



Aggregate Facility Study SPP-2012-AG3-AFS-6

12/04/2013

SPP Engineering, SPP Transmission Service Studies



Table of Contents

Table of Contents	1
Executive Summary	2
Introduction.....	3
Financial Analysis	5
Third-Party Facilities	6
Study Methodology	7
Description	7
Model Development.....	7
Transmission Request Modeling.....	8
Transfer Analysis	8
Curtailment and Redispatch Evaluation.....	8
Study Results	9
Study Analysis Results	9
Example A:.....	11
Example B:.....	11
Example C:.....	11
Study Definitions	11
Conclusion	13
Appendix A	14
BASE CASE SETTINGS:	14
ACCC CASE SETTINGS:.....	14

Executive Summary

Pursuant to Attachment Z1 of the Southwest Power Pool, Inc. (SPP) Open Access Transmission Tariff (OATT), 5189 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 \$291 million. Additionally, \$2.2 million 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 \$554 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 December 4, 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 December 19, 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 October 1, 2012 for 2012-AG3 have been included in this third Aggregate Transmission Service Study (ATSS) of 2012.

Approximately 5189 MW of long-term Transmission Service was studied in this Aggregate Facility Study (AFS), and over \$554 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 [OATT](#) 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

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

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 AECL, 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 six seasonal models to study the aggregate transfers of 5189 MW over a variety of requested service periods. The following SPP Transmission Expansion Plan 2012 Cases were used to study the impact of the requested service on the transmission system:

- 2014 Summer Peak (14SP)
- 2014/15 Winter Peak (14WP)
- 2018 Summer Peak (18SP)

2018/19 Winter Peak (18WP)
2023 Summer Peak (23SP)
2023/24 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 5189 MW to model the requested service. From the six 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 1st-Tier) and voltage threshold (0.02 change) were applied to determine the impacted facilities. The PSS/E options chosen to conduct the analysis can be found in Appendix A.

Curtailed 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. 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 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 base plan funding allowable, due to the E&C cost allocated to the customer being lower than the potential amount allowable to the Customer. The Customer is responsible for any assigned upgrade costs in excess of potential base plan 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.
- 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 December 4, 2013. This will open a 15-day window for Customer response. To remain in the Aggregate Transmission Service Study (ATSS), the Transmission Provider must receive from the Transmission Customer) by December 19, 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: Fixed slope decoupled Newton-Raphson solution (FDNS)
- Tap adjustment: Stepping
- Area Interchange Control: Tie lines and loads
- Var limits: Apply immediately
- Solution Options:
 - Phase shift adjustment
 - Flat start
 - Lock DC taps
 - Lock switched shunts

ACCC CASE SETTINGS:

- Solutions: AC contingency checking (ACCC)
- MW mismatch tolerance: 0.5
- System intact rating: Rate A
- Contingency case rating: Rate B
- Percent of rating: 100
- Output code: Summary
- Min flow change in overload report: 3mw
- Excl'd cases w/ no overloads from report: YES
- 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:
- Tap adjustment: Stepping
- Area interchange control: Tie lines and loads (Disabled for generator outages)
- Var limits: Apply immediately
- Solution options:
 - Phase shift adjustment
 - Flat start
 - Lock DC taps
 - Lock switched shunts

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

Customer	Study Number	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date without interim redispatch	Deferred Stop Date without interim redispatch	Start Date with interim redispatch	Stop Date with interim redispatch	Minimum Allocated ATC (MW) within reservation period	Season of Minimum Allocated ATC within reservation period
EXGN	2012-AG3-057	78865941	ERCOTN	ERCOTN	198	5/1/2014	5/1/2019	5/1/2014	5/1/2019	5/1/2014	5/1/2019	0	14SP
EXGN	2012-AG3-058	78865945	ERCOTN	ERCOTN	198	5/1/2015	5/1/2020	5/1/2015	5/1/2020	5/1/2015	5/1/2020	0	18SP
CRGL	2012-AG3-047	77029025	WFEC	ERCOTN	207	1/1/2014	1/1/2020	6/1/2019	6/1/2025	6/1/2019	6/1/2025	0	14SP
CRGL	2012-AG3-048	77029027	SPS	ERCOTN	207	1/1/2014	1/1/2020	6/1/2019	6/1/2025	6/1/2019	6/1/2025	0	14SP
CRGL	2012-AG3-049	77410128	WR	EES	200	1/1/2014	1/1/2019	6/1/2019	6/1/2024	5/1/2014	5/1/2019	0	14SP
CRGL	2012-AG3-050	77410129	SECI	EES	101	1/1/2014	1/1/2019	6/1/2019	6/1/2024	5/1/2014	5/1/2019	0	14SP
CRGL	2012-AG3-051	77410131	SECI	EES	100	1/1/2014	1/1/2019	6/1/2019	6/1/2024	5/1/2014	5/1/2019	0	14SP
CRGL	2012-AG3-052	77410135	WFEC	EES	75	1/1/2014	1/1/2019	6/1/2019	6/1/2024	6/1/2017	6/1/2022	0	14SP
CRGL	2012-AG3-054	77410157	CSWS	EES	150	1/1/2014	1/1/2019	6/1/2019	6/1/2024	6/1/2017	6/1/2022	0	14SP
ETEC	2012-AG3-038	77410319	CSWS	CSWS	1171	1/1/2015	1/1/2040	1/1/2015	1/1/2040	1/1/2015	1/1/2040	0	18SP
ETEC	2012-AG3-039	77410327	CSWS	CSWS	79	1/1/2015	1/1/2040	1/1/2015	1/1/2040	1/1/2015	1/1/2040	0	18SP
ETEC	2012-AG3-040	77410336	CSWS	CSWS	500	1/1/2015	1/1/2040	1/1/2015	1/1/2040	1/1/2015	1/1/2040	0	18SP
ETEC	2012-AG3-041	77410342	EES	CSWS	30	1/1/2015	1/1/2040	1/1/2015	1/1/2040	1/1/2015	1/1/2040	0	18SP
ETEC	2012-AG3-042	77410350	CSWS	CSWS	406	1/1/2015	1/1/2040	1/1/2015	1/1/2040	1/1/2015	1/1/2040	0	18SP
ETEC	2012-AG3-043	77410353	CLEC	CSWS	38	1/1/2015	1/1/2040	1/1/2015	1/1/2040	1/1/2015	1/1/2040	0	18SP
ETEC	2012-AG3-044	77410357	SPA	CSWS	128	1/1/2015	1/1/2040	1/1/2015	1/1/2040	1/1/2015	1/1/2040	0	18SP
ETEC	2012-AG3-045	77410360	SPA	CSWS	1	1/1/2015	1/1/2040	1/1/2015	1/1/2040	1/1/2015	1/1/2040	0	18SP
ETEC	2012-AG3-046	77410382	CSWS	CSWS	52	1/1/2015	1/1/2040	1/1/2015	1/1/2040	1/1/2015	1/1/2040	0	18SP
GSECGS	2012-AG3-032	77401449	SPS	SPS	7	6/1/2013	1/1/2039	5/1/2014	12/1/2039	5/1/2014	12/1/2039	0	14SP
GSECGS	2012-AG3-033	77401452	SPS	SPS	7	6/1/2013	1/1/2039	5/1/2014	12/1/2039	5/1/2014	12/1/2039	0	14SP
GSECGS	2012-AG3-034	77401453	SPS	SPS	7	6/1/2013	1/1/2039	5/1/2014	12/1/2039	5/1/2014	12/1/2039	0	14SP
GSECGS	2012-AG3-036	77402184	SPS	SPS	203	1/1/2015	1/1/2041	3/1/2018	3/1/2044	1/1/2015	1/1/2041	0	18SP
INF	2012-AG3-030	77409954	SECI	EES	200	1/1/2015	1/1/2020	6/1/2019	6/1/2024	Note 4	Note 4	0	18SP
INF	2012-AG3-031	77409979	SECI	EES	200	1/1/2015	1/1/2020	6/1/2019	6/1/2024	Note 4	Note 4	0	18SP
KBPU	2012-AG3-029	77155691	WR	KACY	2	4/1/2013	8/1/2030	5/1/2014	9/1/2031	5/1/2014	9/1/2031	0	14SP
KPP	2012-AG3-024	77398979	WR	WR	15	6/1/2013	6/1/2023	5/1/2014	5/1/2024	5/1/2014	5/1/2024	0	14SP
KPP	2012-AG3-025	77405406	SPA	WR	1	6/1/2013	6/1/2023	5/1/2014	5/1/2024	5/1/2014	5/1/2024	0	14SP
KPP	2012-AG3-026	77405413	KACY	WR	3	6/1/2013	6/1/2023	5/1/2014	5/1/2024	5/1/2014	5/1/2024	0	14SP
KPP	2012-AG3-027	77405416	WR	WR	9	6/1/2013	6/1/2023	5/1/2014	5/1/2024	5/1/2014	5/1/2024	0	14SP
KPP	2012-AG3-028	77405426	WR	WR	4	6/1/2013	1/1/2015	5/1/2014	12/1/2015	5/1/2014	12/1/2015	0	14SP
MIDW	2012-AG3-013	77410531	WR	WR	28	6/1/2015	6/1/2038	6/1/2019	6/1/2042	6/1/2015	6/1/2038	0	18SP
SPSM	2012-AG3-009	77341873	WFEC	SPS	36	6/1/2017	6/1/2047	6/1/2017	6/1/2047	6/1/2017	6/1/2047	0	23SP
SPSM	2012-AG3-010	77341881	WFEC	SPS	44	6/1/2017	6/1/2047	6/1/2017	6/1/2047	6/1/2017	6/1/2047	0	23SP
WFEC	2012-AG3-008	77193289	WFEC	WFEC	320	3/1/2017	3/1/2042	6/1/2019	6/1/2044	3/1/2017	3/1/2042	0	23SP
WRGS	2012-AG3-002	77379445	WR	EES	50	1/1/2014	1/1/2019	6/1/2019 (Note 3)	6/1/2024 (Note 3)	5/1/2014	1/1/2019	0	14SP
WRGS	2012-AG3-005	77409901	WR	EES	106	1/1/2014	1/1/2019	6/1/2019 (Note 3)	6/1/2024 (Note 3)	5/1/2014	1/1/2019	0	14SP
WRGS	2012-AG3-006	77409994	SPS	EES	106	1/1/2014	1/1/2019	6/1/2019 (Note 3)	6/1/2024 (Note 3)	5/1/2014	1/1/2019	0	14SP
					5189								

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

Customer	Study Number	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date without interim redispatch	Deferred Stop Date without interim redispatch	Start Date with interim redispatch	Stop Date with interim redispatch	Minimum Allocated ATC (MW) within reservation period	Season of Minimum Allocated ATC within reservation period
Note 1: Start and Stop Dates with interim redispatch are determined based on customers choosing option to pursue redispatch to start service at Requested Start and Stop Dates or earliest date possible.													
Note 2: Start dates with and without redispatch are based on the assumed completion dates of previous Aggregate Transmission Service Studies currently being conducted. Actual start dates may differ from the potential start dates upon completion of the previous studies.													
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.													

