# Aggregate Facility Study SPP-2012-AG1-AFS-5

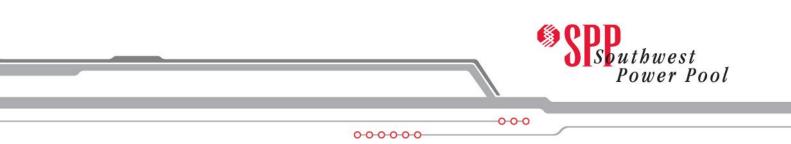
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10/21/2013

SPP Engineering, SPP Transmission Service Studies



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### **Executive Summary**

Pursuant to Attachment Z1 of the Southwest Power Pool, Inc. (SPP) Open Access Transmission Tariff (OATT), 2834 MW of long-term transmission service requests have been studied 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. A highly tangible benefit of studying transmission requests aggregately under the SPP OATT Attachment Z1 is the sharing of costs among Transmission Customers using the same facility. Facility upgrade costs are allocated on a prorated basis to all requests positively impacting any individual overloaded facility.

Attachment Z2 further provides for facility upgrade cost recovery by stating: "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 AFS determined that the total assigned facility upgrade Engineering and Construction (E&C) cost is \$51.4 million. Additionally, \$96 thousand of assigned E&C cost for third party facility upgrades are assignable to the customer.
- Total upgrade levelized revenue requirements for all transmission requests after consideration of potential base plan funding is \$86.3 million.

To accommodate the requested SPP Transmission Service, third-party facilities must be upgraded when the third-party transmission provider determines that they are constrained. Third-party facilities 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 E&C cost estimates for required third-party facility upgrades are applicable.

SPP will tender a Letter of Intent on October 21, 2013. This will open a 15-day window for Customer response. To remain in the Aggregate Transmission Service Study (ATSS), SPP must receive from the Customer by November 5, 2013, 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.

### Introduction

Important milestones and dates in SPP's Aggregate Transmission Study process:

- In 2005, the Federal Energy Regulatory Commission (FERC) accepted SPP's proposed Aggregate Transmission Study procedures in Docket ER05-109.
- In 2008, in Docket ER08-1379-000 SPP filed with FERC to pair open seasons closing during January 2010 with an effective date of August 9, 2008.
- In January 2010, in Docket ER10-659-000 SPP filed with FERC to extend its current practice of pairing open seasons through January 31, 2011, with an effective date of January 28, 2010.
- In March 2010, in Docket ER10-659-000 FERC issued a letter order accepting SPP's proposal to continue to pair open seasons through January 31, 2011, effective January 28, 2010.
- All requests for long-term transmission service with a signed study agreement received before January 31, 2012 for 2012-AG1 have been included in this first Aggregate Transmission Service Study (ATSS) of 2012.

Approximately 2834 MW of long-term Transmission Service was studied in this Aggregate Facility Study (AFS), and over \$51.4 million in transmission upgrades is proposed. The results of the AFS are detailed in Tables 1 through 6. Detailed results depict individual upgrade costs by study and potential base plan allowances determined by Attachments J and Z1. The <u>OATT</u> may be accessed at SPP's website by going to SPP.org>Org Groups>Governing Documents.

To understand the extent to which Base Plan Upgrades may be applied to both Point-to-Point (PTP) 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."

Network and PTP 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, PTP 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 because SPP, 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

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deferment of expansion plan projects with different upgrades with the new required in service date as a result of this AFS.

By taking the transmission service subject to interim redispatch, the Transmission Customer agrees to provide interim redispatch. Once the Transmission Provider identifies the possible redispatch pairs, the Transmission Customer can enter into bilateral agreements to provide redispatch. Should the need to implement redispatch arise in order to maintain Network reliability, it is up to the Transmission Customer to contact parties with whom they have entered into redispatch agreements to implement that service. Such redispatch shall occur in advance of curtailment of other firm reservations impacting these constraints. In the absence of implementation of interim redispatch as requested by the Transmission Provider for Transmission Customer transactions resulting in overloads on limiting facilities, the Transmission Provider shall curtail the Transmission Customers schedule.

# **Financial Analysis**

The AFS utilizes the allocated Customer's 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, 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

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- 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.

In the case of a Base Plan Upgrade being displaced or deferred by an earlier in service date for a requested upgrade, achievable base plan avoided revenue requirements shall be determined per Attachment J, Section VII.B methodology. A deferred Base Plan Upgrade is 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 is defined as the same Network Upgrade being displaced by a requested upgrade needed at an earlier date.

A 40-year service life assumption is utilized for Base Plan funded projects, unless another assumption is provided 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.

### **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 E&C 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 E&C 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 third party owner detailing the mitigation of the third 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 third party facilities for load that sinks outside the SPP footprint with the applicable Transmission Providers.

### Study Methodology

#### **Description**

The facility study analysis was conducted to determine the steady-state impact of the requested service on the SPP and first tier non-SPP control area systems. The steady-state analysis was performed to ensure current SPP Criteria and NERC Reliability Standards requirements are fulfilled. SPP conforms to NERC Reliability Standards, which provide strict requirements related to voltage violations and thermal overloads during normal conditions and during a contingency. NERC Standards require all facilities to 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 Model Development Working Group (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 pre-determined 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 69 kV 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 (Ameren), and ENTR (Entergy) control areas. 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.

#### Model Development

SPP used seven seasonal models to study the aggregate transfers of 2834 MW over a variety of requested service periods. The following SPP Transmission Expansion Plan 2012 Build 1 Cases were used to study the impact of the requested service on the transmission system:

2013/14 Winter Peak (13WP) 2014 Summer Peak (14SP) 2014/2015 Winter Peak (14WP) 2018 Summer Peak (18SP) 2018/19 Winter Peak (18WP) 2023 Summer Peak (23SP) 2023/2024 Winter Peak (23WP)

The Summer Peak models apply to June through September 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 2834 MW 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 2012 Series Cases. Scenario 5 includes transmission service not already included in the SPP 2012 Series Cases.

#### **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.

#### Transfer Analysis

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

#### **Curtailment and Redispatch Evaluation**

During any period in which SPP determines that a transmission constraint exists on and may impair Transmission System reliability, SPP will take whatever actions are reasonably necessary to maintain reliability. If SPP determines Transmission System reliability can be maintained by redispatching resources, it will evaluate the 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. Southwest Power Pool, Inc.

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. Transmission Customers can request SPP to provide additional relief pairs beyond those determined. The potential relief pairs were not evaluated to determine impacts on limiting facilities in the SPP and first tier systems. The SPP Reliability Coordinator would call upon the redispatch requirements before implementing NERC TLR Level 5a.

The Aggregate Study analyzes the most probable contingencies and does not account for every situation that may be encountered in real-time operation. Because of this, it is possible that the customer may be curtailed under certain system conditions to allow system operators to maintain the reliability of the transmission network.

# **Study Results**

#### Study Analysis Results

Tables 1 through 6 contain the AFS steady-state analysis results. 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) and 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 the

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Customer but required for service to be confirmed, credits to be paid for previously assigned AFS or Generation Interconnection Network Upgrades, and any required third party upgrades.

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, 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. MW amounts listed for redispatch are maximum values observed in a long term study and may only be available in a reduced amount or unavailable at any given time.

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 on meeting each of the conditions for classifying upgrades associated with designated resources as Base Plan Upgrades as defined in Section III.B of Attachment J. If the additional capacity of the new or changed Designated Resource exceeds the 125% resource to load forecast for the year of start of service, the requested resource is not eligible for base plan funding of required Network Upgrades and the full cost of the upgrades is assignable to the Customer.

If the 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 five-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 amount 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 E&C 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 amount (so-called "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 \$86 million (\$140 million less \$54 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 amount of \$128 million revenue requirements to be paid back to the Transmission Owners, and the remaining revenue requirements of \$12 million (\$140 million less \$128 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 amount 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.

#### **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.

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- Total engineering and construction cost (E&C) is the upgrade solution cost as determined by the Transmission Owner.
- The Transmission Customer's allocation of the E&C cost is based on the request (1) having an impact of at least 3% on the limiting element, and (2) having a positive impact on the upgraded facility.
- Minimum ATC is the portion of the requested capacity that can be accommodated without upgrading facilities.
- Annual ATC allocated to the Transmission Customer is determined by the least amount of allocated seasonal ATC within each year of a reservation period.

### 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 October 21, 2013. This will open a 15day window for Customer response. To remain in the Aggregate Transmission Service Study (ATSS), the Transmission Provider must receive from the Transmission Customer) by November 5, 2013, 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 E&C 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.

# Appendix A

#### PSS/E CHOICES IN RUNNING LOAD FLOW PROGRAM AND ACCC

#### **BASE CASE SETTINGS:**

- Solutions:
- Tap adjustment:
- Area Interchange Control:
- Var limits:
- Solution Options:

Fixed slope decoupled Newton-Raphson solution (FDNS) Stepping Tie lines and loads Apply immediately

- X Phase shift adjustment
- \_\_Flat start
- \_Lock DC taps
- Lock switched shunts

#### ACCC CASE SETTINGS:

•	Solutions:	AC contingency checking (ACCC)
٠	MW mismatch tolerance:	0.5
•	System intact rating:	Rate A
•	Contingency case rating:	Rate B
٠	Percent of rating:	100
٠	Output code:	Summary
٠	Min flow change in overload report:	3mw
٠	Excld cases w/ no overloads from report:	YES
٠	Exclude interfaces from report:	NO
•	Perform voltage limit check:	YES
•	Elements in available capacity table:	60000
•	Cutoff threshold for available capacity table:	99999.0
•	Min. contng. Case Vltg chng for report:	0.02
•	Sorted output:	None
•	Newton Solution:	
٠	Tap adjustment:	Stepping
٠	Area interchange control:	Tie lines and loads (Disabled for generator
		outages)
٠	Var limits:	Apply immediately
٠	Solution options:	X Phase shift adjustment
		Flat start
		Lock DC taps
		Lock switched shunts

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) within reservation period	Season of Minimum Allocated ATC within reservation period
AECC	2012-AG1-038	76585985	WR	CSWS	51	10/1/2012	10/1/2017	6/1/2018	6/1/2023	3/1/2014	2/1/2019	0	) 13SP
AECC	2012-AG1-040	76586012		OKGE	51		7/1/2020	6/1/2018	6/1/2023	7/1/2015	7/1/2020		23SP
AEPM	2012-AG1-033	76584399		CSWS	250		1/1/2021	1/1/2016	1/1/2021	Note 4	Note 4		235P
AEPM	2012-AG1-034	76584402		CSWS	250		1/1/2021	1/1/2016	1/1/2021	Note 4	Note 4		23SP
AEPM	2012-AG1-036	76584451		CSWS	78		1/1/2032	6/1/2018	9/1/2037	Note 4	Note 4		13SP
AEPM	2012-AG1-037	76584464		CSWS	80		1/1/2032	6/1/2017	9/1/2036	Note 4	Note 4		13SP
AEPM	2012-AG1-042	76586559		CSWS	101		12/31/2032	3/1/2014	5/1/2034	Note 4	Note 4		13SP
AEPM	2012-AG1-044	76586582		CSWS	53		12/31/2032	3/1/2014	5/1/2034	Note 4	Note 4		13SP
AEPM	2012-AG1-046	76586592		CSWS	48		12/31/2032	3/1/2014	5/1/2034	Note 4	Note 4		13SP
CHAN	2012-AG1-028	76583997		WR		1/1/2014	1/1/2019	3/1/2014	3/1/2019	3/1/2014	3/1/2019		14SP
CHAN	2012-AG1-029	76583999		WR	45		1/1/2019	3/1/2014	3/1/2019	3/1/2014	3/1/2019		) 14SP
CHAN	2012-AG1-031	76584004		WR	1	1/1/2014	1/1/2019	3/1/2014	3/1/2019	3/1/2014	3/1/2019		) 14SP
CHAN	2012-AG1-032	76584010		WR	121		1/1/2019	3/1/2014	3/1/2019	3/1/2014	3/1/2019		) 14SP
CHAN	2012-AG1-050	76586685		WR	2	1/1/2014	1/1/2019	3/1/2014	3/1/2019	3/1/2014	3/1/2019		) 14SP
CHAN	2012-AG1-052	76583977		WR	115		1/1/2019	3/1/2014	3/1/2019	3/1/2014	3/1/2019		14SP
CHAN	2012-AG1-053	76583984		WR	2	1/1/2014	1/1/2019	3/1/2014	3/1/2019	3/1/2014	3/1/2019		) 14SP
CRGL	2012-AG1-001	76300099		ERCOTN	207		1/1/2024	6/1/2016	6/1/2026	3/1/2014	3/1/2024		14SP
CRGL	2012-AG1-002	76348872		ERCOTN	207		2/1/2018	3/1/2014	3/1/2019	3/1/2014	3/1/2019		) 13SP
CRGL	2012-AG1-025	76583812		EES	200		1/1/2024	6/1/2019	6/1/2029	1/1/2015	1/1/2025		) 14SP
CRGL	2012-AG1-026	76583814		EES	200		1/1/2024	6/1/2019	6/1/2029	1/1/2015	1/1/2025		) 14SP
CRGL	2012-AG1-027	76583815		EES	100		1/1/2024	1/1/2015	1/1/2025	1/1/2015	1/1/2025		) 14SP
KMEA	2012-AG1-007	76553455		WR	3	2/1/2013	4/1/2025	3/1/2014	5/1/2026	3/1/2014	5/1/2026		) 13SP
KMEA	2012-AG1-012	76580367		WR	1	5/1/2013	4/30/2025	3/1/2014	3/1/2026	3/1/2014	3/1/2026	0	) 13SP
KMEA	2012-AG1-013	76580375		WR	3	5/1/2013	5/1/2026	3/1/2014	3/1/2027	3/1/2014	3/1/2027		) 13SP
KMEA	2012-AG1-014	76580381		WR	4	10/1/2013	6/1/2022	3/1/2014	11/1/2022	3/1/2014	11/1/2022		) 14SP
KMEA	2012-AG1-015	76580392		WR	1	5/1/2013	1/1/2019	3/1/2014	11/1/2019	3/1/2014	11/1/2019	0	) 13SP
KMEA	2012-AG1-016	76580395		WR	5	5/1/2013	1/1/2019	3/1/2014	11/1/2019	3/1/2014	11/1/2019		) 13SP
KMEA	2012-AG1-017	76580515	SPA	WR	1	1/1/2014	1/1/2019	3/1/2014	3/1/2019	3/1/2014	3/1/2019	0	) 14SP
KMEA	2012-AG1-018	76580552	NPPD	WR	1	1/1/2014	5/1/2025	3/1/2014	7/1/2025	3/1/2014	7/1/2025	0	) 14SP
KMEA	2012-AG1-019	76582326	WR	WR	41		5/1/2026	3/1/2014	3/1/2027	3/1/2014	3/1/2027		) 13SP
KMEA	2012-AG1-022	76583607	WR	WR	21	1/1/2014	5/1/2026	3/1/2014	7/1/2026	3/1/2014	7/1/2026	0	) 14SP
KMEA	2012-AG1-023	76583617	GRDA	WR	5	1/1/2014	5/1/2026	3/1/2014	7/1/2026	3/1/2014	7/1/2026		) 14SP
KMEA	2012-AG1-024	76583629	WR	WR	4	1/1/2014	1/1/2019	3/1/2014	3/1/2019	3/1/2014	3/1/2019	0	) 14SP
KMEA	2012-AG1-048	76586675	KCPL	WR	15	6/1/2013	6/1/2023	6/1/2018	6/1/2028	3/1/2014	3/1/2024	0	) 13SP
KMEA	2012-AG1-049	76586679	WR	WR	15	6/1/2013	6/1/2023	3/1/2014	3/1/2024	3/1/2014	3/1/2024	0	) 13SP
KMEA	2012-AG1-051	76586961	NPPD	WR	1	6/1/2013	5/1/2025	3/1/2014	2/1/2026	3/1/2014	2/1/2026	0	) 13SP
DGE	2012-AG1-008	76571379	OKGE	OKGE	60	12/19/2012	12/19/2032	6/1/2015	6/1/2035	3/1/2014	3/1/2034	0	) 13SP
PSCM	2012-AG1-021	76582673	SPS	LAM345	208	3/1/2013	3/1/2018	6/1/2018	6/1/2023	Note 4	Note 4	0	) 13SP
WFEC	2012-AG1-004	76548687	CSWS	WFEC	160	6/1/2014	12/31/2035	6/1/2014	12/1/2035	6/1/2014	12/1/2035	0	) 14SP
WFEC	2012-AG1-005	76548692	CSWS	WFEC	90	6/1/2017	12/31/2035	6/1/2017	12/1/2035	6/1/2017	12/1/2035	0	) 23SP
WFEC	2012-AG1-006	76548702	CSWS	WFEC	30	6/1/2019	12/31/2035	6/1/2019	12/1/2035	6/1/2019	12/1/2035	0	) 23SP
					2834						-		

completion of the previous studies. e 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

Note 3: Request is unable to be deferred due to fixed stop dates.

