1/2011	6/1/2012	,	Yes

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
74236802	Line - Comanche County - Medicine Lodge 345 kV dbl ckt	11/1/2010	1/1/2015		Yes
	Line - Hitchland - Woodward 345 kV dbl ckt OKGE	11/1/2010	7/1/2014		Yes
	Line - Hitchland - Woodward 345 kV dbl ckt SPS	11/1/2010	7/1/2014		Yes
	Line - Medicine Lodge - Wichita 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		Yes
	Line - Medicine Lodge - Wichita 345 kV dbl ckt WERE	11/1/2010	1/1/2015		Yes
	Line - Spearville - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		Yes
	Line - Spearville - Comanche County 345 kV dbl ckt SUNC	11/1/2010	1/1/2015		Yes
	Line - Woodward - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		Yes
	Line - Woodward - Comanche County 345 kV dbl ckt OKGE	11/1/2010	1/1/2015		Yes
	XFR - Medicine Lodge 345/138 kV	11/1/2010	1/1/2015		Yes

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73512720	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		

Reservations 74236802, 74236811, and 74236821 were studied as one reques

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

Customer Study Number MIDW AG3-2009-016

Customer	Reservation	POR	POD			Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
MIDW	73440251	WR	WR	5	5/31/2011	5/31/2016	12/1/2012	12/1/2017	\$ 285,160	\$	\$ 285,160	\$ 418,306
									\$ 285,160	\$ -	\$ 285,160	\$ 418,306

				Earliest	Redispatch	Alloca	ated E & C	Total	E&C	Total	Revenue
Reservation	Upgrade Name	DUN	EOC	Service Date	Available	Cost		Cost		Requi	irements
73440251	CLAY CENTER JUNCTION 115KV Capacitor	6/1/2017	6/1/2017			\$	281,457	\$	600,000	\$	412,322
	HAYS PLANT - SOUTH HAYS 115KV CKT 1	12/1/2011	12/1/2011			\$	3,703	\$	35,000	\$	5,985
					Total	\$	285,160	\$	635.000	\$	418.306

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73440251	COLBY 2 69.000 (COLBY T3) 69/34.5/13.8KV TRANSFORMER CKT 3	6/1/2011	1/1/2013		
	HEIZER - MULLERGREN 115 KV CKT 1 MIDW	6/1/2011	12/1/2011		
	HEIZER - MULLERGREN 115 KV CKT 1 MKEC	6/1/2011	12/1/2011		

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73440251	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		
	MEDICINE LODGE 138/115KV TRANSFORMER CKT 1 Displacement	12/1/2009	6/1/2013		
	NORTHWEST - WOODWARD 345KV 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 Study Number MIDW AG3-2009-017

Customer	Reservation	POR	POD	Requested Amount		Requested		Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue Requirements
MIDW	73440203	WR	WR	10	5/31/2011	5/31/2016	12/1/2012	12/1/2017	\$ 7,407	\$ -	\$ 7,407	\$ 10,684

			Earliest	Redispatch	Allocated E & 0	Total E & C	Total Revenue
Reservation Upgrade Name	DUN	EOC	Service Date	Available	Cost	Cost	Requirements
73440203 HAYS PLANT - SOUTH HAYS 115KV CKT 1	12/1/2011	12/1/2011			\$ 7,407	\$ 35,000	\$ 10,684
				Total	\$ 7.407	\$ 35,000	\$ 10.684

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73440203	COLBY 2 69.000 (COLBY T3) 69/34.5/13.8KV TRANSFORMER CKT 3	6/1/2011	1/1/2013		
	HEIZER - MULLERGREN 115 KV CKT 1 MIDW	6/1/2011	12/1/2011		Yes
	HEIZER - MULLERGREN 115 KV CKT 1 MKEC	6/1/2011	12/1/2011		Yes

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73440203	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		
	MEDICINE LODGE 138/115KV TRANSFORMER CKT 1 Displacement	12/1/2009	6/1/2013		
	NORTHWEST - WOODWARD 345KV 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 MOWR Study Number AG2-2009-002

Customer			POD	Requested Amount	Start Date	Requested Stop Date	Redispatch	Date Without Redispatch	Plan Funding Allowable	Point-to-Point Base Rate	Cost	Total Revenue Requirements
MOWR	1607977	OPPD	MPS	10	12/1/2009	12/1/2014	11/1/2010	11/1/2015	\$	\$ 1,023,600	\$ -	\$ -
									\$ -	\$ 1,023,600	\$ -	\$ -

Reservation Upgrade Name	DUN	EOC			Total E & C Cost	Total Revenue Requirements
1607977 None				\$ -	\$ -	\$ -
			Total	\$ -	s -	\$ -

6/1/2006

6/1/2006

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study Earliest Service Date Redispatch Available Reservation Upgrade Name
1607977 LACYGNE - WEST GARDNER 345KV CKT 1

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

Customer Study Number OKGE AG3-2009-014

	Reservation				Start Date	Requested Stop Date	Redispatch	Date Without Redispatch	Plan Funding Allowable	Point-to-Point Base Rate	Cost	Total Revenue Requirements
OKGE	73439915	OKGE	OKGE	152	12/31/2010	12/31/2030	1/1/2015	1/1/2035	\$ 9,747,599	\$ -	\$ 10,112,724	\$ 38,024,798
									\$ 9,747,599	\$ -	\$ 10,112,724	\$ 38,024,798

						Base	Plan					
				Earliest	Redispatch	Fund	ing for	Directly Assigned	Allocated E & C	Total E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Service Date	Available	Wind		for Wind	Cost	Cost	F	Requirements
73439915	CANTON - TALOGA 69KV CKT 1	11/1/2010	6/1/2013		Yes	\$	534,493	\$ 267,246	\$ 801,739	\$ 3,880,0	000	\$ 2,123,504
	ELK CITY - RHWIND4 138.00 138KV CKT 1	6/1/2011	6/1/2013		Yes	\$	110,019	\$ 55,009	\$ 165,028	\$ 3,600,0	000	\$ 472,323
	GLASS MOUNTAIN - MOORELAND 138KV CKT 1 WFEC	11/1/2010	6/1/2012		Yes	\$	11,765	\$ 5,883	\$ 17,648	\$ 50,0	000	\$ 56,824
	NORTHWEST 345/138/13.8KV TRANSFORMER CKT 1	6/1/2017	6/1/2017			\$	9,017,350	\$ -	\$ 9,017,350	\$ 15,000,0	000	\$ 35,083,968
	TALOGA (TALOGA) 138/69/13.8KV TRANSFORMER CKT 1	11/1/2010	6/1/2013		Yes	\$	73,973	\$ 36,986	\$ 110,959	\$ 1,000,0	000	\$ 288,179
					Total	\$	9.747.599	\$ 365,125	\$ 10.112.724	\$ 23,530.0	000	\$ 38,024,798