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

Customer	Study Number	Reservation	Engineering and Construction Cost of Upgrades Allocated to Customer for Revenue Requirements	¹ Letter of Credit Amount Required	² Potential Base Plan Engineering and Construction Funding Allowable	Notes	⁴ Additional Engineering and Construction Cost for 3rd Party Upgrades	^{3,5} Total Revenue Requirements for Assigned Upgrades Over Term of Reservation WITH Potential Base Plan Funding Allocation	Point-to-Point Base Rate Over Reservation Period	⁴ Total Cost of Reservation Assignable to Customer Contingent Upon Base Plan Funding
EXGN	2012-AG3-057	78865941	\$ -	\$ -	\$ -	7,10	\$ -	\$ -	\$ 22,532,558	\$ 22,532,560
EXGN	2012-AG3-058	78865945	\$ -	\$ -	\$ -	7,10	\$ -	\$ -	\$ 22,532,558	\$ 22,532,560
CRGL	2012-AG3-047	77029025	\$ 42,508,498	\$ 42,508,500	\$ -	9,10	\$ -	\$ 99,366,090	\$ 28,268,119	\$ 99,366,090
CRGL	2012-AG3-048	77029027	\$ 42,184,967	\$ 42,184,970	\$ -	9,10	\$ -	\$ 98,626,610	\$ 28,268,119	\$ 98,626,610
CRGL	2012-AG3-049	77410128	\$ 39,937,765	\$ 39,937,760	\$ -		\$ -	\$ 64,953,720	\$ 15,360,000	\$ 64,953,720
CRGL	2012-AG3-050	77410129	\$ 18,920,836	\$ 18,920,840	\$ -		\$ -	\$ 31,017,260	\$ 7,756,800	\$ 31,017,260
CRGL	2012-AG3-051	77410131	\$ 18,634,331	\$ 18,634,330	\$ -		\$ -	\$ 30,597,040	\$ 7,680,000	\$ 30,597,040
CRGL	2012-AG3-052	77410135	\$ 2,208,686	\$ 2,208,686	\$ -		\$ 36,488	\$ 4,643,332	\$ 5,760,000	\$ 5,760,000
CRGL	2012-AG3-054	77410157	\$ 6,804,515	\$ 6,804,515	\$ -		\$ 2,083,686	\$ 14,462,900	\$ 11,520,000	\$ 14,462,900
ETEC	2012-AG3-038	77410319	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
ETEC	2012-AG3-039	77410327	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
ETEC	2012-AG3-040	77410336	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
ETEC	2012-AG3-041	77410342	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
ETEC	2012-AG3-042	77410350	\$ 5,268,000	\$ -	\$ 5,268,000		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
ETEC	2012-AG3-043	77410353	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
ETEC	2012-AG3-044	77410357	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
ETEC	2012-AG3-045	77410360	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
ETEC	2012-AG3-046	77410382	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
GSECGS	2012-AG3-032	77401449	\$ 10,525	\$ -	\$ 10,525		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
GSECGS	2012-AG3-033	77401452	\$ 10,525	\$ -	\$ 10,525		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
GSECGS	2012-AG3-034	77401453	\$ 10,525	\$ -	\$ 10,525		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
GSECGS	2012-AG3-036	77402184	\$ 9,474,968	\$ -	\$ 9,474,968		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
INF	2012-AG3-030	77409954	\$ 42,933,525	\$ 42,933,520	\$ -	6,10	\$ -	\$ 100,345,000	\$ 15,360,000	\$ 100,345,000
INF	2012-AG3-031	77409979	\$ 43,395,235	\$ 43,395,240	\$ -	6,10	\$ 104,825	\$ 101,422,400	\$ 15,360,000	\$ 101,422,400
KBPU	2012-AG3-029	77155691	\$ 785,223	\$ 785,223	\$ -		\$ -	\$ 1,866,190	\$ 359,840	\$ 1,866,190
KPP	2012-AG3-024	77398979	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
KPP	2012-AG3-025	77405406	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
KPP	2012-AG3-026	77405413	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
KPP	2012-AG3-027	77405416	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
KPP	2012-AG3-028	77405426	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
MIDW	2012-AG3-013	77410531	\$ 604,100	\$ -	\$ 604,100		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
SPSM	2012-AG3-009	77341873	\$ 4,551,154	\$ -	\$ 4,551,154		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
SPSM	2012-AG3-010	77341881	\$ 7,289,885	\$ -	\$ 7,289,885		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
WFEC	2012-AG3-008	77193289	\$ 1,780,517	\$ -	\$ 1,780,517		\$ -	\$ -	\$ -	Schedule 9 & 11 Charges
WRGS	2012-AG3-002	77379445	\$ 879,937	\$ 879,937	\$ -	8,10	\$ -	\$ 1,572,192	\$ 3,584,000	\$ 3,584,000
WRGS	2012-AG3-005	77409901	\$ 725,148	\$ 725,148	\$ -	8,10	\$ -	\$ 1,295,629	\$ 7,598,080	\$ 7,598,080
WRGS	2012-AG3-006	77409994	\$ 2,282,042	\$ 2,282,042	\$ -	8,10	\$ -	\$ 4,077,348	\$ 7,598,080	\$ 7,598,080
Grand Total			\$ 291,200,907		\$ 29,000,199		\$ 2,224,999	\$ 554,245,711		

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

Customer	Study Number	Reservation	Engineering and Construction Cost of Upgrades Allocated to Customer for Revenue Requirements	¹ Letter of Credit Amount Required	² Potential Base Plan Engineering and Construction Funding Allowable	Notes	⁴ Additional Engineering and Construction Cost for 3rd Party Upgrades	^{3,5} Total Revenue Requirements for Assigned Upgrades Over Term of Reservation WITH Potential Base Plan Funding Allocation	Point-to-Point Base Rate Over Reservation Period	⁴ Total Cost of Reservation Assignable to Customer Contingent Upon Base Plan Funding
<p>Note 1: Letter of Credit required for financial security for transmission owner for network upgrades is determined by allocated engineering and construction costs less engineering and construction costs for upgrades when network customer is the transmission owner less the E & C allocation of expedited projects. Letter of Credit is required for upgrades assigned to PTP requests. The amount of the letter of credit will be adjusted down on an annual basis to reflect cost recovery based on revenue allocation. This letter of credit is not required for those facilities that are fully base plan funded. The Letter Of Credit Amount listed is based on meeting OATT Attachment J requirements for base plan funding.</p>										
<p>Note 2: If potential base plan funding is applicable, this value is the lesser of the Engineering and Construction costs of assignable upgrades or the value of base plan funding calculated pursuant to Attachment J, Section III B criteria. Allocation of base plan funding is contingent upon verification of customer agreements meeting Attachment J, Section II B criteria. Not applicable if Point-to-Point base rate exceeds revenue requirements.</p>										
<p>Note 3: Revenue Requirements (RR) are based upon deferred end dates if applicable. Deferred dates are based upon customer's choice to pursue redispatch. Achievable Base Plan Avoided RR in the case of a Base Plan upgrade being displaced or deferred by an earlier in service date for a Requested Upgrade shall be determined per Attachment J, Section VII.C methodology. Assumption of a 40 year service life is utilized for Base Plan funded projects. A present worth analysis of RR on a common year basis between the Base Plan and Requested Upgrades was performed to determine avoided Base Plan RR due to the displacement or deferral of the Base Plan upgrade by the Requested Upgrade. The incremental increase in present worth of a Requested Upgrade on a common year basis as a Base Plan upgrade is assigned to the transmission requests impacting the upgrade based on the displacement or deferral. If the displacement analysis results in lower RR due to the shorter amortization period of the requested upgrade when compared to a base plan amortization period, then no direct assignment of the upgrade cost is made due to the displacement to an earlier start date.</p>										
<p>Note 4: For Point-to-Point requests, total cost is based on the higher of the base rate or assigned upgrade revenue requirements. For Network requests, the total cost is based on the assigned upgrade revenue requirement. Allocation of base plan funding will be determined after verification of designated resource meeting Attachment J, Section II B Criteria. Additionally E & C of 3rd Party upgrades is assignable to Customer. This includes prepayments required for any SWPA upgrades. Revenue requirements for 3rd Party facilities are not calculated. Total cost to customer is based on assumption of Revenue Requirements with confirmation of base plan funding. Customer is responsible for negotiating redispatch costs if applicable. Customer is also responsible to pay credits for previously assigned upgrades that are impacted by their request. Credits can be paid from base plan funding if applicable.</p>										
<p>Note 5: RR with base plan funding may increase or decrease even if no base plan funding is applicable to a particular request if another request that shares the upgrade is now full base plan funded resulting in a different amortization period for the upgrade and thus different RR.</p>										
<p>Note 6: Mutually exclusive with 77409954 and 77409979. System impacts were identified by only modeling mutually exclusive request 77409954.</p>										
<p>Note 7: Mutually exclusive with 76979606, 76979671, and 76979772. System impacts were identified by only modeling mutually exclusive request 76979606.</p>										
<p>Note 8: Mutually exclusive with 77379445, 77409901, and 77409994. System impacts were identified by only modeling mutually exclusive request 77379445.</p>										
<p>Note 9: Mutually exclusive with 77029025 and 77029027. System impacts were identified by only modeling mutually exclusive request 77029025.</p>										
<p>Note 10: ATSS cost allocation includes all customers' mutually exclusive requests in SPP-2012-AG3.</p>										