Note 4: Transmission customer did not select "remain in the study using interim redispatch" option.

Customer	Study Number	Reservation	Engineering and Construction Cost of Upgrades Allocated to Customer for Revenue Requirements	<sup>1</sup> Letter of Credit Amount Required	<sup>2</sup> Potential Base Plan Engineering and Construction Funding Allowable	Notes	<sup>4</sup> Additional Engineering and Construction Cost for 3rd Party Upgrades	<sup>3 5</sup> Total Revenue Requirements for Assigned Upgrades Over Term of Reservation WITH Potential Base Plan Funding Allocation	Point-to-Point Base Rate Over Reservation Period	<sup>4</sup> Total Cost of Reservation Assignable to Customer Contingent Upon Base Plan Funding
AECC	2012-AG1-038	76585985	\$ 3,178,165	Ś -	\$ 3,178,165		\$ 15,335	Ś -	\$ -	Schedule 9 & 11 Charges
AECC	2012-AG1-040	76586012		\$ -	\$ -		\$ -	· Ś -	\$ -	Schedule 9 & 11 Charges
	2012-AG1-033	76584399		\$ -	\$ 90,763		\$ 3,260	<u>-</u>	\$ -	Schedule 9 & 11 Charges
AEPM	2012-AG1-034	76584402	, ,	\$	\$ 109,237		\$ 3,180	<u>۲</u> ۲	\$ -	Schedule 9 & 11 Charges
AEPM	2012-AG1-036	76584451	;	\$ 37,706	\$ 4,823,000		\$ 915	\$ 130,887	ς -	\$ 130,887
	2012-AG1-037	76584464		\$ 18,995	\$ 2,680,517		\$ 943	\$ 61,320	\$ -	\$ 61,320
AEPM	2012-AG1-042	76586559	. , ,	\$ -	\$ <u>-</u>		\$ 1,214		\$ -	Schedule 9 & 11 Charges
	2012-AG1-044	76586582	,	\$ -	÷ \$-		\$ 637	- -	\$ -	Schedule 9 & 11 Charges
	2012-AG1-046	76586592		\$ -	\$ -		\$ 577	- -	\$ -	Schedule 9 & 11 Charges
	2012-AG1-028	76583997		\$ -	\$ -		\$ -	<u>-</u>	\$ -	Schedule 9 & 11 Charges
	2012-AG1-029	76583999		\$ -	\$ -		\$ -	<u>-</u>	\$ -	Schedule 9 & 11 Charges
CHAN	2012-AG1-031	76584004		\$ -	\$ -		\$ -	<u>-</u>	\$ -	Schedule 9 & 11 Charges
CHAN	2012-AG1-032	76584010		\$ -	\$ -		\$ -	<u>-</u>	\$ -	Schedule 9 & 11 Charges
	2012-AG1-050	76586685		÷ \$-	\$ -		\$ -	<u>-</u>	<u>+</u> -	Schedule 9 & 11 Charges
CHAN	2012-AG1-052	76583977		\$ -	\$ -		÷ \$-	- -	\$ -	Schedule 9 & 11 Charges
CHAN	2012-AG1-053	76583984		\$ -	\$ -		\$ -	- -	<u> </u>	Schedule 9 & 11 Charges
CRGL	2012-AG1-001	76300099		\$ -	\$ -	6	\$ -	, Ś -	\$ 47,113,531	
CRGL	2012-AG1-002	76348872	,	\$ -	\$ -	7	\$ -	, Ś -	\$ 23,556,766	
	2012-AG1-025	76583812		\$ 14,846,650	\$ -		\$ -	\$ 32,627,780	\$ 30,720,000	
CRGL	2012-AG1-026	76583814					\$ -	\$ 32,627,780		
	2012-AG1-027	76583815					\$ -	\$ 16,313,890		
KMEA	2012-AG1-007	76553455		\$ -	\$ -		÷ \$-	\$ -	\$ -	Schedule 9 & 11 Charges
	2012-AG1-012	76580367	•	\$ -	\$ -		\$ -	, Ś -	\$ -	Schedule 9 & 11 Charges
	2012-AG1-013	76580375		\$ -	\$ -		\$ -	, Ś -	\$ -	Schedule 9 & 11 Charges
KMEA	2012-AG1-014	76580381		\$ -	\$ -		\$ -	- -	\$ -	Schedule 9 & 11 Charges
	2012-AG1-015	76580392		\$ -	, \$-		\$ -	· ·	\$ -	Schedule 9 & 11 Charges
	2012-AG1-016	76580395		\$ 2,149,001	\$ -		\$ -	\$ 3,842,666	\$ -	\$ 3,842,666
	2012-AG1-017	76580515		\$ -	\$ -		\$ 70,000	\$ -	\$ -	Schedule 9 & 11 Charges
	2012-AG1-018	76580552		\$ -	\$ -		\$ -	\$	\$ -	Schedule 9 & 11 Charges
	2012-AG1-019	76582326		\$ -	\$ -		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
KMEA	2012-AG1-022	76583607		\$ -	\$ -		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
	2012-AG1-023	76583617	-	\$ -	\$ -		\$-	\$ -	\$ -	Schedule 9 & 11 Charges
	2012-AG1-024	76583629	,	\$ 446,530	\$-		\$-	\$ 779,570	\$-	\$ 779,570
	2012-AG1-048	76586675		\$ -	\$ -		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
KMEA	2012-AG1-049	76586679	-	\$-	\$-		\$ -	\$ -	\$-	Schedule 9 & 11 Charges
	2012-AG1-051	76586961		\$-	\$-		\$-	\$ -	\$-	Schedule 9 & 11 Charges
	2012-AG1-008	76571379		\$ -	\$ 750,000		\$ -	\$ -	\$-	Schedule 9 & 11 Charges
	2012-AG1-021	76582673		\$ -	\$ -		\$-	\$ -	\$ 23,137,920	\$ 23,137,920
	2012-AG1-004	76548687		\$ -	\$ -		\$ -	\$	\$ -	Schedule 9 & 11 Charges
	2012-AG1-005	76548692	1	\$ -	\$ -		\$ -	\$	\$ -	Schedule 9 & 11 Charges
	2012-AG1-006	76548702		\$ -	\$ -		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
Grand Total			\$ 51,400,544		\$ 11,631,681		\$ 96,061	\$ 86,383,893		

		r				r	r	r
Customer	Study Number	Reservation	Engineering and Construction Cost of Upgrades Allocated to Customer for Revenue Requirements	<sup>1</sup> Letter of Credit Amount Required	<sup>2</sup> Potential Base Plan Engineering and Construction Funding Allowable	Notes	<sup>4</sup> Additional Engineering and Construction Cost for 3rd Party Upgrades	<sup>3 5</sup> Total I Requirements Upgrades O Reservation W Base Plan Fund
			ansmission owner for networ					
			projects. Letter of Credit is re					
		•	ities that are fully base plan f					•
			lue is the lesser of the Engine	-				-
			nents meeting Attachment J,		••			•
	• • • • •	•	erred end dates if applicable.		•	•	•	
-			rade shall be determined per		•••	•	-	
			es was performed to determine		-			
			Plan upgrade is assigned to the plan amortization period, the					
-		•	the higher of the base rate o	-				
	-		meeting Attachment J, Sect				-	
		•	omer is based on assumption				•	
-			acted by their request. Credits			•	landing. Outlottler 15	
		* I	ase even if no base plan fund	1	1 0 11		hat shares the upora	de is now full ba
and thus differen		.,						
Note 6: Mutually exclusive with 76348872 System impacts were identified by only modeling mutually exclusive request 76300000								

Note 6: Mutually exclusive with 76348872.System impacts were identified by only modeling mutually exclusive request 76300099.Note 7: Mutually exclusive with 76300099.System impacts were identified by only modeling mutually exclusive request 76300099.

SPP Aggregate Facility Study (SPP-2012-AG1-AFS-5) October 21, 2013 Page 17

al Revenue nts for Assigned Over Term of WITH Potential Inding Allocation	Point-to-Point Base Rate Over Reservation Period	<sup>4</sup> Total Cost of Reservation Assignable to Customer Contingent Upon Base Plan Funding							
nd construction costs for upgrades when network customer is the ted down on an annual basis to reflect cost recovery based on revenue ents for base plan funding.									
lated pursuant to	Attachment J, Section	II B criteria. Allocation of base plan							
an Avoided RR in the case of a Base Plan upgrade being displaced or r Base Plan funded projects. A present worth analysis of RR on a common ne Requested Upgrade. The incremental increase in present worth of a displacement analysis results in lower RR due to the shorter amortization art date.									
udes prepayments	required for any SWP	nt. Allocation of base plan funding A upgrades. Revenue requirements ble. Customer is also responsible to							
base plan funded	resulting in a different	amortization period for the upgrade							

#### Study Number Customer AECC 2012-AG1-038

				Requested	Requested Start			Deferred Stop Date Without	Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
AECC	76585985	WR	CSWS	51	10/1/2012	10/1/2017	6/1/2018	6/1/2023	\$ 3,178,165	\$-	\$ 3,178,165	\$ 5,538,348
									\$ 3,178,165	\$-	\$ 3,178,165	\$ 5,538,348

Reservation	Upgrade Name	DUN	EOC		Base Plan Funding for Wind	, .	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2015			\$ 3,178,165		\$ 3,178,165	\$ 49,623,119	· · ·
				Total	\$ 3,178,165	\$-	\$ 3,178,165	\$ 49,623,119	\$ 5,538,348

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76585985	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1	6/1/2014	6/1/2015		Yes

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76585985	412SUB - KANSAS TAP 161KV CKT 1	6/1/2015	6/1/2017		Yes
	412SUB - KERR 161KV CKT 1	6/1/2015	6/1/2017		Yes
	KANSAS TAP - WEST SILOAM SPRINGS 161KV CKT 1 #2	6/1/2019	6/1/2019		
	SILOAM CITY - WEST SILOAM SPRINGS 161KV CKT 1 #2	6/1/2019	6/1/2019		
	Viola - Clearwater 138kV Ckt1	10/1/2014	6/1/2018		Yes
	Viola - Gill 138kV Ckt1	10/1/2014	6/1/2018		Yes
	Viola 345/138kV Transformer Ckt 1	10/1/2014	6/1/2018		Yes

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76585985	ASHDOWN REC (MILLWOOD) - OKAY 138KV CKT 1	7/1/2012	7/1/2012		
	ASHDOWN REC (MILLWOOD) - PATTERSON 138KV CKT 1	7/1/2012	7/1/2012		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345KV CKT 1 WFEC	7/1/2012	7/1/2012		
	MANDEVILTP4 - SE TEXARKANA 138KV CKT 1	7/1/2012	7/1/2012		
	MANDEVILTP4 - TURK 138KV CKT 1	7/1/2012	7/1/2012		
	MCNAB REC - TURK 115KV CKT 1	7/1/2012	7/1/2012		
	NORTHWEST - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	OKAY - TURK 138KV CKT 1	7/1/2012	7/1/2012		
	SUGAR HILL - TURK 138KV CKT 1	7/1/2012	7/1/2012		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

Third Party Limitations.

				Earliest Start	Redispatch	*Allocated E &	ε	
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	*Total E & C Co	ost
76585985	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1 AECC	6/1/2015	6/1/2015			\$ 15,33	5 \$ 15,3	335
					Total	\$ 15,33	5 \$ 15,3	335

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Customer	Study Number											
AECC	2012-AG1-040											
							Deferred Start	Deferred Stop	Potential Base			
				Requested	<b>Requested Start</b>	<b>Requested Stop</b>	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
AECC	76586012	WR	OKGE	51	7/1/2015	7/1/2020	6/1/2018	6/1/2023	\$-	\$-	\$-	\$
		•	•	•		•			\$-	\$-	\$-	\$

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation Up	pgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76586012 No	one					\$-	\$-	\$-
					Total	\$-	\$-	\$-

\*Credits may be required for applicable generation interconnection network upgrades. \*\*Reservation 76586012 studied as resevation 76585985

#### Study Number Customer 2012-AG1-033 AEPM

					Requested Start	Requested Stop	Deferred Start Date Without	Date Without	Potential E Plan Fundii	ng		Allocated E & C		Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable		Base Rate	Cost	R	Requirements
AEPM	76584399	CSWS	CSWS	250	1/1/2016	1/1/2021			\$	90,763	\$-	\$ 90,7	763 \$	\$ 113,314

				Earliest Start	Redispatch	Allocated E	& C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Total E & C Cost	Requirements
	HANCOCK - MUSKOGEE 161KV CKT 1	6/1/2019	6/1/2019			\$6	58,122	\$ 150,000	\$ 84,957
	MUSKOGEE - MUSKOGEE PORT 161KV CKT 1	6/1/2019	6/1/2019			\$ 2	22,641	\$ 50,000	\$ 28,357
					Total	\$ 9	90,763	\$ 200,000	\$ 113,314

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

				Earliest Start	Redispate
Reservation		DUN	EOC	Date	Available
76584399	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1	6/1/2014	6/1/2015		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76584399	412SUB - KANSAS TAP 161KV CKT 1	6/1/2015	6/1/2017		
	412SUB - KERR 161KV CKT 1	6/1/2015	6/1/2017		
	KANSAS TAP - WEST SILOAM SPRINGS 161KV CKT 1 #2	6/1/2019	6/1/2019		
	SILOAM CITY - WEST SILOAM SPRINGS 161KV CKT 1 #2	6/1/2019	6/1/2019		

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispato
Reservation	Upgrade Name	DUN	EOC	Date	Available
76584399	BANN - RED SPRINGS REC 138KV CKT 1	7/1/2012	7/1/2012		
	GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE	1/1/2012	1/1/2012		
	GRACMNT4 138.00 - WASHITA 138KV CKT 2 WFEC	1/1/2012	1/1/2012		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345KV CKT 1 WFEC	7/1/2012	7/1/2012		

Third Party Limitations.