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73439915	CLASSEN - SW 5TAP 138KV CKT 1	6/1/2017	6/1/2017		

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73439915	Line - Comanche County - Medicine Lodge 345 kV dbl ckt	11/1/2010	1/1/2015		Yes
	Line - Hitchland - Woodward 345 kV dbl ckt OKGE	11/1/2010	7/1/2014		Yes
	Line - Hitchland - Woodward 345 kV dbl ckt SPS	11/1/2010	7/1/2014		Yes
	Line - Medicine Lodge - Wichita 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		Yes
	Line - Medicine Lodge - Wichita 345 kV dbl ckt WERE	11/1/2010	1/1/2015		Yes
	Line - Spearville - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		Yes
	Line - Spearville - Comanche County 345 kV dbl ckt SUNC	11/1/2010	1/1/2015		Yes
	Line - Woodward - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		Yes
	Line - Woodward - Comanche County 345 kV dbl ckt OKGE	11/1/2010	1/1/2015		Yes
	XFR - Medicine Lodge 345/138 kV	11/1/2010	1/1/2015		Yes

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study. Earliest Redispatch Service Date Reservation Upgrade Name Available 73439915 KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1 6/1/2006 6/1/2008 NORTHWEST - WOODWARD 345KV CKT 1 1/1/201 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 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 Study Number OKGE AG3-2009-015

Customer	Reservation	POR	POD			Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
OKGE	73439927	OKGE	OKGE	130	9/29/2010	9/29/2030	1/1/2015	1/1/2035	\$ 8,708,710	\$ -	\$ 10,103,469	\$ 34,119,250

						Base Plan					1
				Earliest	Redispatch	Funding for	r	Directly Assigned	Allocated E & C	Total E & C	Total Revenue
Reservation	Upgrade Name	DUN	EOC	Service Date	Available	Wind	ľ	for Wind	Cost	Cost	Requirements
73439927	CANTON - TALOGA 69KV CKT 1	11/1/2010	6/1/2013		Yes	\$ 2,052	,174	\$ 1,026,087	\$ 3,078,261	\$ 3,880,000	\$ 8,153,153
	ELK CITY - RHWIND4 138.00 138KV CKT 1	6/1/2011	6/1/2013		Yes	\$ 133	,095	\$ 66,548	\$ 199,643	\$ 3,600,000	\$ 571,394
	GLASS MOUNTAIN - MOORELAND 138KV CKT 1 WFEC	11/1/2010	6/1/2012		Yes	\$ 11	,553	\$ 5,777	\$ 17,330	\$ 50,000	\$ 55,800
	NORTHWEST 345/138/13.8KV TRANSFORMER CKT 1	6/1/2017	6/1/2017			\$ 5,919	,194	\$ -	\$ 5,919,194	\$ 15,000,000	
	TALOGA (TALOGA) 138/69/13.8KV TRANSFORMER CKT 1	11/1/2010	6/1/2013		Yes	\$ 592	,694	\$ 296,347	\$ 889,041	\$ 1,000,000	\$ 2,308,987
					Total	\$ 8,708	3.710	\$ 1.394.758	\$ 10,103,469	\$ 23,530,000	\$ 34,119,250

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

Earliest

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73439927	CLASSEN - SW 5TAP 138KV CKT 1	6/1/2017	6/1/2017		ĺ

, ,	- The requested service is contingent upon completion of the following upgrades. Cost is not assignable to				Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73439927	Line - Comanche County - Medicine Lodge 345 kV dbl ckt	11/1/2010	1/1/2015		Yes
	Line - Hitchland - Woodward 345 kV dbl ckt OKGE	11/1/2010	7/1/2014		Yes
	Line - Hitchland - Woodward 345 kV dbl ckt SPS	11/1/2010	7/1/2014		Yes
	Line - Medicine Lodge - Wichita 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		Yes
	Line - Medicine Lodge - Wichita 345 kV dbl ckt WERE	11/1/2010	1/1/2015		Yes
	Line - Spearville - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		Yes
	Line - Spearville - Comanche County 345 kV dbl ckt SUNC	11/1/2010	1/1/2015		Yes
	Line - Woodward - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		Yes
	Line - Woodward - Comanche County 345 kV dbl ckt OKGE	11/1/2010	1/1/2015		Yes
	XFR - Medicine Lodge 345/138 kV	11/1/2010	1/1/2015		Yes

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study. Earliest Redispatch Service Date Reservation Upgrade Name Available 73439927 KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1 6/1/2006 6/1/2008 NORTHWEST - WOODWARD 345KV CKT 1 1/1/201 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 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 Study Number OMPA AG2-2009-001

Customer	Reservation		POD		Start Date	Requested Stop Date		Date Without Redispatch	Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C	Total Revenue Requirements
OMPA	1607006	OKGE	OKGE	3	4/30/2010	4/30/2025	11/1/2010	11/1/2025	\$ 63,457	\$ -	\$ 63,457	\$ 142,146
									\$ 63,457	¢.	\$ 63,457	r.

			Earliest	Redispatch	Allocated E	& C	Total E & C	Total Revenue
Reservation Upgrade Name	DUN	EOC	Service Date	Available	Cost	C	Cost	Requirements
1607006 NORTHWEST 345/138/13.8KV TRANSFORMER CKT 1	6/1/2017	6/1/2017			\$ 63	,457	\$ 15,000,000	\$ 142,146
				Total	\$ 63	457 9	\$ 15,000,000	\$ 142 146

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
1607006	OMHUFFYT 69.000 - OMPA-PONCA CITY 69KV CKT 1	6/1/2017	6/1/2017		
	OMKAWS 69.000 - OMPECANT 69.000 69KV CKT 1	6/1/2017	6/1/2017		
	OMNWESTT 69.000 - OMPA-PONCA CITY 69KV CKT 1	6/1/2017	6/1/2017		

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

Reservation Upgrade Name DUN EOC Earliest Aedispatch Service Date Available 1607006 [ARCADIA2] 345/138/13.8KV TRANSFORMER CKT 1 Accelerated 6/1/2011 6/1/2014 10/1/2013