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

Customer **Study Number**
 EXGN 2012-AG3-057

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
EXGN	78865941	ERCOTN	ERCOTN	198	5/1/2014	5/1/2019			\$ -	\$ 22,532,558	\$ -	\$ -
									\$ -	\$ 22,532,558	\$ -	\$ -

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
78865941	None					\$ -	\$ -	\$ -
					Total	\$ -	\$ -	\$ -

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

*The North DC Tie is derated to 210mw indefinitely.

*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.

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

Customer **Study Number**
 EXGN 2012-AG3-058

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
EXGN	78865945	ERCOTN	ERCOTN	198	5/1/2015	5/1/2020			\$ -	\$ 22,532,558	\$ -	\$ -
									\$ -	\$ 22,532,558	\$ -	\$ -

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
78865945	None					\$ -	\$ -	\$ -
					Total	\$ -	\$ -	\$ -

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

*The North DC Tie is derated to 210mw indefinitely.

*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.

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

Customer **Study Number**
 CRGL 2012-AG3-047

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
CRGL	77029025	WFEC	ERCOTN	207	1/1/2014	1/1/2020	6/1/2019	6/1/2025	\$ -	\$ 28,268,119	\$ 42,508,498	\$ 99,366,089
									\$ -	\$ 28,268,119	\$ 42,508,498	\$ 99,366,089

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77029025	AMARILLO SOUTH INTERCHANGE - SWISHER COUNTY INTERCHANGE 230KV CKT 1	10/1/2014	6/1/2016		Yes	\$ 160,000	\$ 160,000	\$ 356,871
	ERCOT North HVDC Tie Expansion	5/1/2014	6/1/2019		No	\$ 32,500,000	\$ 65,000,000	\$ 75,982,988
	OKLAUNION 345KV SVC	5/1/2014	6/1/2019		No	\$ 9,250,000	\$ 18,500,000	\$ 21,625,927
	SOUTHWESTERN STATION - WASHITA 138KV CKT 2	10/1/2014	6/1/2017		Yes	\$ 598,498	\$ 2,260,000	\$ 1,400,303
	Total					\$ 42,508,498	\$ 85,920,000	\$ 99,366,089

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77029025	BUSHLAND INTERCHANGE - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1	6/1/2014	6/1/2016		Yes
	Elk City to Gracemont 345kv AEPW	10/1/2014	3/1/2018		Yes
	Elk City to Gracemont 345kv OKGE	10/1/2014	3/1/2018		Yes
	FLETCHER - MARLOW JCT 69KV CKT 1	6/1/2019	6/1/2019		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77029025	G03-05T 138.00 - PARADISE 138KV CKT 1	6/1/2010	6/1/2013		
	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		

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

*The North DC Tie is derated to 210mw indefinitely.

*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.

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

Customer Study Number
CRGL 2012-AG3-048

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
CRGL	77029027	SPS	ERCOTN	207	1/1/2014	1/1/2020	6/1/2019	6/1/2025	\$ -	\$ 28,268,119	\$ 42,184,967	\$ 98,626,606
									\$ -	\$ 28,268,119	\$ 42,184,967	\$ 98,626,606

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77029027	ERCOT North HVDC Tie Expansion	5/1/2014	6/1/2019		No	\$ 32,500,000	\$ 65,000,000	\$ 75,982,988
	OKLAUNION 345KV SVC	5/1/2014	6/1/2019		No	\$ 9,250,000	\$ 18,500,000	\$ 21,625,927
	SOUTHWESTERN STATION - WASHITA 138KV CKT 2	10/1/2014	6/1/2017		Yes	\$ 434,967	\$ 2,260,000	\$ 1,017,690
	Total					\$ 42,184,967	\$ 85,760,000	\$ 98,626,606

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77029027	Line - Clark County - Thistle 345 kV dbl Ckt	6/1/2014	1/1/2015		Yes
	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	6/1/2014	7/1/2014		Yes
	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	6/1/2014	7/1/2014		Yes
	Line - Spearville - Clark County 345 kV dbl Ckt	6/1/2014	1/1/2015		Yes
	Line - Thistle - Wichita 345 kV dbl Ckt PW	6/1/2014	1/1/2015		Yes
	Line - Thistle - Wichita 345 kV dbl Ckt WERE	6/1/2014	1/1/2015		Yes
	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	6/1/2014	1/1/2015		Yes
	Line - Thistle - Woodward 345 kV dbl Ckt PW	6/1/2014	1/1/2015		Yes
	Line - Tuco - Woodward 345 kV line OKGE	6/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	6/1/2014	6/1/2014		
	XFR - Thistle 345/138 kV	6/1/2014	1/1/2015		Yes

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77029027	GLASS MOUNTAIN - MOORELAND 138KV CKT 1	6/1/2014	6/1/2015		Yes

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77029027	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		
	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 345/138KV TRANSFORMER 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 indefinitely.

*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.

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

Customer Study Number
CRGL 2012-AG3-049

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
CRGL	77410128	WR	EES	200	1/1/2014	1/1/2019	6/1/2019	6/1/2024	\$ -	\$ 15,360,000	\$ 39,937,765	\$ 64,953,720
									\$ -	\$ 15,360,000	\$ 39,937,765	\$ 64,953,720

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77410128	HOLT - NELIGH 345KV CKT 1	10/1/2014	6/1/2019		Yes	\$ 6,817,199	\$ 30,656,000	\$ 12,180,358
	Iatan - Jeffrey Energy Center 345 kV KACP	6/1/2014	6/1/2019		Yes	\$ 3,266,452	\$ 14,089,880	\$ 5,394,960
	Iatan - Jeffrey Energy Center 345 kV WERE	6/1/2014	6/1/2019		Yes	\$ 29,854,114	\$ 128,776,067	\$ 47,378,402
	Total					\$ 39,937,765	\$ 173,521,947	\$ 64,953,720

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410128	HARPER - MILAN TAP 138KV CKT 1 #1	6/1/2014	12/1/2014		Yes
	HAYS PLANT - SOUTH HAYS 115KV CKT 1 #2	6/1/2014	6/1/2016		Yes
	IATAN - NASHUA 345KV CKT 1	6/1/2014	6/1/2015		Yes
	Line - Clark County - Thistle 345 kV dbI Ckt	6/1/2014	1/1/2015		Yes
	Line - Hitchland - Woodward 345 kV dbI Ckt OKGE	6/1/2014	7/1/2014		Yes
	Line - Hitchland - Woodward 345 kV dbI Ckt SPS	6/1/2014	7/1/2014		Yes
	Line - Spearville - Clark County 345 kV dbI Ckt	6/1/2014	1/1/2015		Yes
	Line - Thistle - Wichita 345 kV dbI Ckt PW	6/1/2014	1/1/2015		Yes
	Line - Thistle - Wichita 345 kV dbI Ckt WERE	6/1/2014	1/1/2015		Yes
	Line - Thistle - Woodward 345 kV dbI Ckt OKGE	6/1/2014	1/1/2015		Yes
	Line - Thistle - Woodward 345 kV dbI Ckt PW	6/1/2014	1/1/2015		Yes
	Line - Tuco - Woodward 345 kV line OKGE	6/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	6/1/2014	6/1/2014		
	XFR - Thistle 345/138 kV	6/1/2014	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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410128	Cherry Co - Gentleman 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co - Holt Co 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co 345 kV Terminal Upgrades	6/1/2014	1/1/2018		Yes
	Neligh - Hoskins 345 kV Ckt1	6/1/2014	3/1/2019		Yes
	Neligh 345/115 kV Transformer	6/1/2014	3/1/2019		Yes
	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		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410128	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerate	6/1/2014	6/1/2017		Yes
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerate	6/1/2014	6/1/2017		Yes
	EVANS ENERGY CENTER NORTH - MAIZE 138KV CKT 1 #1	6/1/2019	6/1/2019		
	HARPER - MILAN TAP 138KV CKT 1 #2 Accelerate	6/1/2014	6/1/2017		Yes
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2014	6/1/2017		Yes
	MEDICINE LODGE - PRATT 115KV CKT 1	6/1/2014	6/15/2014		Yes

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410128	BARBER (BARBER 4) 138/115/2.72KV TRANSFORMER CKT 1	12/1/2009	6/1/2013		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	FLATRDG3 138.00 - HARPER 138KV CKT 1	12/1/2009	6/1/2013		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 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.