				Earliest Start	Redispatch	*Allocated	1 E & C		
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		*Total E & C	Cost
76584399	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1 AECC	6/1/2015	6/1/2015			\$	3,260	\$	3,260
					Total	\$	3,260	\$	3,260

\*Estimated cost allocation as a percentage of total cost is shown for third-party limitations when costs have not yet been established by the third-party. \*Credits may be required for applicable generation interconnection network upgrades.

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#### Study Number Customer 2012-AG1-034 AEPM Requested Request Customer Reservation

POR POD Amount Date 76584402 CSWS CSWS 250

				Earliest Start	Redispatch	Allocated E &	С		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Total E & C Cost	Requirements
76584402	HANCOCK - MUSKOGEE 161KV CKT 1	6/1/2019	6/1/2019			\$ 81	878	\$ 150,000	\$ 102,113
	MUSKOGEE - MUSKOGEE PORT 161KV CKT 1	6/1/2019	6/1/2019			\$ 27	359	\$ 50,000	\$ 34,266
					Total	\$ 109	237	\$ 200,000	\$ 136,379

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

				Earliest Start	Redispate
Reservation	Upgrade Name	DUN	EOC	Date	Available
76584402	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1	6/1/2014	6/1/2015		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76584402	412SUB - KANSAS TAP 161KV CKT 1	6/1/2015	6/1/2017		
	412SUB - KERR 161KV CKT 1	6/1/2015	6/1/2017		
	KANSAS TAP - WEST SILOAM SPRINGS 161KV CKT 1 #2	6/1/2019	6/1/2019		
	SILOAM CITY - WEST SILOAM SPRINGS 161KV CKT 1 #2	6/1/2019	6/1/2019		

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispato
Reservation	Upgrade Name	DUN	EOC	Date	Available
76584402	BANN - RED SPRINGS REC 138KV CKT 1	7/1/2012	7/1/2012		
	GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE	1/1/2012	1/1/2012		
	GRACMNT4 138.00 - WASHITA 138KV CKT 2 WFEC	1/1/2012	1/1/2012		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345KV CKT 1 WFEC	7/1/2012	7/1/2012		

Third Party Limitations.

AEPM

				Earliest Start	Redispatch	*Allocate	d E & C		
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		*Total E & C	C Cost
76584402	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1 AECC	6/1/2015	6/1/2015			\$	3,180	\$	3,180
					Total	\$	3,180	\$	3,180

\*Estimated cost allocation as a percentage of total cost is shown for third-party limitations when costs have not yet been established by the third-party. \*Credits may be required for applicable generation interconnection network upgrades.

	Requested Stop	Date Without	Potentia Plan Func Allowable	ding	Point-to-Point Base Rate	Allocated Cost		Total Rever Requiremen	
1/1/2016	1/1/2021		\$	109,237	\$-	\$	109,237	\$	136,379
			\$	109,237	\$-	\$	109,237	\$	136,379

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Customer	Study Number
AEPM	2012-AG1-036

				Requested	Requested Start		Deferred Start Date Without	Deferred Stop Date Without	Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
AEPM	76584	451 WR	CSWS	78	10/1/2012	1/1/2032	6/1/2018	9/1/2037	\$ 4,823,000	\$-	\$ 4,860,705	\$ 18,078,497
									\$ 4,823,000	\$-	\$ 4,860,705	\$ 18,078,497

Reservation	Upgrade Name	DUN	EOC	Redispatch Available	Base Plan Funding for Wind	Directly Assigned for Wind		Total E & C Cost	Total Revenue Requirements
	EVANS ENERGY CENTER NORTH - MAIZE 138KV CKT 1 #1	6/1/2019			\$ 76,554				· · · · · · · · · · · · · · · · · · ·
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2015	6/1/2019		\$ 4,746,446	\$-	\$ 4,746,446	\$ 49,623,119	\$ 17,681,869
				Total	\$ 4,823,000	\$ 37,705	\$ 4,860,705	\$ 50,450,543	\$ 18,078,497

				Earliest Start	Redispatc
Reservation	Upgrade Name	DUN	EOC	Date	Available
76584451	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1	6/1/2014	6/1/2015		
	IATAN - NASHUA 345KV CKT 1	3/1/2014	6/1/2015		

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

				Earliest Start	Redispatch
eservation	Upgrade Name	DUN	EOC	Date	Available
76584451	412SUB - KANSAS TAP 161KV CKT 1	6/1/2015	6/1/2017		
	412SUB - KERR 161KV CKT 1	6/1/2015	6/1/2017		
	KANSAS TAP - WEST SILOAM SPRINGS 161KV CKT 1 #2	6/1/2019	6/1/2019		
	SILOAM CITY - WEST SILOAM SPRINGS 161KV CKT 1 #2	6/1/2019	6/1/2019		
	Viola - Clearwater 138kV Ckt1	10/1/2014	6/1/2018		
	Viola - Gill 138kV Ckt1	10/1/2014	6/1/2018		
	Viola 345/138kV Transformer Ckt 1	10/1/2014	6/1/2018		

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
7658445	1 BANN - RED SPRINGS REC 138KV CKT 1	7/1/2012	7/1/2012		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE	1/1/2012	1/1/2012		
	GRACMNT4 138.00 - WASHITA 138KV CKT 2 WFEC	1/1/2012	1/1/2012		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345KV CKT 1 WFEC	7/1/2012	7/1/2012		
	MCNAB REC - TURK 115KV CKT 1	7/1/2012	7/1/2012		
	NORTHWEST - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

Third Party Limit	ations.						
				Earliest Start	Redispatch	*Allocated E & 0	
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	*Total E & C Cost
76584451	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1 AECC	6/1/2015	6/1/2015			\$ 915	\$ 915
					Total	\$ 915	\$ 915

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Study Number Customer 2012-AG1-037 AEPM

		1					Deferred Start	Deferred Stop	Potential Base			
		1		Requested	<b>Requested Start</b>	<b>Requested Stop</b>	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
AEPM	76584464	SPS	CSWS	80	10/1/2012	1/1/2032	6/1/2017	9/1/2036	\$ 2,680,517	\$-	\$ 2,699,511	\$ 9,338,904
									\$ 2,680,517	\$-	\$ 2,699,511	\$ 9,338,904

Reservation	Upgrade Name	DUN	EOC		Base Plan Funding for Wind	Directly Assigned for Wind		Total E & C Cost	Total Revenue Requirements
76584464	EVANS ENERGY CENTER NORTH - MAIZE 138KV CKT 1 #1	6/1/2019	6/1/2019		\$ 38,565	\$ 18,994	\$ 57,559	\$ 827,424	\$ 185,819
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2015	6/1/2019		\$ 2,641,952	\$-	\$ 2,641,952	\$ 49,623,119	\$ 9,153,085
				Total	\$ 2,680,517	\$ 18,994	\$ 2,699,511	\$ 50,450,543	\$ 9,338,904

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76584464	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1	6/1/2014	6/1/2015		
	Cox Interchange - Kiser 115 kV Ckt 1 #2	3/1/2014	3/1/2014	2/28/2014	
	Kiser Substation 115/69 kV Ckt 1	3/1/2014	3/1/2014	2/28/2014	
	Kress Interchange - Kiser 115 kV Ckt 1	3/1/2014	11/30/2014		
	Line - Clark County - Thistle 345 kV dbl Ckt	3/1/2014	1/1/2015		
	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	3/1/2014	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	3/1/2014	7/1/2014		
	Line - Spearville - Clark County 345 kV dbl Ckt	3/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbl Ckt PW	3/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbl Ckt WERE	3/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	3/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbl Ckt PW	3/1/2014	1/1/2015		
	Line - Tuco - Woodward 345 kV line OKGE	3/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	3/1/2014	6/1/2014		
	MOUNDRIDGE 138/115KV TRANSFORMER CKT 2	3/1/2014	12/1/2014		
	XFR - Thistle 345/138 kV	3/1/2014	1/1/2015		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76584464	412SUB - KANSAS TAP 161KV CKT 1	6/1/2015	6/1/2017		
	412SUB - KERR 161KV CKT 1	6/1/2015	6/1/2017		
	BUSHLAND INTERCHANGE - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1	3/1/2014	6/1/2016		
	CANYON EAST SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	3/1/2014	6/1/2017		
	Cherry Co - Gentleman 345 kV Ckt1	10/1/2014	1/1/2018		
	Cherry Co - Holt Co 345 kV Ckt1	10/1/2014	1/1/2018		
	Cherry Co 345 kV Terminal Upgrades	10/1/2014	1/1/2018		
	KANSAS TAP - WEST SILOAM SPRINGS 161KV CKT 1 #2	6/1/2019	6/1/2019		
	SILOAM CITY - WEST SILOAM SPRINGS 161KV CKT 1 #2	6/1/2019	6/1/2019		

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

				Earliest Start	Redispatch		
Reservation	Upgrade Name	DUN	EOC	Date	Available		
76584464	CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1	3/1/2014	6/1/2017				
	GLASS MOUNTAIN - MOORELAND 138KV CKT 1	6/1/2014	6/1/2016				

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispate
Reservation	Upgrade Name	DUN	EOC	Date	Available
76584464	BANN - RED SPRINGS REC 138KV CKT 1	7/1/2012	7/1/2012		
	CHERRY6 230.00 - Harrington Station East Bus 230KV CKT 1	6/1/2015	6/1/2015		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE	1/1/2012	1/1/2012		
	GRACMNT4 138.00 - WASHITA 138KV CKT 2 WFEC	1/1/2012	1/1/2012		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345KV CKT 1 WFEC	7/1/2012	7/1/2012		
	NORTHWEST - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - IODINE 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 1	1/1/2010	1/1/2010	1	
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010		

Third Party Limitations.

				Earliest Start	Redispatch	*Allocated E & C	
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	*Total E & C Cost
76584464	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1 AECC	6/1/2015	6/1/2015			\$ 943	\$ 943
					Total	\$ 943	\$ 943

\*Estimated cost allocation as a percentage of total cost is shown for third-party limitations when costs have not yet been established by the third-party.

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\*Credits may be required for applicable generation interconnection network upgrades.

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Customer	Study Number						
AEPM	2012-AG1-042						
						Requested	Requeste
Customer	Reservation		PC	OR	POD	Amount	Date
AEPM		76586559	Ok	KGE	CSWS	101	1

Reservation	Upgrade Name	DUN				Base Plan Funding for Wind		Allocated E & C Cost		Total Revenue Requirements
76586559		DOIN	200	Dute	/ wallable	\$ -	\$ -	\$ -	\$ -	\$ -
					Total	\$-	\$-	\$-	\$-	\$-

				Earliest Start	Redispate
Reservation	Upgrade Name	DUN	EOC	Date	Available
76586559	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1	6/1/2014	6/1/2015		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76586559	412SUB - KANSAS TAP 161KV CKT 1	6/1/2015	6/1/2017		
	412SUB - KERR 161KV CKT 1	6/1/2015	6/1/2017		
	KANSAS TAP - WEST SILOAM SPRINGS 161KV CKT 1 #2	6/1/2019	6/1/2019		
	SILOAM CITY - WEST SILOAM SPRINGS 161KV CKT 1 #2	6/1/2019	6/1/2019		

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76586559	BANN - RED SPRINGS REC 138KV CKT 1	7/1/2012	7/1/2012		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE	1/1/2012	1/1/2012		
	GRACMNT4 138.00 - WASHITA 138KV CKT 2 WFEC	1/1/2012	1/1/2012		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345KV CKT 1 WFEC	7/1/2012	7/1/2012		
	NORTHWEST - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

Third Party Limita	itions.						
				Earliest Start	Redispatch	*Allocated E & C	
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	*Total E & C Cost
76586559	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1 AECC	6/1/2015	6/1/2015			\$ 1,214	\$ 1,214
					Total	\$ 1,214	\$ 1,214

	Requested Stop	Date Without				Allocated E & C Cost	Total Revenue Requirements
10/1/2012	12/31/2032	3/1/2014	5/1/2034	\$-	\$-	\$-	\$-
				\$-	\$-	\$-	\$-

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Cus	tomer	Study Number						
AEP	M	2012-AG1-044						
							Requested	Requeste
Cus	tomer	Reservation		Р	POR	POD	Amount	Date
AEP	M		76586582	C	DKGE	CSWS	53	1

Decomunities								Allocated E & C		Total Revenue
		DUN	EUC	Date	Available	Funding for Wind		Cost	Total E & C Cost	Requirements
76586582	None					Ş -	Ş -	Ş -	Ş -	Ş -
					Total	\$-	\$-	\$-	\$-	\$-

				Earliest Start	Redispato
Reservation	Upgrade Name	DUN	EOC	Date	Available
76586582	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1	6/1/2014	6/1/2015		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76586582	412SUB - KANSAS TAP 161KV CKT 1	6/1/2015	6/1/2017		
	412SUB - KERR 161KV CKT 1	6/1/2015	6/1/2017		
	KANSAS TAP - WEST SILOAM SPRINGS 161KV CKT 1 #2	6/1/2019	6/1/2019		
	SILOAM CITY - WEST SILOAM SPRINGS 161KV CKT 1 #2	6/1/2019	6/1/2019		

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76586582	BANN - RED SPRINGS REC 138KV CKT 1	7/1/2012	7/1/2012		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE	1/1/2012	1/1/2012		
	GRACMNT4 138.00 - WASHITA 138KV CKT 2 WFEC	1/1/2012	1/1/2012		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345KV CKT 1 WFEC	7/1/2012	7/1/2012		
	NORTHWEST - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

Third Party Limita	tions.						
				Earliest Start	Redispatch	*Allocated E & C	
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	*Total E & C Cost
76586582	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1 AECC	6/1/2015	6/1/2015			\$ 637	\$ 637
					Total	\$ 637	\$ 637