Priority Projects	s - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to	the transmiss			
				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
1607006	Line - Comanche County - Medicine Lodge 345 kV dbl ckt	11/1/2010	1/1/2015		
	Line - Hitchland - Woodward 345 kV dbl ckt OKGE	11/1/2010	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl ckt SPS	11/1/2010	7/1/2014		
	Line - Medicine Lodge - Wichita 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Medicine Lodge - Wichita 345 kV dbl ckt WERE	11/1/2010	1/1/2015		
	Line - Spearville - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Spearville - Comanche County 345 kV dbl ckt SUNC	11/1/2010	1/1/2015		
	Line - Woodward - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Woodward - Comanche County 345 kV dbl ckt OKGE	11/1/2010	1/1/2015		
	XFR - Medicine Lodge 345/138 kV	11/1/2010	1/1/2015		

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

Reservation Upgrade Name DUN EC Service Date Available 1/1/2010 1/1/

Customer Study Number OMPA AG3-2009-019

Customer	Reservation		POD	Requested Amount		Requested Stop Date		Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue Requirements
OMPA	73441050		CSWS	15	6/1/2011	6/1/2040		10/1/2042		\$ -	\$ 548,034	\$ 2,182,192
OMPA	73441055	GRDA	OKGE	15	6/1/2011	6/1/2040	6/1/2011	6/1/2040	\$ -	\$ -	\$ -	\$ -
OMPA	73441061	GRDA	CSWS	10	6/1/2014	6/1/2040	6/1/2014	6/1/2040	\$ 174,566	\$ -	\$ 174,566	\$ 718,794
OMPA	73441065	GRDA	OKGE	10	6/1/2014	6/1/2040	6/1/2014	6/1/2040	\$ -	\$ -	\$ -	\$ -
OMPA	73441073	GRDA	WFEC	10	6/1/2014			6/1/2040		\$ -	\$ -	\$ -
OMPA	73441080	GRDA	WFEC	15	6/1/2011	6/1/2040	6/1/2011	6/1/2040	\$ -	\$ -	\$ -	\$ -
				•					\$ 722,599	\$ -	\$ 722,599	\$ 2,900,986

				Earliest	Redispatch	Allocat	ted E &	Tot	al E & C	Tota	al Revenue
Reservation	Upgrade Name	DUN	EOC	Service Date	Available	C Cost		Cos	t	Requ	uirements
73441050	CARMEN - EAGLE CHIEF 69KV CKT 1	6/1/2017	6/1/2017			\$	59,986	\$	100,000	\$	152,130
	CITY OF WINFIELD - TIMBER JUNCTION 69KV CKT 1	6/1/2011	6/1/2012			\$	286,182	\$	11,557,700	\$	1,238,496
	RICHLAND - UDALL 69KV CKT 1	6/1/2011				\$	163,186		6,699,200		639,894
	TIMBER JUNCTION - UDALL 69KV CKT 1	6/1/2011	6/1/2014			\$	38,680	\$	1,587,900	\$	151,672
					Total	\$	548,034	\$	34,944,800	\$	2,182,192
73441061	CARMEN - EAGLE CHIEF 69KV CKT 1	6/1/2017	6/1/2017			\$	40,014	\$	100,000	\$	109,753
	RICHLAND - UDALL 69KV CKT 1	6/1/2011	6/1/2014			\$	108,770	\$	6,699,200	\$	492,343
	TIMBER JUNCTION - UDALL 69KV CKT 1	6/1/2011	6/1/2014			\$	25,781	\$	1,587,900	\$	116,698
	·				Total	\$	174,566	\$	23,387,100	\$	718,794

Poliphility Projects. The requested conjugate contingent upon completion of the following ungrades. Cost is not assignable to the transmission sustanger.

	Chability 1 Tojc	cts The requested service is contingent apon completion of the following appraides. Cost is not assignable	to the transm	iiooloii caotoiii	CI.	
ı					Earliest	Redispatch
١	Reservation	Upgrade Name	DUN	EOC	Service Date	Available
[73441050	East Kingfisher Capacitor 69 kV	6/1/2013	6/1/2013		
ı	73441061	Fast Kingfisher Canacitor 60 kV	6/1/2013	6/1/2013		

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73441050	52ND & DELAWARE WEST TAP - RIVERSIDE STATION 138KV CKT 1	6/1/2011	6/1/2012		
	ARCADIA (ARCADIA2) 345/138/13.8KV TRANSFORMER CKT 1 Accelerated	6/1/2011	6/1/2014	10/1/2013	Yes
	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3	6/1/2011	6/1/2012		Yes
73441061	52ND & DELAWARE WEST TAP - RIVERSIDE STATION 138KV CKT 1	6/1/2011	6/1/2012		
	ARCADIA (ARCADIA2) 345/138/13.8KV TRANSFORMER CKT 1 Accelerated	6/1/2011	6/1/2014	10/1/2013	

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73441050	Line - Comanche County - Medicine Lodge 345 kV dbl ckt	11/1/2010	1/1/2015		
	Line - Hitchland - Woodward 345 kV dbl ckt OKGE	11/1/2010	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl ckt SPS	11/1/2010			
	Line - Medicine Lodge - Wichita 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Medicine Lodge - Wichita 345 kV dbl ckt WERE	11/1/2010	1/1/2015		
	Line - Spearville - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Spearville - Comanche County 345 kV dbl ckt SUNC	11/1/2010	1/1/2015		
	Line - Woodward - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Woodward - Comanche County 345 kV dbl ckt OKGE	11/1/2010	1/1/2015		
	XFR - Medicine Lodge 345/138 kV	11/1/2010	1/1/2015		
73441061	Line - Comanche County - Medicine Lodge 345 kV dbl ckt	11/1/2010	1/1/2015		
	Line - Hitchland - Woodward 345 kV dbl ckt OKGE	11/1/2010	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl ckt SPS	11/1/2010	7/1/2014		
	Line - Medicine Lodge - Wichita 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Medicine Lodge - Wichita 345 kV dbl ckt WERE	11/1/2010	1/1/2015		
	Line - Spearville - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Spearville - Comanche County 345 kV dbl ckt SUNC	11/1/2010	1/1/2015		
	Line - Woodward - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		·
	Line - Woodward - Comanche County 345 kV dbl ckt OKGE	11/1/2010	1/1/2015		·
	XFR - Medicine Lodge 345/138 kV	11/1/2010	1/1/2015		·