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

Customer Study Number
CRGL 2012-AG3-050

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
CRGL	77410129	SECI	EES	101	1/1/2014	1/1/2019	6/1/2019	6/1/2024	\$ -	\$ 7,756,800	\$ 18,920,836	\$ 31,017,261
									\$ -	\$ 7,756,800	\$ 18,920,836	\$ 31,017,261

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77410129	HOLT - NELIGH 345KV CKT 1	10/1/2014	6/1/2019		Yes	\$ 4,496,473	\$ 30,656,000	\$ 8,033,894
	Iatan - Jeffrey Energy Center 345 kV KACP	6/1/2014	6/1/2019		Yes	\$ 1,422,575	\$ 14,089,880	\$ 2,349,563
	Iatan - Jeffrey Energy Center 345 kV WERE	6/1/2014	6/1/2019		Yes	\$ 13,001,788	\$ 128,776,067	\$ 20,633,804
	Total					\$ 18,920,836	\$ 173,521,947	\$ 31,017,261

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410129	HARPER - MILAN TAP 138KV CKT 1 #1	6/1/2014	12/1/2014		Yes
	IATAN - NASHUA 345KV CKT 1	6/1/2014	6/1/2015		Yes
	Line - Clark County - Thistle 345 kV dbl Ckt	6/1/2014	1/1/2015		Yes
	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	6/1/2014	7/1/2014		Yes
	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	6/1/2014	7/1/2014		Yes
	Line - Spearville - Clark County 345 kV dbl Ckt	6/1/2014	1/1/2015		Yes
	Line - Thistle - Wichita 345 kV dbl Ckt PW	6/1/2014	1/1/2015		Yes
	Line - Thistle - Wichita 345 kV dbl Ckt WERE	6/1/2014	1/1/2015		Yes
	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	6/1/2014	1/1/2015		Yes
	Line - Thistle - Woodward 345 kV dbl Ckt PW	6/1/2014	1/1/2015		Yes
	Line - Tuco - Woodward 345 kV line OKGE	6/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	6/1/2014	6/1/2014		
	XFR - Thistle 345/138 kV	6/1/2014	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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410129	Cherry Co - Gentleman 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co - Holt Co 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co 345 kV Terminal Upgrades	6/1/2014	1/1/2018		Yes
	Elk City to Gracemont 345kV AEPW	10/1/2014	3/1/2018		Yes
	Elk City to Gracemont 345kV OKGE	10/1/2014	3/1/2018		Yes
	Neligh - Hoskins 345 kV Ckt1	6/1/2014	3/1/2019		Yes
	Neligh 345/115 kV Transformer	6/1/2014	3/1/2019		Yes
	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		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410129	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerate	6/1/2014	6/1/2017		Yes
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerate	6/1/2014	6/1/2017		Yes
	EVANS ENERGY CENTER NORTH - MAIZE 138KV CKT 1 #1	6/1/2019	6/1/2019		
	HARPER - MILAN TAP 138KV CKT 1 #2 Accelerate	6/1/2014	6/1/2017		Yes
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2014	6/1/2017		Yes
	MEDICINE LODGE - PRATT 115KV CKT 1	6/1/2014	6/15/2014		Yes

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410129	BARBER (BARBER 4) 138/115/2.72KV TRANSFORMER CKT 1	12/1/2009	6/1/2013		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	FLATRDG3 138.00 - HARPER 138KV CKT 1	12/1/2009	6/1/2013		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 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.

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

Customer Study Number
CRGL 2012-AG3-051

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
CRGL	77410131	SECI	EES	100	1/1/2014	1/1/2019	6/1/2019	6/1/2024	\$ -	\$ 7,680,000	\$ 18,634,331	\$ 30,597,042
									\$ -	\$ 7,680,000	\$ 18,634,331	\$ 30,597,042

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77410131	HOLT - NELIGH 345KV CKT 1	10/1/2014	6/1/2019		Yes	\$ 4,684,178	\$ 30,656,000	\$ 8,369,268
	Iatan - Jeffrey Energy Center 345 kV KACP	6/1/2014	6/1/2019		Yes	\$ 1,375,807	\$ 14,089,880	\$ 2,272,320
	Iatan - Jeffrey Energy Center 345 kV WERE	6/1/2014	6/1/2019		Yes	\$ 12,574,346	\$ 128,776,067	\$ 19,955,455
	Total					\$ 18,634,331	\$ 173,521,947	\$ 30,597,042

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410131	HARPER - MILAN TAP 138KV CKT 1 #1	6/1/2014	12/1/2014		Yes
	IATAN - NASHUA 345KV CKT 1	6/1/2014	6/1/2015		Yes
	Line - Clark County - Thistle 345 kV dbl Ckt	6/1/2014	1/1/2015		Yes
	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	6/1/2014	7/1/2014		Yes
	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	6/1/2014	7/1/2014		Yes
	Line - Spearville - Clark County 345 kV dbl Ckt	6/1/2014	1/1/2015		Yes
	Line - Thistle - Wichita 345 kV dbl Ckt PW	6/1/2014	1/1/2015		Yes
	Line - Thistle - Wichita 345 kV dbl Ckt WERE	6/1/2014	1/1/2015		Yes
	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	6/1/2014	1/1/2015		Yes
	Line - Thistle - Woodward 345 kV dbl Ckt PW	6/1/2014	1/1/2015		Yes
	Line - Tuco - Woodward 345 kV line OKGE	6/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	6/1/2014	6/1/2014		
	XFR - Thistle 345/138 kV	6/1/2014	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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410131	Cherry Co - Gentleman 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co - Holt Co 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co 345 kV Terminal Upgrades	6/1/2014	1/1/2018		Yes
	Elk City to Gracemont 345kV AEPW	10/1/2014	3/1/2018		Yes
	Elk City to Gracemont 345kV OKGE	10/1/2014	3/1/2018		Yes
	Neligh - Hoskins 345 kV Ckt1	6/1/2014	3/1/2019		Yes
	Neligh 345/115 kV Transformer	6/1/2014	3/1/2019		Yes
	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		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410131	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerate	6/1/2014	6/1/2017		Yes
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerate	6/1/2014	6/1/2017		Yes
	EVANS ENERGY CENTER NORTH - MAIZE 138KV CKT 1 #1	6/1/2019	6/1/2019		
	HARPER - MILAN TAP 138KV CKT 1 #2 Accelerate	6/1/2014	6/1/2017		Yes
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2014	6/1/2017		Yes
	MEDICINE LODGE - PRATT 115KV CKT 1	6/1/2014	6/15/2014		Yes

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410131	BARBER (BARBER 4) 138/115/2.72KV TRANSFORMER CKT 1	12/1/2009	6/1/2013		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	FLATRDG3 138.00 - HARPER 138KV CKT 1	12/1/2009	6/1/2013		
	HUGO POWER PLANT - VALLIANT 345 KV AEPW	7/1/2012	7/1/2012		
	HUGO POWER PLANT - VALLIANT 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.

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

Customer Study Number
CRGL 2012-AG3-052

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
CRGL	77410135	WFEC	EES	75	1/1/2014	1/1/2019	6/1/2019	6/1/2024	\$ -	\$ 5,760,000	\$ 2,208,686	\$ 4,643,331
									\$ -	\$ 5,760,000	\$ 2,208,686	\$ 4,643,331

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77410135	HOLT - NELIGH 345KV CKT 1	10/1/2014	6/1/2019		Yes	\$ 1,010,770	\$ 30,656,000	\$ 2,202,101
	LAKE CREEK - LONEWOLF 69KV CKT 1	6/1/2014	6/1/2016		Yes	\$ 225,000	\$ 225,000	\$ 396,524
	SOUTHWESTERN STATION - WASHITA 138KV CKT 2	10/1/2014	6/1/2017		Yes	\$ 972,916	\$ 2,260,000	\$ 2,044,706
Total						\$ 2,208,686	\$ 33,141,000	\$ 4,643,331

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410135	IATAN - NASHUA 345KV 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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410135	Cherry Co - Gentleman 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co - Holt Co 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co 345 kV Terminal Upgrades	6/1/2014	1/1/2018		Yes
	Multi - Centerton - Osage Creek 345 kV	6/1/2014	6/1/2016		Yes
	Multi - Flint Creek - Centerton 345 kV and Centerton- East Centerton 161 kV	6/1/2014	6/1/2014		
	Neligh - Hoskins 345 kV Ckt1	6/1/2014	3/1/2019		Yes
	Neligh 345/115 kV Transformer	6/1/2014	3/1/2019		Yes

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410135	CANTON - TALOGA 69KV CKT 1	6/1/2014	6/1/2015		Yes
	GLASS MOUNTAIN - MOORELAND 138KV CKT 1	6/1/2014	6/1/2015		Yes
	HANCOCK - MUSKOGEE 161KV CKT 1 Accelerate	6/1/2014	10/1/2015		
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2014	6/1/2017		Yes

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410135	ALTUS SW - NAVAJO 69KV CKT 1	6/1/2013	6/1/2013		
	CANTON - TALOGA 69KV CKT 1	6/1/2011	6/1/2013		
	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		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	NORTHWEST - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TALOGA (TALOGA) 138/69/13.8KV TRANSFORMER CKT 1	10/1/2010	6/1/2013		
	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		
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010		

Third Party Limitations.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	*Allocated E & C Cost	*Total E & C Cost
77410135	BUFORD 5 161.00 - BULL SHOALS 161KV CKT 1 Upgrade #1	6/1/2015	6/1/2017		No	\$ 20,271	\$ 125,000
	BUFORD 5 161.00 - NORFORK 161KV CKT 1 Upgrade #1	6/1/2015	6/1/2017		No	\$ 16,217	\$ 100,000
Total						\$ 36,488	\$ 225,000

*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.