	Requested Stop	Date Without				Allocated E & C Cost	Total Revenue Requirements
10/1/2012	12/31/2032	3/1/2014	5/1/2034	\$-	\$-	\$-	\$-
				\$-	\$-	\$-	\$-

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Customer	Study Number					
AEPM	2012-AG1-046					
					Requested	Request
Customer	Reservation		POR	POD	Amount	Date
AEPM		76586592	OKGE	CSWS	48	1

Deconvotion	Lingrade Nama					Base Plan Funding for Wind		Allocated E & C		Total Revenue
Reservation 76586592		DUN	EUC	Date	Available	s -	s -	Cost s -	Total E & C Cost	Requirements
			Total	\$ -	\$ -	\$ -	\$-	\$ -		

				Earliest Start	Redispato
Reservation	Upgrade Name	DUN	EOC	Date	Available
76586592	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1	6/1/2014	6/1/2015		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76586592	412SUB - KANSAS TAP 161KV CKT 1	6/1/2015	6/1/2017		
	412SUB - KERR 161KV CKT 1	6/1/2015	6/1/2017		
	KANSAS TAP - WEST SILOAM SPRINGS 161KV CKT 1 #2	6/1/2019	6/1/2019		
	SILOAM CITY - WEST SILOAM SPRINGS 161KV CKT 1 #2	6/1/2019	6/1/2019		

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76586592	BANN - RED SPRINGS REC 138KV CKT 1	7/1/2012	7/1/2012		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE	1/1/2012	1/1/2012		
	GRACMNT4 138.00 - WASHITA 138KV CKT 2 WFEC	1/1/2012	1/1/2012		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345KV CKT 1 WFEC	7/1/2012	7/1/2012		
	NORTHWEST - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

Third Party Limita	tions.						
				Earliest Start	Redispatch	*Allocated E & C	
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	*Total E & C Cost
76586592	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1 AECC	6/1/2015	6/1/2015			\$ 577	\$ 577
					Total	\$ 577	\$ 577

	Requested Stop	Date Without				Allocated E & C Cost	Total Revenue Requirements
10/1/2012	12/31/2032	3/1/2014	5/1/2034	\$-	\$-	\$-	\$-
				\$-	\$-	\$-	\$-

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Customer	Study Number											
CHAN	2012-AG1-028											
							Deferred Start	Deferred Stop	Potential Base			
				Requested	<b>Requested Start</b>	<b>Requested Stop</b>	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
CHAN	76583997	KACY	WR	3	3 1/1/2014	1/1/2019	3/1/2014	3/1/2019	\$-	\$-	\$-	\$-
		-	÷	-	-	•	-	-	\$-	\$-	\$-	\$ -

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76583997	None					\$-	\$-	\$-
					Total	\$-	\$-	\$-

\*Credits may be required for applicable generation interconnection network upgrades. \*Scope of Study does not address underlying System Impacts and Upgrades.

<b>Customer</b> CHAN	Study Number 2012-AG1-029											
				Requested	Requested Start			•	Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer		POR		_	Date	Date	Redispatch	Redispatch	Allowable			Requirements
CHAN	76583999	KCPL	WR	45	1/1/2014	1/1/2019	3/1/2014	3/1/2019	\$-	\$-	\$-	\$-
									\$-	\$-	\$-	\$ -

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76583999	None			1		\$-	\$-	\$-
					Total	\$-	\$-	\$-

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76583999	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2011	6/1/2013		
	GREENLEAF - KNOB HILL 115KV CKT 1 MKEC	6/1/2013	6/1/2013		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		

\*Credits may be required for applicable generation interconnection network upgrades.

\*Scope of Study does not address underlying System Impacts and Upgrades.

<b>Customer</b> CHAN	Study Number 2012-AG1-031											
								•	Potential Base			
Customer	Reservation	POR	POD	Requested Amount	Requested Start Date				•	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
CHAN	76584004	SPA	WR	-	1 1/1/2014	1/1/2019	3/1/2014	3/1/2019	\$-	\$-	\$-	\$
									\$-	\$ -	\$-	\$

			Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76584004 None					\$-	\$-	\$-
				Total	\$-	\$-	\$-

\*Credits may be required for applicable generation interconnection network upgrades. \*Scope of Study does not address underlying System Impacts and Upgrades.

Customer	Study Number											
CHAN	2012-AG1-032											
							Deferred Start	Deferred Stop	Potential Base			
				Requested	<b>Requested Start</b>	<b>Requested Stop</b>	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
CHAN	76584010	WR	WR	12	1 1/1/2014	1/1/2019	3/1/2014	3/1/2019	\$-	\$-	\$-	\$
				•	•				Ś -	Ś -	Ś -	Ś

			Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76584010 None					\$-	\$-	\$-
				Total	\$-	\$-	\$-

\*Credits may be required for applicable generation interconnection network upgrades. \*Scope of Study does not address underlying System Impacts and Upgrades.

Customer	Study Number					
CHAN	2012-AG1-050					
					Requested	Request
Customer	Reservation		POR	POD	Amount	Date
CHAN	7	76586685	NPPD	WR	2	

			Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76586685 None					\$-	\$-	\$-
				Total	\$-	\$-	\$-

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76586685	Line - Clark County - Thistle 345 kV dbl Ckt	3/1/2014	1/1/2015		
	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	3/1/2014	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	3/1/2014	7/1/2014		
	Line - Spearville - Clark County 345 kV dbl Ckt	3/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbl Ckt PW	3/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbl Ckt WERE	3/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	3/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbl Ckt PW	3/1/2014	1/1/2015		
	Line - Tuco - Woodward 345 kV line OKGE	3/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	3/1/2014	6/1/2014		
	MOUNDRIDGE 138/115KV TRANSFORMER CKT 2	3/1/2014	12/1/2014		
	XFR - Thistle 345/138 kV	3/1/2014	1/1/2015		

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

				Earliest Start	Redispate
Reservation	Upgrade Name	DUN	EOC	Date	Available
76586685	BUTLER - WEAVER 138KV CKT 1	6/1/2015	6/1/2018		
	Cherry Co - Gentleman 345 kV Ckt1	10/1/2014	1/1/2018		
	Cherry Co - Holt Co 345 kV Ckt1	10/1/2014	1/1/2018		
	Cherry Co 345 kV Terminal Upgrades	10/1/2014	1/1/2018		

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76586685	ALBION - PETERSBURG 115KV CKT 1	1/1/2013	1/1/2013		
	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2011	6/1/2013		
	DEARING 138KV Capacitor	6/1/2012	6/1/2012		
	GREENLEAF - KNOB HILL 115KV CKT 1 MKEC	6/1/2013	6/1/2013		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	NELIGH - PETERSBURG 115KV CKT 1	1/1/2013	1/1/2013		
	NORTHWEST - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

\*Credits may be required for applicable generation interconnection network upgrades.

\*Scope of Study does not address underlying System Impacts and Upgrades.

	Requested Stop	Date Without	Date Without	Potential Base Plan Funding Allowable	Point-to-Point Base Rate		Total Revenue Requirements
1/1/2014	1/1/2019	3/1/2014	3/1/2019	\$-	\$-	\$-	\$-
				\$-	\$-	\$-	\$ -

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<b>Customer</b> CHAN	Study Number 2012-AG1-052											
	2012-A01-032			-								
							Deferred Start	Deferred Stop	Potential Base			
				Requested	<b>Requested Start</b>	<b>Requested Stop</b>	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
CHAN	76583977	WR	WR	115	5 1/1/2014	1/1/2019	3/1/2014	3/1/2019	\$-	\$-	\$-	\$-
	·						-		\$-	\$ -	\$ -	\$-

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation Upgrade	de Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76583977 None						\$-	\$-	\$-
					Total	\$-	\$-	\$-

\*Credits may be required for applicable generation interconnection network upgrades. \*Scope of Study does not address underlying System Impacts and Upgrades.

Customer	Study Number											
CHAN	2012-AG1-053											
							Deferred Start	Deferred Stop	Potential Base			
				Requested	<b>Requested Start</b>	<b>Requested Stop</b>	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
CHAN	76583984	GRDA	WR	2	2 1/1/2014	1/1/2019	3/1/2014	3/1/2019	\$-	\$-	\$-	\$-
	·		•	•	•				\$-	\$-	\$-	\$-

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76583984	None					\$-	\$-	\$-
					Total	\$-	\$-	\$-

\*Credits may be required for applicable generation interconnection network upgrades. \*Scope of Study does not address underlying System Impacts and Upgrades.

	Study Number 2012-AG1-001			
Customer	Reservation	POR	 •	Requeste Date

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76300099	None					\$-	\$-	\$-
					Total	\$-	\$-	\$-

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

76300099

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76300099	Line - Clark County - Thistle 345 kV dbl Ckt	3/1/2014	1/1/2015		Yes
	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	3/1/2014	7/1/2014		Yes
	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	3/1/2014	7/1/2014		Yes
	Line - Spearville - Clark County 345 kV dbl Ckt	3/1/2014	1/1/2015		Yes
	Line - Thistle - Wichita 345 kV dbl Ckt PW	3/1/2014	1/1/2015		Yes
	Line - Thistle - Wichita 345 kV dbl Ckt WERE	3/1/2014	1/1/2015		Yes
	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	3/1/2014	1/1/2015		Yes
	Line - Thistle - Woodward 345 kV dbl Ckt PW	3/1/2014	1/1/2015		Yes
	Line - Tuco - Woodward 345 kV line OKGE	3/1/2014	6/1/2014		Yes
	Line - Tuco - Woodward 345 kV line SPS	3/1/2014	6/1/2014		Yes
	XFR - Thistle 345/138 kV	3/1/2014	1/1/2015		Yes

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76300099	BUSHLAND INTERCHANGE - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1	3/1/2014	6/1/2016		Yes

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76300099	BANN - RED SPRINGS REC 138KV CKT 1	7/1/2012	7/1/2012		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE	1/1/2012	1/1/2012		
	GRACMNT4 138.00 - WASHITA 138KV CKT 2 WFEC	1/1/2012	1/1/2012		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345KV CKT 1 WFEC	7/1/2012	7/1/2012		
	NORTHWEST - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

\*Credits may be required for applicable generation interconnection network upgrades.

\*The North DC Tie is derated to 210mw indefinately.

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\*The NORTH DC tie is scheduled for an outage beginning 12/1/2013 until 3/31/2014 to refurbish the facility.

\*198 MW of available ERCOT North to South capacity without consideration of prior queued STUDY requests in active Aggregate Transmission Service Studies.

\*Available capacity will be allocated on a first come first served basis in accordance with Attachment Z1 III.b. of SPP OATT.

	Requested Stop	Date Without		Potential Base Plan Funding Allowable		Point-to-Point ase Rate	Allocated E & C Cost	Total Revenue Requirements	
1/1/2014	1/1/2024	6/1/2016	6/1/2026	\$-	ç	\$ 47,113,531	\$-	\$	-
				\$-	ç	\$ 47,113,531	\$-	\$	-

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Customer	Study Number												
CRGL	2012-AG1-002												
								Deferred Start	Deferred Stop	Potential Base			
					Requested	<b>Requested Start</b>	<b>Requested Stop</b>	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	<b>Total Revenue</b>
Customer	Reservation		POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
CRGL		76348872	ERCOTN	ERCOTN	207	2/1/2013	2/1/2018	3/1/2014	3/1/2019	\$-	\$ 23,556,766	\$-	\$
						•		•		\$ -	\$ 23,556,766	Ś -	Ś

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76348872	None					\$-	\$-	\$-
					Total	\$-	\$-	\$-

\*Credits may be required for applicable generation interconnection network upgrades.

\*The North DC Tie is derated to 210mw indefinately.

\*The NORTH DC tie is scheduled for an outage beginning 12/1/2013 until 3/31/2014 to refurbish the facility.

\*198 MW of available ERCOT North to South capacity without consideration of prior queued STUDY requests in active Aggregate Transmission Service Studies. \*Available capacity will be allocated on a first come first served basis in accordance with Attachment Z1 III.b. of SPP OATT.

Study Number Customer CRGL 2012-AG1-025

				Requested	Requested Start		Deferred Start Date Without		Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
CRGL	76583812	WPEK	EES	200	1/1/2014	1/1/2024	6/1/2019	6/1/2029	\$-	\$ 30,720,000	\$ 14,846,653	\$ 32,627,778
									\$-	\$ 30,720,000	\$ 14,846,653	\$ 32,627,778

				Earliest Start	Redispatch	Alloc	ated E & C		Total Revenu	he
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Total E & C Cost	Requirements	IS
76583812	EVANS ENERGY CENTER NORTH - MAIZE 138KV CKT 1 #1	6/1/2019	6/1/2019			\$	251,049	\$ 827,424	\$ 514	4,697
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2015	6/1/2019		Yes	\$	14,595,604	\$ 49,623,119	\$ 32,113	3,081
					Total	\$	14,846,653	\$ 50,450,543	\$ 32,62	27,778

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76583812	Line - Clark County - Thistle 345 kV dbl Ckt	3/1/2014	1/1/2015		No
	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	3/1/2014	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	3/1/2014	7/1/2014		
	Line - Spearville - Clark County 345 kV dbl Ckt	3/1/2014	1/1/2015		No
	Line - Thistle - Wichita 345 kV dbl Ckt PW	3/1/2014	1/1/2015		No
	Line - Thistle - Wichita 345 kV dbl Ckt WERE	3/1/2014	1/1/2015		No
	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	3/1/2014	1/1/2015		No
	Line - Thistle - Woodward 345 kV dbl Ckt PW	3/1/2014	1/1/2015		No
	Line - Tuco - Woodward 345 kV line OKGE	3/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	3/1/2014	6/1/2014		
	XFR - Thistle 345/138 kV	3/1/2014	1/1/2015		No

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

				Earliest Start	Redispat
Reservation	Upgrade Name	DUN	EOC	Date	Available
76583812	Cherry Co - Gentleman 345 kV Ckt1	10/1/2014	1/1/2018		
	Cherry Co - Holt Co 345 kV Ckt1	10/1/2014	1/1/2018		
	Cherry Co 345 kV Terminal Upgrades	10/1/2014	1/1/2018		

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76583812	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345KV CKT 1 WFEC	7/1/2012	7/1/2012		
	NORTHWEST - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

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Study Number Customer CRGL 2012-AG1-026

				Requested	Requested Start		Deferred Start Date Without	Deferred Stop Date Without	Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
CRGL	76583814	WPEK	EES	200	1/1/2014	1/1/2024	6/1/2019	6/1/2029	\$-	\$ 30,720,000	\$ 14,846,653	\$ 32,627,778
									\$-	\$ 30,720,000	\$ 14,846,653	\$ 32,627,778