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73441050	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		
	NORTHWEST - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	SUB 110 - ORONOGO JCT SUB 167 - RIVERTON 161KV CKT 1	6/1/2011	6/1/2011		
	WOODWARD - WOODWARD EHV 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 2	1/1/2010	1/1/2010		

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

WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010	
73441061 FT SUPPLY 138/69KV TRANSFORMER CKT 1	12/1/2006	6/1/2008	
HUGO POWER PLANT - VALLIANT 345 KV AEPW	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 345KV CKT 1	1/1/2010	1/1/2010	
SUB 110 - ORONOGO JCT SUB 167 - RIVERTON 161KV CKT 1	6/1/2011	6/1/2011	
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 Study Number OPPM AG3-2009-021

Customer	Reservation	POR	POD	Requested Amount		Requested		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
OPPM	73450809	OPPD	OPPD	60	6/29/2010	1/1/2032	11/1/2010	6/1/2032	\$	\$	\$ -	\$ -

				Total	¢ .	¢	e .
73450809	None				\$ -	\$	\$
		EOC	Service Date	Available	Cost	Cost	Requirements
			Earliest	Redispatch	Allocated E & C	Total E & C	Total Revenue

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

Customer Study Number OPPM AG3-2009-023

Customer	Reservation	POR	POD	Requested Amount		Requested Stop Date		Date Without	Plan Funding	Point-to-Point		Total Revenue Requirements
OPPM	73449634	NPPD	OPPD	41	8/31/2011	9/30/2031	6/1/2015	7/1/2035	\$ -	\$ -	\$ -	\$ -
									r .	¢.	r.	•

			Earliest	Redispatch	Allocated E & C	Total E & C	Total Revenue
Reservation	Upgrade Name	EOC	Service Date	Available	Cost	Cost	Requirements
7344963	None				\$ -	\$ -	\$ -
				Total	\$.	٠.	\$.

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

| Redispatch | Cost |

Third Party Lim	nitations.						
				Earliest	ĺ	ĺ	
				Service Start	Redispatch	Allocated E &	Total E & C
Reservation	Upgrade Name	DUN	EOC	Date	Available	C Cost	Cost
73449634	UTICA - YANKON JCT 115KV CKT 1	6/1/2012	6/1/2012			\$ -	\$
					Total	\$ -	\$

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

Customer Study Number PPMI AG3-2009-035

Customer	Reservation		POD	Requested Amount	Start Date	Requested Stop Date	Date Without Redispatch	Plan Funding	Point-to-Point Base Rate	Cost	Total Revenue Requirements
PPMI	73448030	SPS	AMRN	100	1/1/2013	1/1/2018		\$ -	\$ 5,916,000	\$ 4,603,968	\$ 5,791,818

				Earliest	Redispatch	Allocated E & C	Total E & C	Total Revenue
Reservation	Upgrade Name	DUN	EOC	Service Date	Available	Cost	Cost	Requirements
73448030	GOODYEAR JUNCTION - INDIAN HILLS 115KV CKT 1	6/1/2016	6/1/2016			\$ 4,603,968	\$ 11,032,000	\$ 5,791,818
					Total	\$ 4.603.968	\$ 11.032.000	\$ 5.791.818

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73448030	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		
	NORTHWEST - WOODWARD 345KV 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 Study Number PPMI AG3-2009-036

Customer	Reservation	POR	POD	Requested Amount				Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue Requirements
PPMI	73448026	WR	AMRN	100	1/1/2012	1/1/2017	6/1/2013	6/1/2018	\$ -	\$ 5,916,000	\$ 6,451,922	\$ 7,551,718
											\$ 6,451,922	\$ 7,551,718

				Earliest	Redispatch	Allo	cated E & C	Tot	al E & C	Tota	al Revenue
Reservation	Upgrade Name	DUN	EOC	Service Date	Available	Cos	it	Cos	t	Requ	uirements
73448026	GOODYEAR JUNCTION - INDIAN HILLS 115KV CKT 1	6/1/2016	6/1/2016			\$	6,428,032	\$	11,032,000	\$	7,515,698
	HAYS PLANT - SOUTH HAYS 115KV CKT 1	12/1/2011	12/1/2011			\$	23,890	\$	35,000	\$	36,021
					Total	\$	6,451,922	\$	11,067,000	\$	7,551,718

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73448026	GREENLEAF - KNOB HILL 115KV CKT 1 WERE	6/1/2013	6/1/2013	6/1/2010	

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73448026	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2012	6/1/2013		Yes
	GREENLEAF - KNOB HILL 115KV CKT 1 MKEC	6/1/2013	6/1/2013		

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73448026	FLATRDG3 138.00 - HARPER 138KV CKT 1	12/1/2009	6/1/2013		

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

Customer Study Number SPSM AG3-2009-013

Customer	Reservation	POR	POD		Start Date	Requested Stop Date	Redispatch	Date Without Redispatch	Plan Funding Allowable	Point-to-Point	Cost	Total Revenue Requirements
SPSM	73437686	CSWS	SPS	200	1/1/2012	1/1/2019	6/1/2013	6/1/2020	\$ 107,961	\$ -	\$ 107,961	\$ 210,603
									\$ 107.961		\$ 107.961	\$ 210,603

\$ 4,000,198 \$ 6,000,000 \$

				Earliest	Redispatch	Alloca	ted E & C	Total	E&C	Total Revenu
Reservation	Upgrade Name	DUN	EOC	Service Date	Available	Cost		Cost		Requirements
73437686	ELK CITY - RHWIND4 138.00 138KV CKT 1	6/1/2011	6/1/2013		Yes	\$	107,961	\$	3,600,000	\$ 210,6
					Total	¢	107 961	\$	3 600 000	\$ 210.6

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73437686	AMARILLO SOUTH INTERCHANGE - FARMERS SUB 115KV CKT 1	6/1/2017	6/1/2017		
	CARLISLE INTERCHANGE 230/115KV TRANSFORMER CKT 1	6/1/2017	6/1/2017		
	CHERRY SUB - NORTHWEST INTERCHANGE 115KV CKT 1	6/1/2017	6/1/2017		
	Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2	6/1/2017	6/1/2017		
	OSAGE - RANDALL 115KV CKT 1	6/1/2013	6/1/2013		
	SWISHER 230/115KV TRANSFORMER CKT 1	6/1/2017	6/1/2017		

Construction Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer Upgrade Name Service Date Available 73437686 52ND & DELAWARE WEST TAP - RIVERSIDE STATION 138KV CKT 1