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

Customer Study Number
CRGL 2012-AG3-054

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
CRGL	77410157	CSWS	EES	150	1/1/2014	1/1/2019	6/1/2019	6/1/2024	\$ -	\$ 11,520,000	\$ 6,804,515	\$ 14,462,896
									\$ -	\$ 11,520,000	\$ 6,804,515	\$ 14,462,896

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77410157	HOLT - NELIGH 345KV CKT 1	10/1/2014	6/1/2019		Yes	\$ 1,632,515	\$ 30,656,000	\$ 3,556,657
	TERRA NITROGEN TAP - VERDIGRIS 138KV CKT 1	6/1/2014	6/1/2017		Yes	\$ 5,172,000	\$ 5,172,000	\$ 10,906,239
					Total	\$ 6,804,515	\$ 35,828,000	\$ 14,462,896

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410157	IATAN - NASHUA 345KV 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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410157	Cherry Co - Gentleman 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co - Holt Co 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co 345 kV Terminal Upgrades	6/1/2014	1/1/2018		Yes
	Multi - Centerton - Osage Creek 345 kV	6/1/2014	6/1/2016		Yes
	Multi - Flint Creek - Centerton 345 kV and Centerton- East Centerton 161 kV	6/1/2014	6/1/2014		
	Neligh - Hoskins 345 kV Ckt1	6/1/2014	3/1/2019		Yes
	Neligh 345/115 kV Transformer	6/1/2014	3/1/2019		Yes

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410157	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2014	6/1/2017		Yes

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410157	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		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

Third Party Limitations.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	*Allocated E & C Cost	*Total E & C Cost
77410157	BUFORD 5 161.00 - BULL SHOALS 161KV CKT 1 Upgrade #1	6/1/2015	6/1/2017		No	\$ 46,492	\$ 125,000
	BUFORD 5 161.00 - NORFORK 161KV CKT 1 Upgrade #1	6/1/2015	6/1/2017		No	\$ 37,194	\$ 100,000
	FAIRFAX 138/69KV TRANSFORMER CKT 1	6/1/2019	6/1/2019			\$ 2,000,000	\$ 2,000,000
					Total	\$ 2,083,686	\$ 2,225,000

*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.

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

Customer **Study Number**
 ETEC 2012-AG3-038

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
ETEC	77410319	CSWS	CSWS	1171	1/1/2015	1/1/2040			\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77410319	None					\$ -	\$ -	\$ -
					Total	\$ -	\$ -	\$ -

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

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

Customer Study Number
 ETEC 2012-AG3-039

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
ETEC	77410327	CSWS	CSWS	79	1/1/2015	1/1/2040			\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77410327	None					\$ -	\$ -	\$ -
					Total	\$ -	\$ -	\$ -

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

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

Customer Study Number
 ETEC 2012-AG3-040

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
ETEC	77410336	CSWS	CSWS	500	1/1/2015	1/1/2040			\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77410336	None					\$ -	\$ -	\$ -
						\$ -	\$ -	\$ -
						\$ -	\$ -	\$ -

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410336	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		

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

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

Customer Study Number
 ETEC 2012-AG3-041

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
ETEC	77410342	EES	CSWS	30	1/1/2015	1/1/2040			\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77410342	None					\$ -	\$ -	\$ -
					Total	\$ -	\$ -	\$ -

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

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

Customer Study Number
 ETEC 2012-AG3-042

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
ETEC	77410350	CSWS	CSWS	406	1/1/2015	1/1/2040			\$ 5,268,000	\$ -	\$ 5,268,000	\$ 20,856,592
									\$ 5,268,000	\$ -	\$ 5,268,000	\$ 20,856,592

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77410350	CHAPEL HILL REC - WELSH REC 138KV CKT 1	6/1/2019	6/1/2019			\$ 5,268,000	\$ 5,268,000	\$ 20,856,592
	Total					\$ 5,268,000	\$ 5,268,000	\$ 20,856,592

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410350	Welsh REC - Wilkes 138KV Ckt	6/1/2019	6/1/2019		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410350	ALUMAX TAP - BANN 138KV CKT 1	6/1/2008	6/1/2008		
	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		
	BANN - RED SPRINGS REC 138KV CKT 1	7/1/2012	7/1/2012		
	BEELINE - EXPLORER GLENPOOL TAP 138KV CKT 1	6/1/2009	6/1/2009		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	EXPLORER GLENPOOL TAP - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009		
	EXPLORER GLENPOOL TAP - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009		
	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		
	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		
	SUGAR HILL - TURK 138KV CKT 1	7/1/2012	7/1/2012		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

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

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

Customer Study Number
 ETEC 2012-AG3-043

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
ETEC	77410353	CLEC	CSWS	38	1/1/2015	1/1/2040			\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77410353	None					\$ -	\$ -	\$ -
					Total	\$ -	\$ -	\$ -

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

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

Customer Study Number
 ETEC 2012-AG3-044

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
ETEC	77410357	SPA	CSWS	128	1/1/2015	1/1/2040			\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77410357	None					\$ -	\$ -	\$ -
					Total	\$ -	\$ -	\$ -

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

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

Customer Study Number
 ETEC 2012-AG3-045

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
ETEC	77410360	SPA	CSWS	1	1/1/2015	1/1/2040			\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77410360	None					\$ -	\$ -	\$ -
					Total	\$ -	\$ -	\$ -

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

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

Customer Study Number
 ETEC 2012-AG3-046

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
ETEC	77410382	CSWS	CSWS	52	1/1/2015	1/1/2040			\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77410382	None					\$ -	\$ -	\$ -
					Total	\$ -	\$ -	\$ -

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

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

Customer Study Number
 GSECGS 2012-AG3-032

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
GSECGS	77401449	SPS	SPS	7	6/1/2013	1/1/2039	5/1/2014	12/1/2039	\$ 10,525	\$ -	\$ 10,525	\$ 32,541
									\$ 10,525	\$ -	\$ 10,525	\$ 32,541

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77401449	HITCHLAND INTERCHANGE () 230/115/13.2KV TRANSFORMER CKT 2 Accelerate	6/1/2015	6/1/2017			\$ 10,525	\$ 473,414	\$ 32,541
	Total					\$ 10,525	\$ 473,414	\$ 32,541

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77401449	Mustang to Shell CO2 115 kV	6/1/2019	6/1/2019		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77401449	CHERRY6 230.00 - Harrington Station East Bus 230KV CKT 1	6/1/2015	6/1/2015		

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

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

Customer Study Number
 GSECGS 2012-AG3-033

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
GSECGS	77401452	SPS	SPS	7	6/1/2013	1/1/2039	5/1/2014	12/1/2039	\$ 10,525	\$ -	\$ 10,525	\$ 32,541
									\$ 10,525	\$ -	\$ 10,525	\$ 32,541

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77401452	HITCHLAND INTERCHANGE () 230/115/13.2KV TRANSFORMER CKT 2 Accelerate	6/1/2015	6/1/2017			\$ 10,525	\$ 473,414	\$ 32,541
	Total					\$ 10,525	\$ 473,414	\$ 32,541

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77401452	Mustang to Shell CO2 115 kV	6/1/2019	6/1/2019		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77401452	CHERRY6 230.00 - Harrington Station East Bus 230KV CKT 1	6/1/2015	6/1/2015		

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

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

Customer Study Number
 GSECGS 2012-AG3-034

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
GSECGS	77401453	SPS	SPS	7	6/1/2013	1/1/2039	5/1/2014	12/1/2039	\$ 10,525	\$ -	\$ 10,525	\$ 32,541
									\$ 10,525	\$ -	\$ 10,525	\$ 32,541

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77401453	HITCHLAND INTERCHANGE () 230/115/13.2KV TRANSFORMER CKT 2 Accelerate	6/1/2015	6/1/2017			\$ 10,525	\$ 473,414	\$ 32,541
Total						\$ 10,525	\$ 473,414	\$ 32,541

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77401453	Mustang to Shell CO2 115 kV	6/1/2019	6/1/2019		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77401453	CHERRY6 230.00 - Harrington Station East Bus 230KV CKT 1	6/1/2015	6/1/2015		

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

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

Customer Study Number
GSECGS 2012-AG3-036

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
GSECGS	77402184	SPS	SPS	203	1/1/2015	1/1/2041	3/1/2018	3/1/2044	\$ 9,474,968	\$ -	\$ 9,474,968	\$ 31,948,712
									\$ 9,474,968	\$ -	\$ 9,474,968	\$ 31,948,712

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements	
77402184	CANYON WEST SUB - DAWN SUB 115KV CKT 1	1/1/2015	6/1/2017		Yes	\$ 4,303,779	\$ 10,412,000	\$ 14,485,398	
	Carlisle - SP Erskine 115 kV Ckt 1	6/1/2019	6/1/2019			\$ 886,550	\$ 886,550	\$ 2,951,758	
	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1	10/1/2015	6/1/2016		Yes	\$ 184,844	\$ 240,000	\$ 729,738	
	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	1/1/2015	6/1/2017		Yes	\$ 2,641,955	\$ 6,391,600	\$ 8,892,132	
	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	1/1/2015	6/1/2017		Yes	\$ 1,112,071	\$ 2,690,400	\$ 3,742,941	
	HITCHLAND INTERCHANGE () 230/115/13.2KV TRANSFORMER CKT 2 Accelerate	6/1/2015	6/1/2017		Yes	\$ 345,769	\$ 473,414	\$ 1,146,745	
						Total	\$ 9,474,968	\$ 21,093,964	\$ 31,948,712