				Earliest Start	Redispatch	Alloc	ated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Total E & C Cost	Requirements
76583814	EVANS ENERGY CENTER NORTH - MAIZE 138KV CKT 1 #1	6/1/2019	6/1/2019			\$	251,049	\$ 827,424	\$ 514,
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2015	6/1/2019		Yes	\$	14,595,604	\$ 49,623,119	\$ 32,113,
					Total	\$	14,846,653	\$ 50,450,543	\$ 32,627,

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

				Earliest Start	Redispatc
Reservation	Upgrade Name	DUN	EOC	Date	Available
76583814	Line - Clark County - Thistle 345 kV dbl Ckt	3/1/2014	1/1/2015		No
	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	3/1/2014	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	3/1/2014	7/1/2014		
	Line - Spearville - Clark County 345 kV dbl Ckt	3/1/2014	1/1/2015		No
	Line - Thistle - Wichita 345 kV dbl Ckt PW	3/1/2014	1/1/2015		No
	Line - Thistle - Wichita 345 kV dbl Ckt WERE	3/1/2014	1/1/2015		No
	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	3/1/2014	1/1/2015		No
	Line - Thistle - Woodward 345 kV dbl Ckt PW	3/1/2014	1/1/2015		No
	Line - Tuco - Woodward 345 kV line OKGE	3/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	3/1/2014	6/1/2014		
	XFR - Thistle 345/138 kV	3/1/2014	1/1/2015		No

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

				Earliest Start	Redispate
Reservation	Upgrade Name	DUN	EOC	Date	Available
76583814	Cherry Co - Gentleman 345 kV Ckt1	10/1/2014	1/1/2018		
	Cherry Co - Holt Co 345 kV Ckt1	10/1/2014	1/1/2018		
	Cherry Co 345 kV Terminal Upgrades	10/1/2014	1/1/2018		

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76583814	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345KV CKT 1 WFEC	7/1/2012	7/1/2012		
	NORTHWEST - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

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Study Number Customer CRGL 2012-AG1-027

				Requested	Requested Start	Requested Stop	Deferred Start Date Without	Deferred Stop Date Without	Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
CRGL	76583815	WPEK	EES	100	1/1/2014	1/1/2024	1/1/201	1/1/2025	\$-	\$ 15,360,000	\$ 7,423,326	\$ 16,313,888
									\$-	\$ 15,360,000	\$ 7,423,326	\$ 16,313,888

				Earliest Start	Redispatch	Alloca	ited E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Total E & C Cost	Requirements
76583815	EVANS ENERGY CENTER NORTH - MAIZE 138KV CKT 1 #1	6/1/2019	6/1/2019			\$	125,524	\$ 827,424	\$ 257,348
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2015	6/1/2019			\$	7,297,802	\$ 49,623,119	\$ 16,056,540
					Total	\$	7,423,326	\$ 50,450,543	\$ 16,313,888

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

				Earliest Start	Redispat
Reservation	Upgrade Name	DUN	EOC	Date	Available
76583815	Line - Clark County - Thistle 345 kV dbl Ckt	3/1/2014	1/1/2015		No
	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	3/1/2014	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	3/1/2014	7/1/2014		
	Line - Spearville - Clark County 345 kV dbl Ckt	3/1/2014	1/1/2015		No
	Line - Thistle - Wichita 345 kV dbl Ckt PW	3/1/2014	1/1/2015		No
	Line - Thistle - Wichita 345 kV dbl Ckt WERE	3/1/2014	1/1/2015		No
	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	3/1/2014	1/1/2015		No
	Line - Thistle - Woodward 345 kV dbl Ckt PW	3/1/2014	1/1/2015		No
	Line - Tuco - Woodward 345 kV line OKGE	3/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	3/1/2014	6/1/2014		
	XFR - Thistle 345/138 kV	3/1/2014	1/1/2015		No

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

				Earliest Start	Redispate
Reservation	Upgrade Name	DUN	EOC	Date	Available
76583815	Cherry Co - Gentleman 345 kV Ckt1	10/1/2014	1/1/2018		
	Cherry Co - Holt Co 345 kV Ckt1	10/1/2014	1/1/2018		
	Cherry Co 345 kV Terminal Upgrades	10/1/2014	1/1/2018		

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76583815	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345KV CKT 1 WFEC	7/1/2012	7/1/2012		
	NORTHWEST - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

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	Study Number 2012-AG1-007		

							Deferred Start	Deferred Stop	Potential Base			
				Requested	<b>Requested Start</b>	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer R	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KMEA	76553455	NPPD	WR	3	2/1/201	.3 4/1/2025	5 3/1/2014	5/1/2026	\$	- \$ -	\$-	\$-
									\$	- \$ -	\$-	\$ -

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76553455	None					\$-	\$-	\$-
					Total	\$-	\$-	\$-

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76553455	Cowskin - Westlink 69 kV Ckt 1	6/1/2014	12/1/2015		
	Gill 138/69 kV Transformer Ckt 3	6/1/2014	12/1/2015		
	Hoover South - Tyler 69 kV Ckt 1	6/1/2014	6/1/2014		
	Tyler - Westlink 69 kV Ckt 1	6/1/2014	6/1/2015		
	Viola - Clearwater 138kV Ckt1	10/1/2014	6/1/2018		
	Viola - Gill 138kV Ckt1	10/1/2014	6/1/2018		
	Viola 345/138kV Transformer Ckt 1	10/1/2014	6/1/2018		

Credits may be required for the following Network Upgrades in accordance with Attachment 72 of the SPP OATT.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76553455	ALBION - PETERSBURG 115KV CKT 1	1/1/2013	1/1/2013		
	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2011	6/1/2013		
	GREENLEAF - KNOB HILL 115KV CKT 1 MKEC	6/1/2013	6/1/2013		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	LYONS - RICE_CO 115KV CKT 1	10/1/2012	4/1/2013		
	LYONS - WHEATLAND 115KV CKT 1 #1	10/1/2012	7/15/2013		
	LYONS - WHEATLAND 115KV CKT 1 #2	10/1/2012	7/15/2013		
	NELIGH - PETERSBURG 115KV CKT 1	1/1/2013	1/1/2013		

\*Credits may be required for applicable generation interconnection network upgrades.

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<b>Customer</b> KMEA	Study Number 2012-AG1-012											
				Requested	Requested Start		Deferred Start Date Without	•	Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KMEA	76580367	NPPD	WR	1	L 5/1/2013	4/30/2025	3/1/2014	3/1/2026	\$-	\$-	\$-	\$-
									\$-	\$-	\$-	\$-

		ľ		Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76580367	None					\$-	\$-	\$-
					Total	\$-	\$-	\$-

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispat
Reservation	Upgrade Name	DUN	EOC	Date	Available
76580367	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2011	6/1/2013		
	GREENLEAF - KNOB HILL 115KV CKT 1 MKEC	6/1/2013	6/1/2013		

\*Credits may be required for applicable generation interconnection network upgrades.

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Customer	Study Number											
KMEA	2012-AG1-013											
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							Deferred Start	Deferred Stop	Potential Base			
				Requested	<b>Requested Start</b>	<b>Requested Stop</b>	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	<b>Total Revenue</b>
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KMEA	76580375	GRDA	WR	3	3 5/1/2013	5/1/2026	3/1/2014	3/1/2027	\$-	\$-	\$-	\$-
	·	-							\$-	\$ -	\$ -	\$ -

			Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76580375 None					\$-	\$-	\$-
				Total	\$-	\$-	\$-

<b>Customer</b> KMEA	Study Number 2012-AG1-014											
[								•	Potential Base			
Customer	Reservation	POR	POD	Requested Amount	Requested Start Date				•	Point-to-Point Base Rate		Total Revenue Requirements
KMEA	76580381	KACY	WR	4	4 10/1/2013	6/1/2022	2 3/1/2014	11/1/2022	\$-	\$-	\$-	\$
									\$-	\$ -	\$-	\$

			Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76580381 None					\$-	\$-	\$-
				Total	\$-	\$-	\$-

Customer	Study Number													
KMEA	2012-AG1-015													
									Deferred Start	Deferred Stop	Potential Base			
					Requested	Requeste	d Start	Requested Stop		-	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation		POR	POD	Amount	Date		Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KMEA	765803	92	SPA	WR		1 5	5/1/2013	1/1/2019	3/1/2014	11/1/2019	\$-	\$-	\$-	\$
					•					1	- Ś	Ś -	Ś -	Ś

			Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76580392 None					\$-	\$-	\$-
	-			Total	\$-	\$-	\$-

Study Number Customer 2012-AG1-016 KMEA

				Requested	Requested Start	Requested Stop	Deferred Start Date Without	Deferred Stop Date Without	Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KMEA	76580395	WR	WR	5	5/1/2013	1/1/2019	3/1/202	14 11/1/201	9\$-	\$-	\$ 2,149,001	\$ 3,842,666
			-	-					Ś -	Ś -	\$ 2,149,001	\$ 3,842,666

				Earliest Start	Redispatch	Alloca	ted E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Total E & C Cost	Requirements
76580395	EVANS ENERGY CENTER NORTH - MAIZE 138KV CKT 1 #1	6/1/2019	6/1/2019			\$	27,985	\$ 827,424	\$ 46,6
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2015	6/1/2019			\$	2,121,016	\$ 49,623,119	\$ 3,795,9
					Total	\$	2,149,001	\$ 50,450,543	\$ 3,842,6

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

				Earliest Start	Redispate
Reservation	Upgrade Name	DUN	EOC	Date	Available
76580395	IATAN - NASHUA 345KV CKT 1	3/1/2014	6/1/2015		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76580395	East Manhattan - Jeffrey Energy Center 230 kV Ckt 1	6/1/2019	6/1/2019		

Planned Projects Redispat Earliest Start Reservation Upgrade Name DUN EOC Date Available 6/1/2014 12/1/2013 76580395 GOODYEAR JUNCTION - MCVICAR3 115kV 6/1/2014 MCVICAR3 - 17TH & FAIRLAWN 115kV 6/1/2014 12/1/2014

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76580395	BARBER (BARBER 4) 138/115/2.72KV TRANSFORMER CKT 1	12/1/2009	6/1/2013		
	CIRCLE - RICE_CO 230KV CKT 1	10/1/2012	11/15/2012		
	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		
	GREENLEAF - KNOB HILL 115KV CKT 1 MKEC	6/1/2013	6/1/2013		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	LYONS - RICE_CO 115KV CKT 1	10/1/2012	4/1/2013		
	LYONS - WHEATLAND 115KV CKT 1 #1	10/1/2012	7/15/2013		
	LYONS - WHEATLAND 115KV CKT 1 #2	10/1/2012	7/15/2013		
	RICE CO 230/115KV TRANSFORMER CKT 1	10/1/2012	11/15/2012		

\*Credits may be required for applicable generation interconnection network upgrades.

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Customer	Study Number											
KMEA	2012-AG1-017											
							Deferred Start	Deferred Stop	Potential Base			
				Requested	<b>Requested Start</b>	<b>Requested Stop</b>	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KMEA	76580515	SPA	WR	1	1/1/2014	1/1/2019	3/1/2014	3/1/2019	\$-	\$-	\$-	\$-
<b>5</b>	•	-	•	-	-	-	•	-	\$-	\$-	\$-	\$-

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76580515	None					\$-	\$-	\$-
					Total	\$-	\$-	\$-

#### Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispate
Reservation	Upgrade Name	DUN	EOC	Date	Available
7658051	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	CIRCLE - RICE_CO 230KV CKT 1	10/1/2012	11/15/2012		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	LYONS - RICE_CO 115KV CKT 1	10/1/2012	4/1/2013		
	LYONS - WHEATLAND 115KV CKT 1 #1	10/1/2012	7/15/2013		
	LYONS - WHEATLAND 115KV CKT 1 #2	10/1/2012	7/15/2013		
	NORTHWEST - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	RICE_CO 230/115KV TRANSFORMER CKT 1	10/1/2012	11/15/2012		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

Third	Party	Limitations.

			Earliest Start Redispat		Redispatch	*Allocat	ted E & C	
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		*Total E & C Cost
76580515	NORTH WARSAW - TRUMAN 161KV CKT 1 SWPA #1	6/1/2015	6/1/2016			\$	70,000	\$ 70,000
					Total	\$	70,000	\$ 70,000

\*Estimated cost allocation as a percentage of total cost is shown for third-party limitations when costs have not yet been established by the third-party.

\*Credits may be required for applicable generation interconnection network upgrades.

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Customer	Study Number					
KMEA	2012-AG1-018					
					Requested	Request
Customer	Reservation		POR	POD	Amount	Date
KMEA		76580552	NPPD	WR	1	

			Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76580552 None					\$-	\$-	\$-
				Total	\$-	\$-	\$-

3/1/2014 6/1/2015

Expansion Plan - 1	The requested service is contingent upon completion of the following upgrades. Cost is not assignable to t	the transmissi	on customer.		
				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available

nnletion of the following ungrades. Cost is not assignable to the transmission custor Reliability Projects - The requested service is contingent upon con

Reliability Project	eliability Projects - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.							
				Earliest Start	Redispatch			
Reservation	Upgrade Name	DUN	EOC	Date	Available			
76580552	Cherry Co - Gentleman 345 kV Ckt1	10/1/2014	1/1/2018					
	Cherry Co - Holt Co 345 kV Ckt1	10/1/2014	1/1/2018					
	Cherry Co 345 kV Terminal Upgrades	10/1/2014	1/1/2018					
	HAYS PLANT - VINE STREET 115KV CKT 1 #1	3/1/2014	6/1/2015					

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

_	Construction Pen	ding - The requested service is contingent upon completion of the following upgrades. Cost is not assignal	ble to the tran	ismission cust	omer.	
					Earliest Start	Redispatch
	Reservation	Upgrade Name	DUN	EOC	Date	Available
	76580552	HAYS PLANT - VINE STREET 115KV CKT 1 #2	6/1/2014	6/1/2016		

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76580552	ALBION - PETERSBURG 115KV CKT 1	1/1/2013	1/1/2013		
	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2011	6/1/2013		
	GREENLEAF - KNOB HILL 115KV CKT 1 MKEC	6/1/2013	6/1/2013		
	LYONS - RICE_CO 115KV CKT 1	10/1/2012	4/1/2013		
	LYONS - WHEATLAND 115KV CKT 1 #1	10/1/2012	7/15/2013		
	LYONS - WHEATLAND 115KV CKT 1 #2	10/1/2012	7/15/2013		
	NELIGH - PETERSBURG 115KV CKT 1	1/1/2013	1/1/2013		
	NORTHWEST - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

\*Credits may be required for applicable generation interconnection network upgrades.

\*Scope of Study does not address underlying System Impacts and Upgrades.