Direct Assigned Network Upgrades - The requested service is contingent upon completion of the following upgrades. Total Revenue Earliest Redispatch Allocated E & C Total E & C DUN EOC Reservation Upgrade Name Service Date Available nst Cost Requirements 73437686 LUBBOCK POWER & LIGHT-HOLLY PLANT 230/69KV TRANSFORMER CKT 1
LUBBOCK POWER & LIGHT-SOUTHEAST 230/69KV TRANSFORMER CKT 1 6/1/2012 6/1/2013 3,000,000 2.000,168 \$ Yes

6/1/2006

1/1/2010

6/1/2006

1/1/2010

Credits may be required for the following network upgrades directly assigned to transmission customers in previous aggregate study. Redispatch Earliest Upgrade Name OC Service Date Available 73437686 HUGO POWER PLANT - VALLIANT 345 KV AEPW 7/1/201 7/1/2012 HUGO POWER PLANT - VALLIANT 345 KV WFEC 7/1/201 7/1/201 HUGO POWER PLANT 345/138KV TRANSFORMER CKT 1 LACYGNE - WEST GARDNER 345KV CKT 1 NORTHWEST - WOODWARD 345KV CKT 1 7/1/2012 7/1/201

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

Customer Study Number WFEC AG3-2009-003

Customer	Reservation		POD	Requested Amount	Start Date	Requested Stop Date	Redispatch	Date Without Redispatch	Plan Funding Allowable	Point-to-Point	Cost	Total Revenue Requirements
WFEC	1614798	WFEC	WFEC	123	3/31/2010	3/31/2029	1/1/2015	1/1/2034	\$ 3,054,107	\$ -	\$ 3,054,107	\$ 8,578,952

					Base Plan				
			Earliest	Redispatch	Funding for	Directly Assigned	Allocated E & C	Total E & C	Total Revenue
Reservation Upgrade Name	DUN	EOC	Service Date	Available	Wind	for Wind	Cost	Cost	Requirements
1614798 ELK CITY - RHWIND4 138.00 138KV CKT 1	6/1/2011	6/1/2013			\$ 3,046,042	\$ -	\$ 3,046,042	\$ 3,600,000	\$ 8,553,474
GLASS MOUNTAIN - MOORELAND 138KV CKT 1 WFEC	11/1/2010	6/1/2012			\$ 8,065	\$ -	\$ 8,065	\$ 50,000	\$ 25,478
				Total	\$ 3.054.107	\$ -	\$ 3.054.107	\$ 3.650.000	\$ 8.578.952

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

					Earliest	Redispatch
Reservati	n Upgrade Name		DUN	EOC	Service Date	Available
161	798 FRANKLIN SW (FRANKLIN) 138/69/1	3.8KV TRANSFORMER CKT 1	6/1/2011	6/1/2012		

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
1614798	Line - Comanche County - Medicine Lodge 345 kV dbl ckt	11/1/2010	1/1/2015		
	Line - Hitchland - Woodward 345 kV dbl ckt OKGE	11/1/2010	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl ckt SPS	11/1/2010	7/1/2014		
	Line - Medicine Lodge - Wichita 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Medicine Lodge - Wichita 345 kV dbl ckt WERE	11/1/2010	1/1/2015		
	Line - Spearville - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Spearville - Comanche County 345 kV dbl ckt SUNC	11/1/2010	1/1/2015		
	Line - Woodward - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Woodward - Comanche County 345 kV dbl ckt OKGE	11/1/2010	1/1/2015		
	XFR - Medicine Lodge 345/138 kV	11/1/2010	1/1/2015		

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
1614798	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1	6/1/200	6/1/2008		
	NORTHWEST - WOODWARD 345KV CKT 1	1/1/201	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 1	1/1/201	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 2	1/1/201	1/1/2010		
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/201	1/1/2010		

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

Customer Study Number WFEC AG3-2009-004

Customer	Reservation	POR			Start Date	Requested Stop Date	Redispatch	Date Without Redispatch	Plan Funding Allowable	Point-to-Point		Total Revenue Requirements
WFEC	1614799	WFEC	WFEC	75	3/31/2010	3/31/2024	11/1/2010	11/1/2024	\$	\$	\$ -	\$ -
									r .	¢.	•	r.

			Earliest	Redispatch	Allocated E & C	Total E & C	Total Revenue
Reservation Upgrade Name	DUN	EOC	Service Date	Available	Cost	Cost	Requirements
1614799 None					\$ -	\$ -	\$ -
				Total	\$ -	\$	٠ .

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
1614799	FRANKLIN SW (FRANKLIN) 138/69/13.8KV TRANSFORMER CKT 1	6/1/2011	6/1/2012		

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
1614799	Line - Comanche County - Medicine Lodge 345 kV dbl ckt	11/1/2010	1/1/2015		
	Line - Hitchland - Woodward 345 kV dbl ckt OKGE	11/1/2010	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl ckt SPS	11/1/2010	7/1/2014		
	Line - Medicine Lodge - Wichita 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Medicine Lodge - Wichita 345 kV dbl ckt WERE	11/1/2010	1/1/2015		
	Line - Spearville - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Spearville - Comanche County 345 kV dbl ckt SUNC	11/1/2010	1/1/2015		
	Line - Woodward - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Woodward - Comanche County 345 kV dbl ckt OKGE	11/1/2010	1/1/2015		
	VED. Medicine Lodge 24F/139 kV	11/1/2010	4/4/0045		

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
1614799	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 Study Number WFEC AG3-2009-031

Customer	Reservation	POR	POD	Requested Amount		Requested		Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue Requirements
WFEC	73436312	WFEC	SPS	100	5/31/2012	5/31/2042	1/1/2015	1/1/2045	\$ 88,283	\$ -	\$ 88,283	\$ 304,489
									\$ 88,283	e	\$ 88,283	\$ 304,489

				Earliest	Redispatch	Allocat	ed E & C	Tota	IE&C	Total	Revenue
Reservation	Upgrade Name	DUN	EOC	Service Date	Available	Cost		Cost		Requi	irements
73436312	ELK CITY - RHWIND4 138.00 138KV CKT 1	6/1/2011	6/1/2013			\$	81,326	\$	3,600,000	\$	277,758
	GLASS MOUNTAIN - MOORELAND 138KV CKT 1 WFEC	11/1/2010	6/1/2012			\$	6,957	\$	50,000	\$	26,731
					Total	\$	88.283	\$	3.650.000	\$	304.489