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77402184	Carlisle Interchange - Wolfforth Interchange 230 kV Ckt 1	6/1/2019	6/1/2019		
	Line - Clark County - Thistle 345 kV dbl Ckt	6/1/2014	1/1/2015		
	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	6/1/2014	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	6/1/2014	7/1/2014		
	Line - Spearville - Clark County 345 kV dbl Ckt	6/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbl Ckt PW	6/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbl Ckt WERE	6/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	6/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbl Ckt PW	6/1/2014	1/1/2015		
	Line - Tuco - Woodward 345 kV line OKGE	6/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	6/1/2014	6/1/2014		
	XFR - Thistle 345/138 kV	6/1/2014	1/1/2015		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77402184	BUSHLAND INTERCHANGE - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1	6/1/2014	6/1/2016		Yes
	CANYON EAST SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	1/1/2015	6/1/2017		Yes
	Elk City to Gracemont 345kV AEPW	10/1/2014	3/1/2018		Yes
	Elk City to Gracemont 345kV OKGE	10/1/2014	3/1/2018		Yes
	Indiana - SP Erskine 115 kV Ckt 1	6/1/2019	6/1/2019		
	Indiana - Stanton 115 kV Ckt 1	6/1/2019	6/1/2019		
	MULTI - Tuco-New Deal 345 kV	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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77402184	CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1	1/1/2015	6/1/2017		Yes
	Mustang to Shell CO2 115 kV	6/1/2019	6/1/2019		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77402184	CHERRY6 230.00 - Harrington Station East Bus 230KV CKT 1	6/1/2015	6/1/2015		

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

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

Customer Study Number
INF 2012-AG3-030

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
INF	77409954	SECI	EES	200	1/1/2015	1/1/2020	6/1/2019	6/1/2024	\$ -	\$ 15,360,000	\$ 42,933,525	\$ 100,345,001
									\$ -	\$ 15,360,000	\$ 42,933,525	\$ 100,345,001

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77409954	HOLT - NELIGH 345KV CKT 1	10/1/2014	6/1/2019			\$ 2,856,819	\$ 30,656,000	\$ 7,089,951
	Iatan - Jeffrey Energy Center 345 kV KACP	6/1/2014	6/1/2019			\$ 3,952,488	\$ 14,089,880	\$ 10,210,959
	Iatan - Jeffrey Energy Center 345 kV WERE	6/1/2014	6/1/2019			\$ 36,124,218	\$ 128,776,067	\$ 83,044,091
	Total					\$ 42,933,525	\$ 173,521,947	\$ 100,345,001

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77409954	HARPER - MILAN TAP 138KV CKT 1 #1	6/1/2014	12/1/2014		
	IATAN - NASHUA 345KV CKT 1	6/1/2014	6/1/2015		
	Line - Clark County - Thistle 345 kV dbl Ckt	6/1/2014	1/1/2015		
	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	6/1/2014	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	6/1/2014	7/1/2014		
	Line - Spearville - Clark County 345 kV dbl Ckt	6/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbl Ckt PW	6/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbl Ckt WERE	6/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	6/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbl Ckt PW	6/1/2014	1/1/2015		
	Line - Tuco - Woodward 345 kV line OKGE	6/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	6/1/2014	6/1/2014		
	XFR - Thistle 345/138 kV	6/1/2014	1/1/2015		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77409954	Cherry Co - Gentleman 345 kV Ckt1	6/1/2014	1/1/2018		
	Cherry Co - Holt Co 345 kV Ckt1	6/1/2014	1/1/2018		
	Cherry Co 345 kV Terminal Upgrades	6/1/2014	1/1/2018		
	Neligh - Hoskins 345 kV Ckt1	6/1/2014	3/1/2019		
	Neligh 345/115 kV Transformer	6/1/2014	3/1/2019		
	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		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77409954	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerate	6/1/2014	6/1/2017		
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerate	6/1/2014	6/1/2017		
	EVANS ENERGY CENTER NORTH - MAIZE 138KV CKT 1 #1	6/1/2019	6/1/2019		
	HARPER - MILAN TAP 138KV CKT 1 #2 Accelerate	6/1/2014	6/1/2017		
	HOYT - JEFFREY ENERGY CENTER 345KV 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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77409954	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		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

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

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

Customer Study Number
INF 2012-AG3-031

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
INF	77409979	SECI	EES	200	1/1/2015	1/1/2020	6/1/2019	6/1/2024	\$ -	\$ 15,360,000	\$ 43,395,235	\$ 101,422,434
									\$ -	\$ 15,360,000	\$ 43,395,235	\$ 101,422,434

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77409979	HOLT - NELIGH 345KV CKT 1	10/1/2014	6/1/2019			\$ 2,876,668	\$ 30,656,000	\$ 7,139,212
	Iatan - Jeffrey Energy Center 345 kV KACP	6/1/2014	6/1/2019			\$ 3,996,066	\$ 14,089,880	\$ 10,323,540
	Iatan - Jeffrey Energy Center 345 kV WERE	6/1/2014	6/1/2019			\$ 36,522,501	\$ 128,776,067	\$ 83,959,683
	Total					\$ 43,395,235	\$ 173,521,947	\$ 101,422,434

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77409979	HARPER - MILAN TAP 138KV CKT 1 #1	6/1/2014	12/1/2014		
	IATAN - NASHUA 345KV CKT 1	6/1/2014	6/1/2015		
	Line - Clark County - Thistle 345 kV dbl Ckt	6/1/2014	1/1/2015		
	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	6/1/2014	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	6/1/2014	7/1/2014		
	Line - Spearville - Clark County 345 kV dbl Ckt	6/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbl Ckt PW	6/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbl Ckt WERE	6/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	6/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbl Ckt PW	6/1/2014	1/1/2015		
	Line - Tuco - Woodward 345 kV line OKGE	6/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	6/1/2014	6/1/2014		
	XFR - Thistle 345/138 kV	6/1/2014	1/1/2015		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77409979	Cherry Co - Gentleman 345 kV Ckt1	6/1/2014	1/1/2018		
	Cherry Co - Holt Co 345 kV Ckt1	6/1/2014	1/1/2018		
	Cherry Co 345 kV Terminal Upgrades	6/1/2014	1/1/2018		
	Neligh - Hoskins 345 kV Ckt1	6/1/2014	3/1/2019		
	Neligh 345/115 kV Transformer	6/1/2014	3/1/2019		
	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		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77409979	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerate	6/1/2014	6/1/2017		
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerate	6/1/2014	6/1/2017		
	EVANS ENERGY CENTER NORTH - MAIZE 138KV CKT 1 #1	6/1/2019	6/1/2019		
	HARPER - MILAN TAP 138KV CKT 1 #2 Accelerate	6/1/2014	6/1/2017		
	HOYT - JEFFREY ENERGY CENTER 345KV 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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77409979	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		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

Third Party Limitations.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	*Allocated E & C Cost	*Total E & C Cost
77409979	BUFORD 5 161.00 - BULL SHOALS 161KV CKT 1 Upgrade #1	6/1/2015	6/1/2017			\$ 58,236	\$ 125,000
	BUFORD 5 161.00 - NORFORK 161KV CKT 1 Upgrade #1	6/1/2015	6/1/2017			\$ 46,589	\$ 100,000
	Total					\$ 104,825	\$ 225,000

*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.

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

Customer **Study Number**
 KBPU 2012-AG3-029

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
KBPU	77155691	WR	KACY	2	4/1/2013	8/1/2030	5/1/2014	9/1/2031	\$ -	\$ 359,840	\$ 785,223	\$ 1,866,190
									\$ -	\$ 359,840	\$ 785,223	\$ 1,866,190

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77155691	HOLT - NELIGH 345KV CKT 1	10/1/2014	6/1/2019			\$ 9,633	\$ 30,656,000	\$ 24,478
	Iatan - Jeffrey Energy Center 345 kV KACP	6/1/2014	6/1/2019			\$ 76,491	\$ 14,089,880	\$ 198,880
	Iatan - Jeffrey Energy Center 345 kV WERE	6/1/2014	6/1/2019			\$ 699,099	\$ 128,776,067	\$ 1,642,831
	KAW WEST 5 161/69KV TRANSFORMER CKT 1	6/1/2014	6/1/2014			\$ -	\$ -	\$ -
	Total					\$ 785,223	\$ 173,521,947	\$ 1,866,190

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77155691	IATAN - NASHUA 345KV 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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77155691	Cherry Co - Gentleman 345 kV Ckt1	6/1/2014	1/1/2018		
	Cherry Co - Holt Co 345 kV Ckt1	6/1/2014	1/1/2018		
	Cherry Co 345 kV Terminal Upgrades	6/1/2014	1/1/2018		
	Neligh - Hoskins 345 kV Ckt1	6/1/2014	3/1/2019		
	Neligh 345/115 kV Transformer	6/1/2014	3/1/2019		
	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		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77155691	BLUE SPRING SOUTH - BLUE SPRINGS EAST 161KV CKT 1 #1 Accelerate	6/1/2014	6/1/2015		
	BLUE SPRING SOUTH - BLUE SPRINGS EAST 161KV CKT 1 #2 Accelerate	6/1/2014	6/1/2016		
	BLUE SPRING SOUTH - PRAIRIE LEE 161KV CKT 1 #2 Accelerate	6/1/2014	6/1/2016		
	EVANS ENERGY CENTER NORTH - MAIZE 138KV CKT 1 #1	6/1/2019	6/1/2019		
	HOYT - JEFFREY ENERGY CENTER 345KV 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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77155691	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		
	FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	FLATRDG3 138.00 - HARPER 138KV CKT 1	12/1/2009	6/1/2013		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	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		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

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

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

Customer Study Number
KPP 2012-AG3-024

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
KPP	77398979	WR	WR	15	6/1/2013	6/1/2023	5/1/2014	5/1/2024	\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77398979	None					\$ -	\$ -	\$ -
Total						\$ -	\$ -	\$ -

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77398979	HARPER - MILAN TAP 138KV CKT 1 #1	6/1/2014	12/1/2014		
	Line - Clark County - Thistle 345 kV dbl Ckt	6/1/2014	1/1/2015		
	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	6/1/2014	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	6/1/2014	7/1/2014		
	Line - Spearville - Clark County 345 kV dbl Ckt	6/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbl Ckt PW	6/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbl Ckt WERE	6/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	6/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbl Ckt PW	6/1/2014	1/1/2015		
	Line - Tuco - Woodward 345 kV line OKGE	6/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	6/1/2014	6/1/2014		
	XFR - Thistle 345/138 kV	6/1/2014	1/1/2015		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77398979	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		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77398979	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerate	6/1/2014	6/1/2017		
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerate	6/1/2014	6/1/2017		
	HARPER - MILAN TAP 138KV CKT 1 #2 Accelerate	6/1/2014	6/1/2017		
	HOYT - JEFFREY ENERGY CENTER 345KV 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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77398979	ALEXANDER - PRATT 115KV CKT 1	12/1/2009	6/1/2013		
	ALEXANDER - SAWYER 3 115.00 115KV CKT 1	12/1/2009	6/1/2013		
	BARBER - MEDICINE LODGE 115KV CKT 1	12/1/2009	6/1/2013		
	BARBER - SAWYER 115KV CKT 1	12/1/2009	6/1/2013		
	BARBER (BARBER 4) 138/115/2.72KV TRANSFORMER CKT 1	12/1/2009	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		
	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 345/138KV TRANSFORMER 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.