76580552 HAYS PLANT - SOUTH HAYS 115KV CKT 1 #2

	Requested Stop	Date Without	Date Without	Potential Base Plan Funding Allowable	Point-to-Point Base Rate		Total Revenue Requirements
1/1/2014	5/1/2025	3/1/2014	7/1/2025	\$-	\$-	\$-	\$-
				\$-	\$-	\$-	\$-

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Customer	Study Number					
KMEA	2012-AG1-019					
					Requested	Request
Customer	Reservation		POR	POD	Amount	Date
КМЕА		76582326	WR	WR	41	
				-		-

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76582326	None					\$-	\$-	\$-
					Total	\$-	\$-	\$-

Reliability Project	s - The requested service is contingent upon completion of the following upgrades. Cost is not assignable	to the transm	ission custom	er.	
				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76582326	GOODYEAR JUNCTION - NORTHLAND 115KV CKT 1	6/1/2014	6/1/2017		

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispatch
eservation	Upgrade Name	DUN	EOC	Date	Available
76582326	CIRCLE - RICE_CO 230KV CKT 1	10/1/2012	11/15/2012		
	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2011	6/1/2013		
	GREENLEAF - KNOB HILL 115KV CKT 1 MKEC	6/1/2013	6/1/2013		
	LYONS - RICE_CO 115KV CKT 1	10/1/2012	4/1/2013		
	LYONS - WHEATLAND 115KV CKT 1 #1	10/1/2012	7/15/2013		
	LYONS - WHEATLAND 115KV CKT 1 #2	10/1/2012	7/15/2013		
	RICE_CO 230/115KV TRANSFORMER CKT 1	10/1/2012	11/15/2012		
	SUB 110 - ORONOGO JCT SUB 167 - RIVERTON 161KV CKT 1	6/1/2011	6/1/2011		

\*Credits may be required for applicable generation interconnection network upgrades.

	Requested Stop	Date Without		Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
5/1/2013	5/1/2026	3/1/2014	3/1/2027	\$-	\$-	\$-	\$-
				\$-	\$-	\$-	\$-

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Customer	Study Number											
KMEA	2012-AG1-022											
							Deferred Start	Deferred Stop	Potential Base			
				Requested	<b>Requested Start</b>	<b>Requested Stop</b>	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	<b>Total Revenue</b>
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KMEA	76583607	WR	WR	2	1 1/1/2014	5/1/2026	3/1/2014	7/1/2026	\$-	\$-	\$-	\$
				•	•		•		\$ -	Ś -	- Ś	Ś

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76583607	None					\$-	\$-	\$-
<u> </u>					Total	\$-	\$-	\$-

Customer	Study Number											
KMEA	2012-AG1-023											
							Deferred Start	Deferred Stop	Potential Base			
				Requested	<b>Requested Start</b>	<b>Requested Stop</b>	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	<b>Total Revenue</b>
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KMEA	76583617	GRDA	WR		5 1/1/2014	5/1/2026	3/1/2014	7/1/2026	\$-	\$-	\$-	\$
							•		Ś -	Ś -	Ś -	Ś

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation l	Jpgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76583617	lone					\$-	\$-	\$-
					Total	\$-	\$-	\$-

Customer	Study Number											
KMEA	2012-AG1-024											
							Deferred Start	Deferred Stop	Potential Base			
				Requested	<b>Requested Start</b>	<b>Requested Stop</b>	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KMEA	76583629	WR	WR		4 1/1/2014	1/1/2019	3/1/2014	3/1/2019	\$	- \$ -	\$ 446,530	\$ 779,570
				•	•	•		•	\$	- \$ -	\$ 446,530	\$ 779,570
				Earliest Start	Redispatch	Allocated E & C		Total Revenue	]			
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements				
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2015	6/1/2019			\$ 446,530	\$ 49,623,119	\$ 779,570				
		•	•	•	Total	\$ 446,530	\$ 49,623,119	\$ 779,570				
					L	<u>,</u> , , , , , , , , , , , , , , , , , ,	, , <u>,</u>	1· ,				

6/1/2014 12/1/2014

Expansion Plan - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.									
				Earliest Start	Redispatch				
Reservation	Upgrade Name	DUN	EOC	Date	Available				
76583629	IATAN - NASHUA 345KV CKT 1	3/1/2014	6/1/2015						

					4
76583629	IATAN - NASHUA 345KV CKT 1	3/1/2014	6/1/2015		
Planned Projects					
				Earliest Start	Redispat
Reservation	Upgrade Name	DUN	EOC	Date	Available
76583629	GOODYEAR JUNCTION - MCVICAR3 115kV	6/1/2014	6/1/2014	12/1/2013	

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispatch
Reservation Upgr	grade Name	DUN	EOC	Date	Available
76583629 BARI	RBER (BARBER 4) 138/115/2.72KV TRANSFORMER CKT 1	12/1/2009	6/1/2013		
CIRC	CLE - RICE_CO 230KV CKT 1	10/1/2012	11/15/2012		
CLIF	FTON - GREENLEAF 115KV CKT 1	6/1/2011	6/1/2013		
FLAT	TRDG3 138.00 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
FLAT	TRDG3 138.00 - HARPER 138KV CKT 1	12/1/2009	6/1/2013		
GRE	EENLEAF - KNOB HILL 115KV CKT 1 MKEC	6/1/2013	6/1/2013		
LACY	CYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
LYON	DNS - RICE_CO 115KV CKT 1	10/1/2012	4/1/2013		
LYON	DNS - WHEATLAND 115KV CKT 1 #1	10/1/2012	7/15/2013		
LYON	DNS - WHEATLAND 115KV CKT 1 #2	10/1/2012	7/15/2013		
RICE	E_CO 230/115KV TRANSFORMER CKT 1	10/1/2012	11/15/2012		

\*Credits may be required for applicable generation interconnection network upgrades.

\*Scope of Study does not address underlying System Impacts and Upgrades.

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							Deferred Start	Deferred Stop	Potential Base			
				Requested	<b>Requested Start</b>	<b>Requested Stop</b>	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KMEA	76586675	KCPL	WR	-	15 6/1/2013	6/1/2023	6/1/2018	6/1/2028	\$-	\$-	\$-	\$
									\$-	\$-	\$-	\$

			Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76586675 None					\$-	\$-	\$-
				Total	\$-	\$-	\$-

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

				Earliest Start	Redispate
Reservation	Upgrade Name	DUN	EOC	Date	Available
76586675	IATAN - NASHUA 345KV CKT 1	3/1/2014	6/1/2015		Yes
	MOUNDRIDGE 138/115KV TRANSFORMER CKT 2	3/1/2014	12/1/2014		Yes

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76586675	Cowskin - Westlink 69 kV Ckt 1	6/1/2014	12/1/2015		
	Gill 138/69 kV Transformer Ckt 3	6/1/2014	12/1/2015		Yes
	GOODYEAR JUNCTION - NORTHLAND 115KV CKT 1	6/1/2014	6/1/2017		
	Hoover South - Tyler 69 kV Ckt 1	6/1/2014	6/1/2014		
	Tyler - Westlink 69 kV Ckt 1	6/1/2014	6/1/2015		
	Viola - Clearwater 138kV Ckt1	10/1/2014	6/1/2018		Yes
	Viola - Gill 138kV Ckt1	10/1/2014	6/1/2018		Yes
	Viola 345/138kV Transformer Ckt 1	10/1/2014	6/1/2018		Yes

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76586675	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	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 345KV CKT 1 WFEC	7/1/2012	7/1/2012		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	LYONS - RICE_CO 115KV CKT 1	10/1/2012	4/1/2013		
	LYONS - WHEATLAND 115KV CKT 1 #1	10/1/2012	7/15/2013		
	LYONS - WHEATLAND 115KV CKT 1 #2	10/1/2012	7/15/2013		
	NORTHWEST - TATONGA 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		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

\*Credits may be required for applicable generation interconnection network upgrades.

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<b>Customer</b> KMEA	Study Number 2012-AG1-049											
					1		Deferred Start	Deferred Stop	Potential Base	1		<u> </u>
				Requested	<b>Requested Start</b>	<b>Requested Stop</b>	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	<b>Total Revenue</b>
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KMEA	76586679	WR	WR	15	6/1/2013	6/1/2023	3/1/2014	3/1/2024	\$-	\$-	\$-	\$
				<u>.</u>		-			\$-	\$-	\$-	\$

			Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76586679 None					\$-	\$-	\$-
				Total	\$-	\$-	\$-

Customer	Study Number					
KMEA	2012-AG1-051					
					Requested	Request
Customer	Reservation		POR	POD	Amount	Date
KMEA		76586961	NPPD	WR		1

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76586961	None					\$-	\$-	\$-
					Total	\$-	\$-	\$-

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

_						
					Earliest Start	Redispatch
	Reservation	Upgrade Name	DUN	EOC	Date	Available
	76586961	MOUNDRIDGE 138/115KV TRANSFORMER CKT 2	3/1/2014	12/1/2014		

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

Reliability Project	s - the requested service is contingent upon completion of the following upgrades. Cost is not assignable	to the transm	Ission custom	er.	
				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76586961	Gill 138/69 kV Transformer Ckt 3	6/1/2014	12/1/2015		
	Viola - Clearwater 138kV Ckt1	10/1/2014	6/1/2018		
	Viola - Gill 138kV Ckt1	10/1/2014	6/1/2018		
	Viola 345/138kV Transformer Ckt 1	10/1/2014	6/1/2018		

\*Credits may be required for applicable generation interconnection network upgrades.

	Requested Stop	Date Without		Potential Base Plan Funding Allowable	Point-to-Point Base Rate		Total Revenue Requirements	
6/1/2013	5/1/2025	3/1/2014	2/1/2026	\$-	\$-	\$-	\$	-
				\$-	\$-	\$-	\$	

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Customer	Study Number											
OGE	2012-AG1-008											
							Deferred Start	Deferred Stop	Potential Base			
				Requested	<b>Requested Start</b>	<b>Requested Stop</b>	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
OGE	76571379	OKGE	OKGE	60	12/19/2012	12/19/2032	6/1/2015	6/1/2035	\$ 750,000	\$-	\$ 750,000	\$ 2,132,309
									\$ 750,000	\$-	\$ 750,000	\$ 2,132,309

				Earliest Start	Redispatch	Base Plan	Directly Assigned	Allocated E & C		Total Re	evenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Funding for Wind	for Wind	Cost	Total E & C Cost	Requirer	ments
76571379	HEFNER - TULSA 138KV CKT 1	6/1/2019	6/1/2019	)		\$ 750,000	\$-	\$ 750,00	0 \$ 750,000	) \$ 2	2,132,309
					Total	\$ 750,000	\$-	\$ 750,00	0 \$ 750,000	)\$2	2,132,309

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

	0				
				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76571379	DIVISION AVE - LAKESIDE 138KV CKT 1	6/1/2019	6/1/2019		
	NORTHWEST 345/138/13.8KV TRANSFORMER CKT 3 Accelerated	3/1/2014	6/1/2015		Yes

Credits may be required for the following Network Ungrades in accordance with Attachment 72 of the SPP OATT

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76571379	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	NORTHWEST - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

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Customer	Study Number						
PSCM	2012-AG1-021						
						Requested	Request
Customer	Reservation		PO	R	POD	Amount	Date
PSCM		76582673	SPS	S	LAM345	208	

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76582673	None					\$-	\$-	\$-
					Total	\$-	\$-	\$-

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
7658267	73 Line - Clark County - Thistle 345 kV dbl Ckt	3/1/2014	1/1/2015		
	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	3/1/2014	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	3/1/2014	7/1/2014		
	Line - Spearville - Clark County 345 kV dbl Ckt	3/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbl Ckt PW	3/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbl Ckt WERE	3/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	3/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbl Ckt PW	3/1/2014	1/1/2015		
	Line - Tuco - Woodward 345 kV line OKGE	3/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	3/1/2014	6/1/2014		
	XFR - Thistle 345/138 kV	3/1/2014	1/1/2015		

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

				Earliest Start	Redispate
Reservation	Upgrade Name		EOC	Date	Available
7658267	3 CIMARRON RIVER TAP - KISMET 3 115.00 115KV CKT 1	3/1/2014	6/1/2018		
	CUDAHY - KISMET 3 115.00 115KV CKT 1	3/1/2014	6/1/2018		

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76582673	CHERRY6 230.00 - Harrington Station East Bus 230KV CKT 1	6/1/2015	6/1/2015		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345KV CKT 1 WFEC	7/1/2012	7/1/2012		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	NORTHWEST - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

	Requested Stop	Date Without		Potential Base Plan Funding Allowable		Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements	
3/1/2013	3/1/2018	6/1/2018	6/1/2023	\$-	ç	\$ 23,137,920	\$-	\$	-
				\$-	ç	\$ 23,137,920	\$-	\$	-

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<b>Customer</b> WFEC	Study Number 2012-AG1-004										
				Requested	Requested Start		Deferred Start Date Without	Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	-		Redispatch	•		Cost	Requirements
WFEC	76548687	CSWS	WFEC	160	6/1/2014	12/31/2035	,	\$-	\$-	\$-	\$-
								\$-	\$-	\$-	\$-

			Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76548687 None					\$-	\$-	\$-
				Total	\$-	\$-	\$-

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispatch
leservation	Upgrade Name	DUN	EOC	Date	Available
	BLUE CANYON - PARADISE 138KV CKT 1	6/1/2010	6/1/2013		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345KV CKT 1 WFEC	7/1/2012	7/1/2012		
	HUGO POWER PLANT 345/138KV TRANSFORMER CKT 1	7/1/2012	7/1/2012		
	NORTHWEST - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 2	1/1/2010	1/1/2010		
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010		

Customer	Study Number											
WFEC	2012-AG1-005											
							Deferred Start	Deferred Stop	Potential Base			
				Requested	<b>Requested Start</b>	<b>Requested Stop</b>	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
WFEC	76548692	CSWS	WFEC	90	6/1/2017	12/31/2035			\$-	\$-	\$-	\$-
	·			-				·	\$ -	\$-	\$ -	\$-

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76548692	None					\$-	\$-	\$-
					Total	\$-	\$-	\$-

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispate
Reservation	Upgrade Name	DUN	EOC	Date	Available
76548692	BLUE CANYON - PARADISE 138KV CKT 1	6/1/2010	6/1/2013		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345KV CKT 1 WFEC	7/1/2012	7/1/2012		
	HUGO POWER PLANT 345/138KV TRANSFORMER CKT 1	7/1/2012	7/1/2012		
	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		

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<b>Customer</b> WFEC	Study Number 2012-AG1-006											
				Requested	Requested Start		Deferred Start Date Without	Deferred Stop Date Without	Potential Base Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD				Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
WFEC	76548702	CSWS	WFEC	30	6/1/2019	12/31/2035	5		\$-	\$-	- \$ -	\$-
									\$-	\$-	\$-	\$-

			Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	EOC	Date	Available	Cost	Total E & C Cost	Requirements
76548702	None				\$-	\$-	\$ -
				Total	\$-	\$-	\$-

Credits may be required for the following Network Upgrades in accordance with Attachment Z2 of the SPP OATT.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
76548702	BLUE CANYON - PARADISE 138KV CKT 1	6/1/2010	6/1/2013		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 345KV CKT 1 WFEC	7/1/2012	7/1/2012		
	HUGO POWER PLANT 345/138KV TRANSFORMER CKT 1	7/1/2012	7/1/2012		
	WOODWARD - WOODWARD EHV 138KV CKT 1	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)	Engir	timated neering & ruction Cost
OKGE	HANCOCK - MUSKOGEE 161KV CKT 1	Upgrade the Muskogee CT rating from 800 amps to 1200 amps	6/1/2019	6/1/2019	\$	150,000
OKGE	HEFNER - TULSA 138KV CKT 1	Reconductor 1.25 miles of line to 1590AS52	6/1/2019	6/1/2019	\$	750,000
OKGE	MUSKOGEE - MUSKOGEE PORT 161KV CKT 1	Upgrade the Muskogee CT rating from 800 amps to 1200 amps	6/1/2019	6/1/2019	\$	50,000
WERE	EVANS ENERGY CENTER NORTH - MAIZE 138KV CKT 1 #1	Upgrade disconnect switches, wavetrap, breaker, jumpers	6/1/2019	6/1/2019	\$	827,424
		Rebuild the JEC - Hoyt 345kV line as a single circuit with new conductor,				
WERE	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	poles, and shield wire and substation work	6/1/2015	6/1/2019	\$	49,623,119

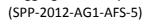
#### Construction Pending Projects - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.