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

					Earliest	Redispatch
R	eservation	Upgrade Name	DUN	EOC	Service Date	Available
	73436312	CANYON EAST SUB - OSAGE SWITCHING STATION 115KV CKT 1	6/1/2017	6/1/2017		
		CARLISLE INTERCHANGE 230/115KV TRANSFORMER CKT 1	6/1/2017	6/1/2017		
		Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2	6/1/2017	6/1/2017		
		LOVINGTON 115/69 KV CKT 2	6/1/2012	6/1/2013		
		OSAGE - RANDALL 115KV CKT 1	6/1/2013	6/1/2013		
		SWISHER 230/115KV TRANSFORMER CKT 1	6/1/2017	6/1/2017		

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

				Farliest	Redispatch
Reservation	Upgrade Name	DUN	EOC		Available
73436312	BORDEN COUNTY INTERCHANGE 230/138KV TRANSFORMER CKT 1	6/1/2012	6/1/2013		
	DEAF SMITH COUNTY INTERCHANGE (GE M101353) 230/115/13.2KV TRANSFORMER CKT 1	6/1/2012	6/1/2013		
	MIDLAND COUNTY INTERCHANGE 230/138KV TRANSFORMER CKT 1	6/1/2012	6/1/2013		

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

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73436312	Line - Comanche County - Medicine Lodge 345 kV dbl ckt	11/1/2010	1/1/2015		
	Line - Hitchland - Woodward 345 kV dbl ckt OKGE	11/1/2010	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl ckt SPS	11/1/2010	7/1/2014		
	Line - Medicine Lodge - Wichita 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Medicine Lodge - Wichita 345 kV dbl ckt WERE	11/1/2010	1/1/2015		
	Line - Spearville - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Spearville - Comanche County 345 kV dbl ckt SUNC	11/1/2010	1/1/2015		
	Line - Woodward - Comanche County 345 kV dbl ckt MKEC	11/1/2010	1/1/2015		
	Line - Woodward - Comanche County 345 kV dbl ckt OKGE	11/1/2010	1/1/2015		
	XFR - Medicine Lodge 345/138 kV	11/1/2010	1/1/2015		

Direct Assigned Network Upgrades - The requested service is contingent upon completion of the following upgrade

					Earliest	Redispatch	Allocated E & C	Total E & C	Total Revenue
	Reservation	Upgrade Name	DUN	EOC	Service Date	Available	Cost	Cost	Requirements
	73436312	LUBBOCK POWER & LIGHT-HOLLY PLANT 230/69KV TRANSFORMER CKT 1	6/1/2012				\$ 999,970	\$ 3,000,000	\$ -
ı		LUBBOCK POWER & LIGHT-SOUTHEAST 230/69KV TRANSFORMER CKT 1	6/1/2012	6/1/2013			\$ 999,832	\$ 3,000,000	\$ -
						Total	\$ 1,999,802	\$ 6,000,000	\$ -

				Earliest	Redispatch
Reservation	Upgrade Name	DUN	EOC	Service Date	Available
73436312	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		

Transmission Owner	Upgrade	Solution	Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)	Estimated Engineering & Construction Cost
AEPW	DIANA (DIANA 3) 345/138/13.8KV TRANSFORMER CKT 3	Replace auto with new 450 MVA	6/1/2012	6/1/2013	\$5,500,000.00
MIDW	HAYS PLANT - SOUTH HAYS 115KV CKT 1	Replace Wavetrap	12/1/2011	12/1/2011	\$35,000.00
OKGE	NORTHWEST 345/138/13.8KV TRANSFORMER CKT 1	Install third 345/138 kV Bus Tie in Northwest Su	6/1/2017	6/1/2017	\$15,000,000.00
		Tear down / Rebuild 8.23 mile Bell-Peck 69 kV line with 1192			
WERE	BELL - PECK 69KV CKT 1	ACSR and replace CT	6/1/2011	6/1/2014	\$6,701,700.00
WERE	CHAPMAN JUNCTION 115KV	Install three position ring bu	12/1/2010	12/1/2010	\$2,750,000.00
		Tear down / Rebuild 14.63-mile Timber Tap-Winfield 69 kV line,			
WERE	CITY OF WINFIELD - TIMBER JUNCTION 69KV CKT 1	954 ACSR	6/1/2011	6/1/2012	\$11,557,700.00
		Install two transmission line deadends circuit switchers an			
WERE	CLAY CENTER JUNCTION 115KV	disconnect switches plus land expansion	12/1/2010	12/1/2010	\$1,545,000.00
WERE	CLAY CENTER JUNCTION 115KV Capacitor	Install 10.8 MVAR capacitor at Clay Center Junction 115 k\	6/1/2017	6/1/2017	\$600,000.00
		Replace jumpers and bus, and reset CTs and relaying. Rebuild			
WERE	CRESWELL - OAK 69KV CKT 1	substations.	6/1/2011	6/1/2013	\$1,500,000.00
WERE	GOODYEAR JUNCTION - INDIAN HILLS 115KV CKT 1	Rebuild 11.2 miles	6/1/2016	6/1/2016	\$11,032,000.00
WERE	RICHLAND - UDALL 69KV CKT 1	Tear down / Rebuild 8.48-mile Richland-Udall 69 kV line using 954 kcmil ACSR	6/1/2011	6/1/2014	\$6,699,200.00
WERE	TIMBER JUNCTION - UDALL 69KV CKT 1	Tear down / Rebuild Udall-Timber Jct 69 kV using 954 kcmi ACSR	6/1/2011	6/1/2014	\$1,587,900.00
WFEC	CANTON - TALOGA 69KV CKT 1	UPGRADE CANTON TO TALOGA TO 1113	11/1/2010	6/1/2013	\$3,880,000.00
WFEC	CARMEN - EAGLE CHIEF 69KV CKT 1	Reset CT ratio	6/1/2017	6/1/2017	\$100,000.00
WFEC	ELK CITY - RHWIND4 138.00 138KV CKT 1	Upgrade Elk City to RHWIND4 TO 1113	6/1/2011	6/1/2013	\$3,600,000.00
WFEC	GLASS MOUNTAIN - MOORELAND 138KV CKT 1 WFEC	Terminal Upgrade at Mooreland (CTS)	11/1/2010	6/1/2012	\$50,000.00
WFEC	TALOGA (TALOGA) 138/69/13.8KV TRANSFORMER CKT 1	Auto XFMR 56 to 112MVA	11/1/2010	6/1/2013	\$1,000,000.00