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

Customer **Study Number**
 KPP 2012-AG3-025

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
KPP	77405406	SPA	WR	1	6/1/2013	6/1/2023	5/1/2014	5/1/2024	\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77405406	None					\$ -	\$ -	\$ -
Total						\$ -	\$ -	\$ -

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

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

Customer Study Number
KPP 2012-AG3-026

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
KPP	77405413	KACY	WR	3	6/1/2013	6/1/2023	5/1/2014	5/1/2024	\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77405413	None					\$ -	\$ -	\$ -
Total						\$ -	\$ -	\$ -

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77405413	BUTLER - WEAVER 138KV 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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77405413	ALEXANDER - PRATT 115KV CKT 1	12/1/2009	6/1/2013		
	ALEXANDER - SAWYER 3 115.00 115KV CKT 1	12/1/2009	6/1/2013		
	BARBER - SAWYER 115KV CKT 1	12/1/2009	6/1/2013		
	BARBER (BARBER 4) 138/115/2.72KV TRANSFORMER CKT 1	12/1/2009	6/1/2013		
	FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		

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

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

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

Customer **Study Number**
 KPP 2012-AG3-027

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
KPP	77405416	WR	WR	9	6/1/2013	6/1/2023	5/1/2014	5/1/2024	\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77405416	None					\$ -	\$ -	\$ -
Total						\$ -	\$ -	\$ -

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77405416	BUTLER - WEAVER 138KV 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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77405416	ALEXANDER - PRATT 115KV CKT 1	12/1/2009	6/1/2013		
	ALEXANDER - SAWYER 3 115.00 115KV CKT 1	12/1/2009	6/1/2013		
	BARBER - SAWYER 115KV CKT 1	12/1/2009	6/1/2013		
	BARBER (BARBER 4) 138/115/2.72KV TRANSFORMER CKT 1	12/1/2009	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		
	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.

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

Customer Study Number
KPP 2012-AG3-028

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
KPP	77405426	WR	WR	4	6/1/2013	1/1/2015	5/1/2014	12/1/2015	\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77405426	None					\$ -	\$ -	\$ -
Total						\$ -	\$ -	\$ -

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77405426	IATAN - NASHUA 345KV 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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77405426	BUTLER - WEAVER 138KV CKT 1	6/1/2014	6/1/2017		
	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		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77405426	HOYT - JEFFREY ENERGY CENTER 345KV 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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77405426	ALEXANDER - PRATT 115KV CKT 1	12/1/2009	6/1/2013		
	ALEXANDER - SAWYER 3 115.00 115KV CKT 1	12/1/2009	6/1/2013		
	BARBER - SAWYER 115KV CKT 1	12/1/2009	6/1/2013		
	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		
	FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	FLATRDG3 138.00 - HARPER 138KV CKT 1	12/1/2009	6/1/2013		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	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.
*Scope of Study does not address underlying System Impacts and Upgrades.

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

Customer Study Number
MIDW 2012-AG3-013

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
MIDW	77410531	WR	WR	28	6/1/2015	6/1/2038	6/1/2019	6/1/2042	\$ 604,100	\$ -	\$ 604,100	\$ 1,910,822
									\$ 604,100	\$ -	\$ 604,100	\$ 1,910,822

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77410531	HOLT - NELIGH 345KV CKT 1	10/1/2014	6/1/2019		Yes	\$ 604,100	\$ 30,656,000	\$ 1,910,822
					Total	\$ 604,100	\$ 30,656,000	\$ 1,910,822

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410531	HARPER - MILAN TAP 138KV CKT 1 #1	6/1/2014	12/1/2014		
	Line - Clark County - Thistle 345 kV dbI Ckt	6/1/2014	1/1/2015		
	Line - Hitchland - Woodward 345 kV dbI Ckt OKGE	6/1/2014	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbI Ckt SPS	6/1/2014	7/1/2014		
	Line - Spearville - Clark County 345 kV dbI Ckt	6/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbI Ckt PW	6/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbI Ckt WERE	6/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbI Ckt OKGE	6/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbI Ckt PW	6/1/2014	1/1/2015		
	Line - Tuco - Woodward 345 kV line OKGE	6/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	6/1/2014	6/1/2014		
	XFR - Thistle 345/138 kV	6/1/2014	1/1/2015		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410531	Cherry Co - Gentleman 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co - Holt Co 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co 345 kV Terminal Upgrades	6/1/2014	1/1/2018		Yes
	Neligh - Hoskins 345 kV Ckt1	6/1/2014	3/1/2019		Yes
	Neligh 345/115 kV Transformer	6/1/2014	3/1/2019		Yes

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410531	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerate	6/1/2014	6/1/2017		
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerate	6/1/2014	6/1/2017		
	HARPER - MILAN TAP 138KV CKT 1 #2 Accelerate	6/1/2014	6/1/2017		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77410531	ALEXANDER - PRATT 115KV CKT 1	12/1/2009	6/1/2013		
	BARBER - SAWYER 115KV CKT 1	12/1/2009	6/1/2013		
	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		
	FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	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		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

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

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

Customer Study Number
SPSM 2012-AG3-009

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
SPSM	77341873	WFEC	SPS	36	6/1/2017	6/1/2047			\$ 4,551,154	\$ -	\$ 4,551,154	\$ 20,464,957
									\$ 4,551,154	\$ -	\$ 4,551,154	\$ 20,464,957

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77341873	CANYON WEST SUB - DAWN SUB 115KV CKT 1	1/1/2015	6/1/2017			\$ 2,330,107	\$ 10,412,000	\$ 10,535,217
	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1	10/1/2015	6/1/2016			\$ 29,753	\$ 240,000	\$ 158,140
	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	1/1/2015	6/1/2017			\$ 1,430,380	\$ 6,391,600	\$ 6,467,241
	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	1/1/2015	6/1/2017			\$ 602,086	\$ 2,690,400	\$ 2,722,238
	HITCHLAND INTERCHANGE () 230/115/13.2KV TRANSFORMER CKT 2 Accelerate	6/1/2015	6/1/2017			\$ 43,232	\$ 473,414	\$ 192,608
	SOUTHWESTERN STATION - WASHITA 138KV CKT 2	10/1/2014	6/1/2017			\$ 115,596	\$ 2,260,000	\$ 389,512
					Total	\$ 4,551,154	\$ 22,467,414	\$ 20,464,957

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77341873	Line - Clark County - Thistle 345 kV dbl Ckt	6/1/2014	1/1/2015		
	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	6/1/2014	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	6/1/2014	7/1/2014		
	Line - Spearville - Clark County 345 kV dbl Ckt	6/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbl Ckt PW	6/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbl Ckt WERE	6/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	6/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbl Ckt PW	6/1/2014	1/1/2015		
	Line - Tuco - Woodward 345 kV line OKGE	6/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	6/1/2014	6/1/2014		
	XFR - Thistle 345/138 kV	6/1/2014	1/1/2015		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77341873	BUSHLAND INTERCHANGE - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1	6/1/2014	6/1/2016		
	CANYON EAST SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	1/1/2015	6/1/2017		
	FLETCHER - MARLOW JCT 69KV CKT 1	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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77341873	CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1	1/1/2015	6/1/2017		
	Mustang to Shell CO2 115 kV	6/1/2019	6/1/2019		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77341873	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		
	G03-05T 138.00 - PARADISE 138KV CKT 1	6/1/2010	6/1/2013		
	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		
	WOODWARD - WOODWARD EHV 138KV CKT 2	1/1/2010	1/1/2010		
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010		

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

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

Customer Study Number
SPSM 2012-AG3-010

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
SPSM	77341881	WFEC	SPS	44	6/1/2017	6/1/2047			\$ 7,289,885	\$ -	\$ 7,289,885	\$ 32,817,787
									\$ 7,289,885	\$ -	\$ 7,289,885	\$ 32,817,787