Transmission Owner	Upgrade	Solution Up		Estimated Date of Upgrade Completion (EOC)
MIDW	HAYS PLANT - VINE STREET 115KV CKT 1 #2	Rebuild 0.23 miles	6/1/2014	6/1/2016
OKGE	DIVISION AVE - LAKESIDE 138KV CKT 1	Rebuild 3.58 mile line with 1590AS52 Conductor	6/1/2019	6/1/2019
OKGE	NORTHWEST 345/138/13.8KV TRANSFORMER CKT 3 Accelerated	Install third 345/138 kV Bus Tie in Northwest Sub	3/1/2014	6/1/2015
		Rebuild 3.73 miles to at least 107 MVA Summer Rate B and 127 MVA		
SPS	CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1	Winter Rate B.	3/1/2014	6/1/2017
WFEC	GLASS MOUNTAIN - MOORELAND 138KV CKT 1	Reset CT to at least 153 MVA Summer Rate B.	6/1/2014	6/1/2016

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

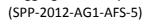
Transmission Owner	Upgrade	Solution	Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)
		Build 3.25 miles of 115kV from Goodyear to MacVicar. 223 MVA Rate A.		
WERE	GOODYEAR JUNCTION - MCVICAR3 115kV	245 MVA Rate B.	6/1/2014	6/1/2014
		Build 3.6 miles of 115kV from MacVicar to 17th & Fairlawn. 223 MVA Rate		
WERE	MCVICAR3 - 17TH & FAIRLAWN 115kV	A. 245 MVA Rate B.	6/1/2014	12/1/2014

SPP Aggregate Facility Study



Transmission Owner	Upgrade	Solution	Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)
		Rebuild and reconductor 11.1-mile 161 kV line from Chamber Springs to		
		Farmington REC with 2-959.6 ACSR/TW. Upgrade wavetraps, CT ratios,	1	
AEPW	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1	and relay settings at Chamber Springs.	6/1/2014	6/1/2015
		Build a new 86 mile double circuit 345 kV line with at least 3000 A	1	
		capacity from the Thistle 345 kV substation to the new Clark County		
		substation. Build a new 345 kV substation at Thistle with a ring bus and		
ITCGP	Line - Clark County - Thistle 345 kV dbl Ckt	necessary terminal equipment.	3/1/2014	1/1/2015
		Build a new 36 mile double circuit 345 kV line with at least 3000 A		
		capacity from the Spearville substation to the new Clark County		
		substation. Build the Clark County 345 kV substation with a ring bus and		
ITCGP	Line - Spearville - Clark County 345 kV dbl Ckt	necessary terminal equipment.	3/1/2014	1/1/2015
		Install a 400 MVA 345/138 kV transformer at the new 345 kV Thistle		
ITCGP	XFR - Thistle 345/138 kV	substation.	3/1/2014	1/1/2015
		Tap Nashua 345kV bus in Hawthorn - St. Joseph 345 kV line. Build new 345		
КАСР	IATAN - NASHUA 345KV CKT 1	kV line from latan to Nashua,Add Nashua 345/161 kV	3/1/2014	6/1/2015
		Tear down and rebuild of exisiting South Hays - Hays Plant 115 kV line.		
		Tentative plans include rebuilding on existing right-of-way with the	1	
		possibility of re-routing a portion of the line to new right-of-way as	1	
MIDW	HAYS PLANT - SOUTH HAYS 115KV CKT 1 #2	necessary.	3/1/2014	6/1/2015
		Build a new 92 mile double circuit 345 kV line with at least 3000 A		
		capacity from the Woodward District EHV substation to the SPS	1	
		interception from the Hitchland substation. Upgrade the Woodward	1	
OKGE	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	District EHV substation with the necessary breakers and term	3/1/2014	7/1/2014
UKGE			5/1/2014	//1/2014
		Build a new 79 mile double circuit 345 kV line with at least 3000 A		
		capacity from the Woodward District EHV substation to the	1	
		Kansas/Oklahoma state border towards the Thistle substation. Upgrade	1	
OKGE	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	the Woodward Distric EHV substation with the necessary brea	3/1/2014	1/1/2015
		Build new 345 kV line from Woodward EHV to Border - Project costs now	5,1/2014	
OKGE	Line - Tuco - Woodward 345 kV line OKGE	include Border reactor substation	3/1/2014	6/1/2014
OROL		Build a new 78 mile double circuit 345 kV line with at least 3000 A	5/1/2014	0/1/2014
		capacity from the Wichita substation to the new Thistle 345 kV	1	
	Line Thictle Wights 245 W/ dhl Cht DW/	substation.	2/1/2014	1/1/2015
PW	Line - Thistle - Wichita 345 kV dbl Ckt PW	Build a new 30 mile double circuit 345 kV line with at least 3000 A	3/1/2014	1/1/2015
			1	
		capacity from the Thistle substation to the Kansas/Oklahoma state border	0/1/0011	
PW	Line - Thistle - Woodward 345 kV dbl Ckt PW	towards the Woodward District EHV substation.	3/1/2014	1/1/2015
SPS	Cox Interchange - Kiser 115 kV Ckt 1 #2	Build new 8.7-mile 115 kV line from Cox to new Kiser substation.	3/1/2014	3/1/2014
			1	
		Build new substation at Kiser and install a 115/69 kV transformer and 69		
SPS	Kiser Substation 115/69 kV Ckt 1	kV terminal equipment to connect to the local 69 kV system.	3/1/2014	3/1/2014
		Build new 22-mile 115 kV line from Kress Interchange to new Kiser	1	
SPS	Kress Interchange - Kiser 115 kV Ckt 1	substation.	3/1/2014	11/30/2014
		Build 30 mile double circuit 345 kV line with at least 3000 A capacity from	1	
		the Hitchland substation to the OGE interception point from the		
		Woodward District EHV substation. Upgrade the Hitchland substation	1	
SPS	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	with the necessary breakers and terminal equipme	3/1/2014	7/1/2014
		Build new 345 kV line from Tuco to OGE Border station near TX/OK		
		Stateline. Install line reactor outside Border station and line reactors at		
SPS	Line - Tuco - Woodward 345 kV line SPS	Tuco.	3/1/2014	6/1/2014
55.5		Upgrade the Wichita substation with the necessary breakers and terminal		1
5F 5				
555				
	Line - Thistle - Wichita 345 kV dbl Ckt WERF	equipment to accommodate two new 345 kV circuits from the new Thistle	3/1/2014	1/1/2015
WERE	Line - Thistle - Wichita 345 kV dbl Ckt WERE		3/1/2014	1/1/2015

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



Transmission Owner	Upgrade Solution		Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)
GRDA	412SUB - KANSAS TAP 161KV CKT 1	Remove limiting Element, Line Switches 1200A increase to 2000A	6/1/2015	6/1/2017
GRDA	412SUB - KERR 161KV CKT 1	Replace 161kV,1200A switch with a 2000A Switch at Kerr Substation bus.	6/1/2015	6/1/2017
GRDA	KANSAS TAP - WEST SILOAM SPRINGS 161KV CKT 1 #2	Replace Terminal Equipment	6/1/2019	6/1/2019
GRDA	SILOAM CITY - WEST SILOAM SPRINGS 161KV CKT 1 #2	Replace Terminal Equipment	6/1/2019	6/1/2019
MIDW	HAYS PLANT - VINE STREET 115KV CKT 1 #1	Replace Wavetrap	3/1/2014	6/1/2015
MKEC	CIMARRON RIVER TAP - KISMET 3 115.00 115KV CKT 1	Rebuild 3.37 miles and Substation work	3/1/2014	6/1/2018
МКЕС	CUDAHY - KISMET 3 115.00 115KV CKT 1	Rebuild 23.17 miles and increase terminal limits to at least 146MVA Summer Rate B.	3/1/2014	6/1/2018
		Build new 345 kV Transmission Line from GGS 345 kV Substation to a new		
NPPD	Cherry Co - Gentleman 345 kV Ckt1	Cherry County 345 kV Substation (76 miles).	10/1/2014	1/1/2018
NPPD	Cherry Co - Holt Co 345 kV Ckt1	Build new 345 kV Transmission Line from new Cherry County 345 kV Substation to new 345 kV Holt County Substation. (Estimated 146 miles).	10/1/2014	1/1/2018
NPPD	Cherry Co 345 kV Terminal Upgrades	Build new Cherry County 345 kV Substation.	10/1/2014	1/1/2018
SPS	BUSHLAND INTERCHANGE - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1	Upgrade 800A wave trap at both Bushland Interchange and Deaf Smith Interchange to at least 428 MVA Winter Rate B. Deaf Smith - Replace existing wave trap so that the limiting factor of K-11 terminal at Deaf Smith will be no less than 1200 A. Rebuild 18 miles to at least 107 MVA Summer Rate B and 127 MVA Winter	3/1/2014	6/1/2016
SPS	CANYON EAST SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	Rate B.	3/1/2014	6/1/2017
WERE	BUTLER - WEAVER 138KV CKT 1	Rebuild 16.31 miles	6/1/2015	6/1/2018
WERE	Cowskin - Westlink 69 kV Ckt 1	Rebuild 2.1-mile 69 kV line from Cowskin to Westlink.	6/1/2014	12/1/2015
WERE	East Manhattan - Jeffrey Energy Center 230 kV Ckt 1	Rebuild 27-mile 230 kV line from East Manhattan to Jeffrey Energy Center to 345 kV construction but operate as 230 kV using bundled 1590 ACSR conductor. Upgrade terminal equipment at East Manhattan and Jeffrey Energy Center to a minimum emergency rating o	6/1/2019	6/1/2019
WERE	Gill 138/69 kV Transformer Ckt 3	Install a third 138/69 kV transformer at Gill Energy Center.	6/1/2014	12/1/2015
WERE	GOODYEAR JUNCTION - NORTHLAND 115KV CKT 1	Rebuild 3.44 miles and replace buses and jumper to at least 187 MVA Summer Rate B	6/1/2014	6/1/2017
WERE	Hoover South - Tyler 69 kV Ckt 1	Rebuild 1.96-mile 69 kV line from Tyler to Hoover.	6/1/2014	6/1/2014
WERE	Tyler - Westlink 69 kV Ckt 1	Rebuild 2.65-mile 69 kV line from Westlink to Tyler. Install terminal equipment at Tyler. Build new 138kV line between new Viola substation 345/138 kV	6/1/2014	6/1/2015
WERE	Viola - Clearwater 138kV Ckt1	transformer and existing Clearwater 138 kV substation.	10/1/2014	6/1/2018
WERE WERE	Viola - Gill 138kV Ckt1 Viola 345/138kV Transformer Ckt 1	Build new 138kV line between new Viola substation 345/138 kV transformer and existing Gill 138 kV substation. Install new 345/138 kV transformer at Viola substation	10/1/2014 10/1/2014	6/1/2018 6/1/2018

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

#### Network Upgrades requiring credits per Attachment Z2 of the SPP OATT.

			Earliest Date	Estimated Date	
Transmission Owner	Upgrade	Solution	Upgrade Required	of Upgrade	1
			(DUN)	Completion (EOC)	1