\$73,138,500.00

Transmission Owner	Upgrade Solution		Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)
		Install 9 miles of 345 kV line from Shipe Road to East Rogers,		
		Install 32 miles of 345 kV line from East Rogers to Osage Creek,		
AEPW	Multi - Centerton - Osage Creek 345 kV	and Install new 345/161 kV transformer at Osage Creek	6/1/2011	6/1/2016
		Install 22 miles of new 345 kV, 2-954 ACSR line. And Instal		
AEPW	Multi - Flint Creek - Centerton 345 kV and Centerton- East Centerton 161 kV	345/161 kV transformer at Centerton	6/1/2011	6/1/2014
		Rebuild 2.49 miles with 1590 ACSR. Replace wavetrap &		
AEPW	TEXAS EASTMAN - WHITNEY 138KV CKT 1	jumpers @ Whitney. Replace metering CT @ Texas Eastman	10/1/2012	6/1/2013
MKEC	ICLIFTON - GREENLEAF 115KV CKT 1	Rebuild 14.4 miles	6/1/2012	6/1/2013
MKEC	FLATROG3 138.00 - HARPER 138KV CKT 1	Rebuild 24.15 mile line	11/1/2010	6/1/2013
MKEC	GREENLEAF - KNOB HILL 115KV CKT 1 MKEC	Rebuild 67.3% Ownership of 20.9 miles	6/1/2013	6/1/2013
NPPD	PETERSBURG - MADISON 115KV CKT 1	Build new 35 mile 115 kV line from Petersburg to Madisor	12/1/2011	6/1/2015
		Add 3rd 345/138KV Auto and convert the 345kV and 138kV to a		
OKGE	ARCADIA (ARCADIA2) 345/138/13.8KV TRANSFORMER CKT 1 Accelerated	breaker and a half configuration.	6/1/2011	6/1/2014
		Add second 230/138kV transformer at Borden County by moving		
SPS	BORDEN COUNTY INTERCHANGE 230/138KV TRANSFORMER CKT 1	old from Midland when retired.	6/1/2012	6/1/2013
	DEAF SMITH COUNTY INTERCHANGE (GE M101353) 230/115/13.2KV			
SPS	TRANSFORMER CKT 1	Upgrade Both Transformers	6/1/2012	6/1/2013
SPS	MIDLAND COUNTY INTERCHANGE 230/138KV TRANSFORMER CKT 1	Add 2nd 230/115 kV transformer at Midland	6/1/2012	6/1/2013
		Uprate JEC- E. Manhattan 230 kV line to 100 deg C operation by		
WERE	Line - E. Manhattan - JEC 230 kV	raising structures.	6/1/2012	12/1/2012
WERE	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 3	Add third 345-138 kV transformer at Rose Hil	6/1/2011	6/1/2012

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

Transmission Owner	Upgrade	Solution	Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)
AEPW	52ND & DELAWARE WEST TAP - RIVERSIDE STATION 138KV CKT 1	Install 2% Reactor at Tulsa Power Station. (Priority Project	6/1/2011	6/1/2012
MKEC	Line - Comanche County - Medicine Lodge 345 kV dbl ck	Build a new 55 mile double circuit 345 kV lini	11/1/2010	1/1/2015
		Build a new 35 mile double circuit 345 kV line with at least 3000 A capacity from the new Medicine Lodge 345 kV substation to		
MKEC	Line - Medicine Lodge - Wichita 345 kV dbl ckt MKEC	the WR interception from the Wichita substation.	11/1/2010	1/1/2015
MKEC	Line - Spearville - Comanche County 345 kV dbl ckt MKEC	Build a new 27.5 mile double circuit 345 kV line	11/1/2010	1/1/2015
MKEC	Line - Woodward - Comanche County 345 kV dbl ckt MKEC	Build a new 5 mile double circuit 345 kV lin	11/1/2010	1/1/2015
MKEC	XFR - Medicine Lodge 345/138 kV	Install a 400 MVA 345/138 kV transformer at the new 345 kV Medicine Lodge substation.	11/1/2010	1/1/2015
OKGE	Line - Hitchland - Woodward 345 kV dbl ckt OKGE	Build a new 60.5 mile double circuit 345 kV line 11/1/2010		7/1/2014
OKGE	Line - Woodward - Comanche County 345 kV dbl ckt OKGE	Build a new 50 mile double circuit 345 k\ 11/1/2010		1/1/2015
SPS	Line - Hitchland - Woodward 345 kV dbl ckt SPS	Build a new 60.5 mile double circuit 345 kV line	11/1/2010	7/1/2014
SUNC	Line - Spearville - Comanche County 345 kV dbl ckt SUNC	Build a new 27.5 mile double circuit 345 kV line with at least 300 A capacity from the Spearville substation to the MKEC interception point from the new Comanche County substation.	11/1/2010	1/1/2015
WERE	Line - Medicine Lodge - Wichita 345 kV dbl ckt WERE	Build a new 35 mile double circuit 345 kV line	11/1/2010	1/1/2015

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

Transmission Owner	Upgrade	Solution	Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)
	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	6/1/2011	12/1/2011
WERE	GREENLEAF - KNOB HILL 115KV CKT 1 WERE	Rebuild 32.7% Ownership of 20.9 miles	6/1/2013	6/1/2013

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

Transmission Owner	Upgrade	Upgrade Solution		Estimated Date of Upgrade Completion (EOC)
		Rebuild 21.85 miles of 2-397 ACSR with 1590 ACSR. Replace		
		Breakers 9310 & 10080, wavetrap, & five switches @ Perdue.		
AEPW	DIANA - PERDUE 138KV CKT 1	Replace switch 12798 and wavetrap @ Diana.	6/1/2013	6/1/2014
AEPW	EASTON REC - KNOX LEE 138KV CKT 1	Replace 3 2000 A switches at Knox Lee	6/1/2012	6/1/2012
AEPW	EASTON REC - PIRKEY 138KV CKT 1	Replace Switch at Easton, and Breaker and Switch at Pirkey	6/1/2012	6/1/2012
AEPW	PIRKEY - WHITNEY 138KV CKT 1	Reset CT, Replace Breaker and Switch	6/1/2013	6/1/2013
AEPW	SOUTHWEST SHREVEPORT - SPRINGRIDGE PAN-HARR REC 138KV CKT 1	Rebuild 7.11 miles of 397.5 ACSR with 1272 ACSR	6/1/2013	6/1/2013
MIDW	COLBY 2 69.000 (COLBY T3) 69/34.5/13.8KV TRANSFORMER CKT 3	Replace the Colby 69/34.5 kV transformer with a larger un	6/1/2011	1/1/2013
MIDW	HEIZER - MULLERGREN 115 KV CKT 1 MIDW	Install 115 kV bay at Heizer and update relaying equipmer	6/1/2011	12/1/2011
		Construct approximately one mile of 115-kV transmission line		
		from the Great Bend (Mullergren) generation station to Heizer		
MKEC	HEIZER - MULLERGREN 115 KV CKT 1 MKEC	Substation with 795 ACSR conductor	6/1/2011	12/1/2011
NPPD	OGALLALA 230/115KV TRANSFORMER CKT 2	Install a second 230/115 KV transformer at Ogallala	6/1/2014	6/1/2014
OKGE	CLASSEN - SW 5TAP 138KV CKT 1	Replace 800A trap and CT at Classer	6/1/2017	6/1/2017
OMPA	OMHUFFYT 69.000 - OMPA-PONCA CITY 69KV CKT 1	Rebuild line	6/1/2017	6/1/2017
OMPA	OMKAWS 69.000 - OMPECANT 69.000 69KV CKT 1	Rebuild line	6/1/2017	6/1/2017
OMPA	OMNWESTT 69.000 - OMPA-PONCA CITY 69KV CKT 1	Rebuild line	6/1/2017	6/1/2017
SPS	AMARILLO SOUTH INTERCHANGE - FARMERS SUB 115KV CKT 1	Reconductor 115 kV line T73 from Amarillo South to South Georgia with 795 ACSR and replace all terminal equipment linitations to bring rating of this line to 246 MVA.	6/1/2017	6/1/2017
SPS	CANYON EAST SUB - OSAGE SWITCHING STATION 115KV CKT 1	524266-524567 rated 246/270 MVA summer normal/emergency rating	6/1/2017	6/1/2017
SPS	CARLISLE INTERCHANGE 230/115KV TRANSFORMER CKT 1	Upgrade the Carlisle Transformer to 252 MVA	6/1/2017	6/1/2017
SPS	CHERRY SUB - NORTHWEST INTERCHANGE 115KV CKT 1	Construct 8.6 miles of 115 kV from Cherry to Northwes	6/1/2017	6/1/2017
SPS	Jones Station Bus#2 - LUBBOCK SOUTH INTERCHANGE 230KV CKT 2	Replace 800 amp wavetrap	6/1/2017	6/1/2017
SPS	LOVINGTON 115/69 KV CKT 2	Add redundant 115/69 kV transformer at LE-Lovingtor	6/1/2012	6/1/2013
SPS	OSAGE - RANDALL 115KV CKT 1	Osage station & line reterminations with a new 2 mile 115 kV line from Randall Co	6/1/2013	6/1/2013
SPS	SWISHER 230/115KV TRANSFORMER CKT 1	Upgrade Swisher 230/115 kV TF	6/1/2017	6/1/2017
WFEC	East Kingfisher Capacitor 69 kV	Install 18 Mvar capacitor at East Kingfisher bus	6/1/2013	6/1/2013
WFEC	FRANKLIN SW (FRANKLIN) 138/69/13.8KV TRANSFORMER CKT 1	Replace 70 MVA Auto with 112 MVA autotranformer (100 MVA base Rating), Upgrade 138 and 69 KV buswork and switches.	6/1/2011	6/1/2012

Direct Assigned Network Upgrades - The requested service is contingent upon completion of the following upgrade

Transmission Owner	Upgrade	Solution	Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)	Estimated Engineering & Construction Cost
LPL	LUBBOCK POWER & LIGHT-HOLLY PLANT 230/69KV TRANSFORMER CKT 1	Upgrade trasformer	1/1/2012	6/1/2012	\$ 3,000,000
LPL	LUBBOCK POWER & LIGHT-SOUTHEAST 230/69KV TRANSFORMER CKT 1	Upgrade trasformer	1/1/2012	6/1/2012	\$ 3,000,000
		Replace existing voltage regulator with a 18 MVA rated voltage			
SUNC	Cunningham Voltage Regulator	regulator	8/1/2010	6/1/2014	\$ 250,000
0.1110		Install new 115/34.5 kV TXF rated at 25/30/37.5 MVA at Pratt 115 kV Substation to address 34.5kV distribution limitations to	0/4/0040	0/4/0044	
SUNC	Pratt 115/34.5kV Transformer	address 34.5kV distribution limitations	8/1/2010	6/1/2014	\$ 2,000,000
		Rebuild and reconductor 15 miles of 34.5-kV Line with T2 Raver (T2 4/0 ACSR) from Pratt to the Cunningham metering station to			
SUNC	Cunningham - Pratt 34.5kV CKT 1	address 34.5kV distribution limitations	8/1/2010	6/1/2014	\$ 4,164,600

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

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 termina	7/1/2012	7/1/2012
EMDE	SUB 110 - ORONOGO JCT SUB 167 - RIVERTON 161KV CKT 1	Reconductor Oronogo 59467 to Riverton 59469 with Bundlec 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
MKEC	MEDICINE LODGE 138/115KV TRANSFORMER CKT 1 Displacement	Upgrade transformer	12/1/2009	6/1/2013
OKGE	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1	Replace bus tie with 100MVA transforme	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 equipmer	1/1/2010	1/1/2010
OKGE	WOODWARD - WOODWARD EHV 138KV CKT 2	Build .5 miles of 138 kV and install terminal equipmer	1/1/2010	1/1/2010
OKGE	WOODWARD 345/138KV TRANSFORMER CKT 1	Install 345/138 kV XF	1/1/2010	1/1/2010
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	8BYLBUT 500.00 - WEBRE 500KV CKT 1	Indeterminate	10/1/2013	10/1/2013	Indeterminate
		Upgrade from a capacity of 147MVA to at			
EES	TRUMANN - TRUMANN WEST AECC 161KV CKT 1	least 155MVA	6/1/2017	6/1/2017	\$ 4,600,000
SWPA	JONESBORO - JONESBORO 161KV CKT 1 SWPA	Reconductor line	6/1/2017	6/1/2017	Indeterminate
		Replace Paragould auto transformers 1			
SWPA	XFR - Paragould 161/69 kV Auto 1 & 2	and 2 with 70 MVA units.	6/1/2011	6/1/2013	Indeterminate
WAPA	UTICA - YANKON JCT 115KV CKT 1	Indeterminate	6/1/2012	6/1/2012	Indeterminate