			(DUN)	Completion (EOC
		Recunductor and convert line to 138 kV and replace switches at Ashdown		
AEPW	ASHDOWN REC (MILLWOOD) - OKAY 138KV CKT 1	REC	7/1/2012	7/1/2012
		Reconductor Line & Convert Line to 138 kV and convert Patterson station		
AEPW	ASHDOWN REC (MILLWOOD) - PATTERSON 138KV CKT 1	to breaker-and-a half cofiguration	7/1/2012	7/1/2012
AEPW	BANN - RED SPRINGS REC 138KV CKT 1	Replace 138 kV breakers 3300 & 3310	7/1/2012	7/1/2012
AEPW	HUGO POWER PLANT - VALLIANT 345 KV AEPW	Vallient 345 KV line terminal	7/1/2012	7/1/2012
		Build new Turk-SE Texarkana 138 kV line and add SE Texarkana 138 kV		
AEPW	MANDEVILTP4 - SE TEXARKANA 138KV CKT 1	terminal.	7/1/2012	7/1/2012
		Build new Turk-SE Texarkana 138 kV line and add SE Texarkana 138 kV		
AEPW	MANDEVILTP4 - TURK 138KV CKT 1	terminal.	7/1/2012	7/1/2012
		Build a new two mile, 138 kV, 1590 ACSR line section (operated at 115 kV)		
		from Turk Substation to the existing Okay- Hope 115 kV line to form a		
AEPW	MCNAB REC - TURK 115KV CKT 1	Turk - Hope 115 kV line.	7/1/2012	7/1/2012
		Build two mile, 138 kV, 1590ACSR line section from Turk Sub to existing		
		Okay-Hope 115 kV line and rebuild twelve miles of 115 kV line to Okay Sub		
AEPW	OKAY - TURK 138KV CKT 1	to 138 kV, 1590 ACSR , to form a Turk-Okay 138 kV line	7/1/2012	7/1/2012
45014			7/4/2042	7/4/2012
AEPW	SUGAR HILL - TURK 138KV CKT 1	Build new Turk-Sugar Hill 138 kV line and add Sugar Hill 138 kV terminal.	7/1/2012	7/1/2012
EMDE	SUB 110 - ORONOGO JCT SUB 167 - RIVERTON 161KV CKT 1	Reconductor Oronogo 59467 to Riverton 59469 with Bundled 556 ACSR	6/1/2011	6/1/2011
КАСР	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
MIDW	CIRCLE - RICE_CO 230KV CKT 1	Convert from 115kV to 230kV operation	10/1/2012	11/15/2012
MIDW	LYONS - RICE_CO 115KV CKT 1	Rebuild 11.7 mile line	10/1/2012	4/1/2013
MIDW	RICE_CO 230/115KV TRANSFORMER CKT 1	Add 230/115kV Transformer	10/1/2012	11/15/2012
MKEC	BARBER (BARBER 4) 138/115/2.72KV TRANSFORMER CKT 1	Upgrade transformer	12/1/2009	6/1/2013
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	GREENLEAF - KNOB HILL 115KV CKT 1 MKEC	Rebuild 43.5% Ownership of 20.9 miles	6/1/2013	6/1/2013
		Deplese Dreeker Switch 1100 D and immerse at Albian Deplese regin hus		
		Replace Breaker Switch 1106-D and jumpers at Albion. Replace main bus		
		at Petersburg. Upgrade and replace transmission structures on 115 kV	4 14 12042	4/4/2012
NPPD	ALBION - PETERSBURG 115KV CKT 1	lineto facilitate 100 degrees Centigrade line operation.	1/1/2013	1/1/2013
		Replace Breaker 1106, jumpers, and 115 kV Switch 1106-D2 at Neligh.		
		Replace main bus at Petersburg. Upgrade and replace transmission		
		the state of the by the fact that a fact the state of the		
		structures on 115 kV lineto facilitate 100 degrees Centigrade line	4/4/2012	4/4/2012
	NELIGH - PETERSBURG 115KV CKT 1	operation.	1/1/2013	1/1/2013
OKGE	CIMARRON - DRAPER LAKE 345KV CKT 1	operation. Increase capacity of Draper Lake CT and Cimarron wave trap	10/1/2014	6/1/2016
OKGE OKGE	CIMARRON - DRAPER LAKE 345KV CKT 1 GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE	operation. Increase capacity of Draper Lake CT and Cimarron wave trap Build 138kV Terminal.	10/1/2014 1/1/2012	6/1/2016 1/1/2012
OKGE OKGE OKGE	CIMARRON - DRAPER LAKE 345KV CKT 1 GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE NORTHWEST - TATONGA 345KV CKT 1	operation.         Increase capacity of Draper Lake CT and Cimarron wave trap         Build 138kV Terminal.         Build 345 kV line	10/1/2014 1/1/2012 1/1/2010	6/1/2016 1/1/2012 1/1/2010
OKGE OKGE OKGE OKGE	CIMARRON - DRAPER LAKE 345KV CKT 1 GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE NORTHWEST - TATONGA 345KV CKT 1 TATONGA - WOODWARD 345KV CKT 1	operation. Increase capacity of Draper Lake CT and Cimarron wave trap Build 138kV Terminal. Build 345 kV line Build 345 kV line Build 345 kV line	10/1/2014 1/1/2012 1/1/2010 1/1/2010	6/1/2016 1/1/2012 1/1/2010 1/1/2010
OKGE OKGE OKGE OKGE OKGE	CIMARRON - DRAPER LAKE 345KV CKT 1 GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE NORTHWEST - TATONGA 345KV CKT 1 TATONGA - WOODWARD 345KV CKT 1 WOODWARD - IODINE 138KV CKT 1	operation.Increase capacity of Draper Lake CT and Cimarron wave trapBuild 138kV Terminal.Build 345 kV lineBuild 345 kV lineTap Iodine to Woodward 138 kV line	10/1/2014 1/1/2012 1/1/2010 1/1/2010 1/1/2010	6/1/2016 1/1/2012 1/1/2010 1/1/2010 1/1/2010
NPPD OKGE OKGE OKGE OKGE OKGE	CIMARRON - DRAPER LAKE 345KV CKT 1 GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE NORTHWEST - TATONGA 345KV CKT 1 TATONGA - WOODWARD 345KV CKT 1 WOODWARD - IODINE 138KV CKT 1 WOODWARD - WOODWARD EHV 138KV CKT 1	operation.Increase capacity of Draper Lake CT and Cimarron wave trapBuild 138kV Terminal.Build 345 kV lineBuild 345 kV lineTap lodine to Woodward 138 kV lineBuild .5 miles of 138 kV and install terminal equipment	10/1/2014         1/1/2012         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010	6/1/2016 1/1/2012 1/1/2010 1/1/2010 1/1/2010 1/1/2010
OKGE OKGE OKGE OKGE OKGE OKGE	CIMARRON - DRAPER LAKE 345KV CKT 1 GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE NORTHWEST - TATONGA 345KV CKT 1 TATONGA - WOODWARD 345KV CKT 1 WOODWARD - IODINE 138KV CKT 1 WOODWARD - WOODWARD EHV 138KV CKT 1 WOODWARD - WOODWARD EHV 138KV CKT 2	operation.Increase capacity of Draper Lake CT and Cimarron wave trapBuild 138kV Terminal.Build 345 kV lineBuild 345 kV lineTap Iodine to Woodward 138 kV lineBuild .5 miles of 138 kV and install terminal equipmentBuild .5 miles of 138 kV and install terminal equipment	10/1/2014         1/1/2012         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010	6/1/2016 1/1/2012 1/1/2010 1/1/2010 1/1/2010 1/1/2010 1/1/2010
OKGE OKGE OKGE OKGE OKGE OKGE OKGE	CIMARRON - DRAPER LAKE 345KV CKT 1 GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE NORTHWEST - TATONGA 345KV CKT 1 TATONGA - WOODWARD 345KV CKT 1 WOODWARD - IODINE 138KV CKT 1 WOODWARD - WOODWARD EHV 138KV CKT 1 WOODWARD - WOODWARD EHV 138KV CKT 2 WOODWARD 345/138KV TRANSFORMER CKT 1	operation.Increase capacity of Draper Lake CT and Cimarron wave trapBuild 138kV Terminal.Build 345 kV lineBuild 345 kV lineTap lodine to Woodward 138 kV lineBuild .5 miles of 138 kV and install terminal equipmentBuild .5 miles of 138 kV and install terminal equipmentInstall 345/138 kV XF	10/1/2014         1/1/2012         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010	6/1/2016 1/1/2012 1/1/2010 1/1/2010 1/1/2010 1/1/2010 1/1/2010 1/1/2010
OKGE OKGE OKGE OKGE OKGE OKGE OKGE SPS	CIMARRON - DRAPER LAKE 345KV CKT 1 GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE NORTHWEST - TATONGA 345KV CKT 1 TATONGA - WOODWARD 345KV CKT 1 WOODWARD - IODINE 138KV CKT 1 WOODWARD - WOODWARD EHV 138KV CKT 1 WOODWARD - WOODWARD EHV 138KV CKT 2 WOODWARD 345/138KV TRANSFORMER CKT 1 CHERRY6 230.00 - Harrington Station East Bus 230KV CKT 1	operation.Increase capacity of Draper Lake CT and Cimarron wave trapBuild 138kV Terminal.Build 345 kV lineBuild 345 kV lineTap lodine to Woodward 138 kV lineBuild .5 miles of 138 kV and install terminal equipmentBuild .5 miles of 138 kV and install terminal equipmentInstall 345/138 kV XFReplace wavetrap at Harrington East	10/1/2014         1/1/2012         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         6/1/2015	6/1/2016           1/1/2012           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           6/1/2015
OKGE OKGE OKGE OKGE OKGE OKGE OKGE SPS WERE	CIMARRON - DRAPER LAKE 345KV CKT 1 GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE NORTHWEST - TATONGA 345KV CKT 1 TATONGA - WOODWARD 345KV CKT 1 WOODWARD - IODINE 138KV CKT 1 WOODWARD - WOODWARD EHV 138KV CKT 1 WOODWARD - WOODWARD EHV 138KV CKT 2 WOODWARD - WOODWARD EHV 138KV CKT 2 WOODWARD 345/138KV TRANSFORMER CKT 1 CHERRY6 230.00 - Harrington Station East Bus 230KV CKT 1 DEARING 138KV Capacitor	operation.Increase capacity of Draper Lake CT and Cimarron wave trapBuild 138kV Terminal.Build 345 kV lineBuild 345 kV lineBuild 345 kV lineTap Iodine to Woodward 138 kV lineBuild .5 miles of 138 kV and install terminal equipmentBuild .5 miles of 138 kV and install terminal equipmentInstall 345/138 kV XFReplace wavetrap at Harrington EastDearing 138 kV 20 MVAR Capacitor Addition	10/1/2014         1/1/2012         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         6/1/2015         6/1/2012	6/1/2016         1/1/2012         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         6/1/2015         6/1/2012
OKGE OKGE OKGE OKGE OKGE OKGE OKGE SPS WERE WERE	CIMARRON - DRAPER LAKE 345KV CKT 1 GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE NORTHWEST - TATONGA 345KV CKT 1 TATONGA - WOODWARD 345KV CKT 1 WOODWARD - IODINE 138KV CKT 1 WOODWARD - WOODWARD EHV 138KV CKT 1 WOODWARD - WOODWARD EHV 138KV CKT 2 WOODWARD 345/138KV TRANSFORMER CKT 1 CHERRY6 230.00 - Harrington Station East Bus 230KV CKT 1 DEARING 138KV Capacitor LYONS - WHEATLAND 115KV CKT 1 #1	operation.Increase capacity of Draper Lake CT and Cimarron wave trapBuild 138kV Terminal.Build 345 kV lineBuild 345 kV lineTap lodine to Woodward 138 kV lineBuild .5 miles of 138 kV and install terminal equipmentBuild .5 miles of 138 kV and install terminal equipmentInstall 345/138 kV XFReplace wavetrap at Harrington EastDearing 138 kV 20 MVAR Capacitor AdditionReplace CTs	10/1/2014         1/1/2012         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         6/1/2015         6/1/2012         10/1/2012	6/1/2016 1/1/2012 1/1/2010 1/1/2010 1/1/2010 1/1/2010 1/1/2010 1/1/2010 6/1/2015 6/1/2012 7/15/2013
OKGE OKGE OKGE OKGE OKGE OKGE OKGE SPS WERE WERE WERE	CIMARRON - DRAPER LAKE 345KV CKT 1 GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE NORTHWEST - TATONGA 345KV CKT 1 TATONGA - WOODWARD 345KV CKT 1 WOODWARD - IODINE 138KV CKT 1 WOODWARD - WOODWARD EHV 138KV CKT 1 WOODWARD - WOODWARD EHV 138KV CKT 2 WOODWARD 345/138KV TRANSFORMER CKT 1 CHERRY6 230.00 - Harrington Station East Bus 230KV CKT 1 DEARING 138KV Capacitor LYONS - WHEATLAND 115KV CKT 1 #1 LYONS - WHEATLAND 115KV CKT 1 #2	operation.Increase capacity of Draper Lake CT and Cimarron wave trapBuild 138kV Terminal.Build 345 kV lineBuild 345 kV lineTap lodine to Woodward 138 kV lineBuild .5 miles of 138 kV and install terminal equipmentBuild .5 miles of 138 kV and install terminal equipmentInstall 345/138 kV XFReplace wavetrap at Harrington EastDearing 138 kV 20 MVAR Capacitor AdditionReplace CTsRerate circuit to 1000 amps	10/1/2014         1/1/2012         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2011         1/1/2012         10/1/2012         10/1/2012	6/1/2016 1/1/2012 1/1/2010 1/1/2010 1/1/2010 1/1/2010 1/1/2010 6/1/2015 6/1/2012 7/15/2013 7/15/2013
OKGE OKGE OKGE OKGE OKGE OKGE OKGE OKGE	CIMARRON - DRAPER LAKE 345KV CKT 1 GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE NORTHWEST - TATONGA 345KV CKT 1 TATONGA - WOODWARD 345KV CKT 1 WOODWARD - IODINE 138KV CKT 1 WOODWARD - WOODWARD EHV 138KV CKT 1 WOODWARD - WOODWARD EHV 138KV CKT 2 WOODWARD 345/138KV TRANSFORMER CKT 1 CHERRY6 230.00 - Harrington Station East Bus 230KV CKT 1 DEARING 138KV Capacitor LYONS - WHEATLAND 115KV CKT 1 #1 LYONS - WHEATLAND 115KV CKT 1 #2 BLUE CANYON - PARADISE 138KV CKT 1	operation.Increase capacity of Draper Lake CT and Cimarron wave trapBuild 138kV Terminal.Build 345 kV lineBuild 345 kV lineBuild 345 kV lineTap lodine to Woodward 138 kV lineBuild .5 miles of 138 kV and install terminal equipmentBuild .5 miles of 138 kV and install terminal equipmentInstall 345/138 kV XFReplace wavetrap at Harrington EastDearing 138 kV 20 MVAR Capacitor AdditionReplace CTsRerate circuit to 1000 ampsUpgrade Paradise to Blue Canyon to 1113	10/1/2014         1/1/2012         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2012         6/1/2012         10/1/2012         6/1/2010	6/1/2016           1/1/2012           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2013           6/1/2013           7/15/2013           6/1/2013
OKGE OKGE OKGE OKGE OKGE OKGE OKGE SPS WERE WERE WERE	CIMARRON - DRAPER LAKE 345KV CKT 1 GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE NORTHWEST - TATONGA 345KV CKT 1 TATONGA - WOODWARD 345KV CKT 1 WOODWARD - IODINE 138KV CKT 1 WOODWARD - WOODWARD EHV 138KV CKT 1 WOODWARD - WOODWARD EHV 138KV CKT 2 WOODWARD 345/138KV TRANSFORMER CKT 1 CHERRY6 230.00 - Harrington Station East Bus 230KV CKT 1 DEARING 138KV Capacitor LYONS - WHEATLAND 115KV CKT 1 #1 LYONS - WHEATLAND 115KV CKT 1 #2	operation.Increase capacity of Draper Lake CT and Cimarron wave trapBuild 138kV Terminal.Build 345 kV lineBuild 345 kV lineTap lodine to Woodward 138 kV lineBuild .5 miles of 138 kV and install terminal equipmentBuild .5 miles of 138 kV and install terminal equipmentInstall 345/138 kV XFReplace wavetrap at Harrington EastDearing 138 kV 20 MVAR Capacitor AdditionReplace CTsRerate circuit to 1000 amps	10/1/2014         1/1/2012         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2010         1/1/2011         1/1/2012         10/1/2012         10/1/2012	6/1/2016           1/1/2012           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           7/15/2013           7/15/2013

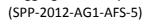


 Table 5 - Third Party Facility Constraints

Transmission Owner	UpgradeName	Solution	Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)	Estimated Engineering & Construction Cost
AECC	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1 AECC	Upgrade 1272 AAC bus at Farmington REC. Replace bus at Farmington REC and rebuild 400 feet of the 161 kV line going to Chamber Springs.	6/1/2015	6/1/2015	\$ 26,061
SWPA	NORTH WARSAW - TRUMAN 161KV CKT 1 SWPA #1	Replace wave trap and CTs at Truman.	6/1/2015	6/1/2016	\$ 70,000

SPP Aggregate Facility Study