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77341881	CANYON WEST SUB - DAWN SUB 115KV CKT 1	1/1/2015	6/1/2017			\$ 3,778,114	\$ 10,412,000	\$ 17,082,157
	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1	10/1/2015	6/1/2016			\$ 25,403	\$ 240,000	\$ 135,019
	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	1/1/2015	6/1/2017			\$ 2,319,265	\$ 6,391,600	\$ 10,486,197
	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	1/1/2015	6/1/2017			\$ 976,242	\$ 2,690,400	\$ 4,413,927
	HITCHLAND INTERCHANGE () 230/115/13.2KV TRANSFORMER CKT 2 Accelerate	6/1/2015	6/1/2017			\$ 52,839	\$ 473,414	\$ 235,409
	SOUTHWESTERN STATION - WASHITA 138KV CKT 2	10/1/2014	6/1/2017			\$ 138,022	\$ 2,260,000	\$ 465,078
					Total	\$ 7,289,885	\$ 22,467,414	\$ 32,817,787

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77341881	Line - Clark County - Thistle 345 kV dbl Ckt	6/1/2014	1/1/2015		
	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	6/1/2014	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	6/1/2014	7/1/2014		
	Line - Spearville - Clark County 345 kV dbl Ckt	6/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbl Ckt PW	6/1/2014	1/1/2015		
	Line - Thistle - Wichita 345 kV dbl Ckt WERE	6/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	6/1/2014	1/1/2015		
	Line - Thistle - Woodward 345 kV dbl Ckt PW	6/1/2014	1/1/2015		
	Line - Tuco - Woodward 345 kV line OKGE	6/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	6/1/2014	6/1/2014		
	XFR - Thistle 345/138 kV	6/1/2014	1/1/2015		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77341881	BUSHLAND INTERCHANGE - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1	6/1/2014	6/1/2016		
	CANYON EAST SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	1/1/2015	6/1/2017		
	FLETCHER - MARLOW JCT 69KV CKT 1	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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77341881	CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1	1/1/2015	6/1/2017		
	Mustang to Shell CO2 115 kV	6/1/2019	6/1/2019		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77341881	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		
	G03-05T 138.00 - PARADISE 138KV CKT 1	6/1/2010	6/1/2013		
	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		
	WOODWARD - WOODWARD EHV 138KV CKT 2	1/1/2010	1/1/2010		
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010		

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

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

Customer **Study Number**
 WFEC 2012-AG3-008

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
WFEC	77193289	WFEC	WFEC	320	3/1/2017	3/1/2042	6/1/2019	6/1/2044	\$ 1,780,517	\$ -	\$ 1,780,517	\$ 6,557,245
									\$ 1,780,517	\$ -	\$ 1,780,517	\$ 6,557,245

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77193289	HOLT - NELIGH 345KV CKT 1	10/1/2014	6/1/2019		Yes	\$ 1,780,517	\$ 30,656,000	\$ 6,557,245
					Total	\$ 1,780,517	\$ 30,656,000	\$ 6,557,245

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77193289	Cherry Co - Gentleman 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co - Holt Co 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co 345 kV Terminal Upgrades	6/1/2014	1/1/2018		Yes
	Neligh - Hoskins 345 kV Ckt1	6/1/2014	3/1/2019		Yes
	Neligh 345/115 kV Transformer	6/1/2014	3/1/2019		Yes
	PAOLI - PAYNE 138.00 138KV CKT 1	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		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77193289	EVANS ENERGY CENTER NORTH - MAIZE 138KV CKT 1 #1	6/1/2019	6/1/2019		

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77193289	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2014	6/1/2016		
	G03-05T 138.00 - PARADISE 138KV CKT 1	6/1/2010	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		
	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 - IODINE 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 2	1/1/2010	1/1/2010		
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010		

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

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

Customer Study Number
WRGS 2012-AG3-002

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
WRGS	77379445	WR	EES	50	1/1/2014	1/1/2019	6/1/2019	6/1/2024	\$ -	\$ 3,840,000	\$ 879,937	\$ 1,572,192
									\$ -	\$ 3,840,000	\$ 879,937	\$ 1,572,192

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77379445	HOLT - NELIGH 345KV CKT 1	10/1/2014	6/1/2019		Yes	\$ 879,937	\$ 30,656,000	\$ 1,572,192
					Total	\$ 879,937	\$ 30,656,000	\$ 1,572,192

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77379445	HARPER - MILAN TAP 138KV CKT 1 #1	6/1/2014	12/1/2014		Yes
	HAYS PLANT - SOUTH HAYS 115KV CKT 1 #2	6/1/2014	6/1/2016		
	Line - Clark County - Thistle 345 kV dbI Ckt	6/1/2014	1/1/2015		Yes
	Line - Hitchland - Woodward 345 kV dbI Ckt OKGE	6/1/2014	7/1/2014		Yes
	Line - Hitchland - Woodward 345 kV dbI Ckt SPS	6/1/2014	7/1/2014		Yes
	Line - Spearville - Clark County 345 kV dbI Ckt	6/1/2014	1/1/2015		Yes
	Line - Thistle - Wichita 345 kV dbI Ckt PW	6/1/2014	1/1/2015		Yes
	Line - Thistle - Wichita 345 kV dbI Ckt WERE	6/1/2014	1/1/2015		Yes
	Line - Thistle - Woodward 345 kV dbI Ckt OKGE	6/1/2014	1/1/2015		Yes
	Line - Thistle - Woodward 345 kV dbI Ckt PW	6/1/2014	1/1/2015		Yes
	Line - Tuco - Woodward 345 kV line OKGE	6/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	6/1/2014	6/1/2014		
	XFR - Thistle 345/138 kV	6/1/2014	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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77379445	Cherry Co - Gentleman 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co - Holt Co 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co 345 kV Terminal Upgrades	6/1/2014	1/1/2018		Yes
	Neligh - Hoskins 345 kV Ckt1	6/1/2014	3/1/2019		Yes
	Neligh 345/115 kV Transformer	6/1/2014	3/1/2019		Yes

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77379445	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerate	6/1/2014	6/1/2017		Yes
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerate	6/1/2014	6/1/2017		Yes
	HARPER - MILAN TAP 138KV CKT 1 #2 Accelerate	6/1/2014	6/1/2017		Yes
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2014	6/1/2017		Yes

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

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77379445	ALBION - PETERSBURG 115KV CKT 1	1/1/2013	1/1/2013		
	ALEXANDER - PRATT 115KV CKT 1	12/1/2009	6/1/2013		
	BARBER - SAWYER 115KV CKT 1	12/1/2009	6/1/2013		
	BARBER (BARBER 4) 138/115/2.72KV TRANSFORMER CKT 1	12/1/2009	6/1/2013		
	CANTON - TALOGA 69KV CKT 1	6/1/2011	6/1/2013		
	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		
	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		
	G03-05T 138.00 - PARADISE 138KV CKT 1	6/1/2010	6/1/2013		
	GREENLEAF - KNOB HILL 115KV CKT 1 MKEC	6/1/2013	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		
	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1	6/1/2006	6/1/2008		
	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		
	RICE_CO 230/115KV TRANSFORMER CKT 1	10/1/2012	11/15/2012		
	Spearville 345/115/13.8kV Transformer CKT 3	10/1/2013	6/1/2015		
	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		
	WOODWARD - WOODWARD EHV 138KV CKT 2	1/1/2010	1/1/2010		
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010		

Potential reservation deferral and redispatch requirement on the following upgrades due to positive MW Impact on limitations that require upgrade. No cost assignment due to negative MW impact on defined upgrade.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77379445	Iatan - Jeffrey Energy Center 345 kV KACP	6/1/2014	6/1/2019		Yes
	Iatan - Jeffrey Energy Center 345 kV WERE	6/1/2014	6/1/2019		Yes

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

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

Customer Study Number
WRGS 2012-AG3-005

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
WRGS	77409901	WR	EES	106	1/1/2014	1/1/2019	6/1/2019	6/1/2024	\$ -	\$ 8,140,800	\$ 725,148	\$ 1,295,629
									\$ -	\$ 8,140,800	\$ 725,148	\$ 1,295,629

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77409901	HOLT - NELIGH 345KV CKT 1	10/1/2014	6/1/2019		Yes	\$ 725,148	\$ 30,656,000	\$ 1,295,629
					Total	\$ 725,148	\$ 30,656,000	\$ 1,295,629

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77409901	HARPER - MILAN TAP 138KV CKT 1 #1	6/1/2014	12/1/2014		Yes
	Line - Clark County - Thistle 345 kV dbl Ckt	6/1/2014	1/1/2015		Yes
	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	6/1/2014	7/1/2014		
	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	6/1/2014	7/1/2014		
	Line - Spearville - Clark County 345 kV dbl Ckt	6/1/2014	1/1/2015		Yes
	Line - Thistle - Wichita 345 kV dbl Ckt PW	6/1/2014	1/1/2015		Yes
	Line - Thistle - Wichita 345 kV dbl Ckt WERE	6/1/2014	1/1/2015		Yes
	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	6/1/2014	1/1/2015		Yes
	Line - Thistle - Woodward 345 kV dbl Ckt PW	6/1/2014	1/1/2015		Yes
	Line - Tuco - Woodward 345 kV line OKGE	6/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	6/1/2014	6/1/2014		
	XFR - Thistle 345/138 kV	6/1/2014	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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77409901	Cherry Co - Gentleman 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co - Holt Co 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co 345 kV Terminal Upgrades	6/1/2014	1/1/2018		Yes
	Neligh - Hoskins 345 kV Ckt1	6/1/2014	3/1/2019		Yes
	Neligh 345/115 kV Transformer	6/1/2014	3/1/2019		Yes
	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

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77409901	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerate	6/1/2014	6/1/2017		Yes
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerate	6/1/2014	6/1/2017		Yes
	EVANS ENERGY CENTER NORTH - MAIZE 138KV CKT 1 #1	6/1/2019	6/1/2019		
	HARPER - MILAN TAP 138KV CKT 1 #2 Accelerate	6/1/2014	6/1/2017		Yes
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2014	6/1/2017		Yes

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

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77409901	ALEXANDER - PRATT 115KV CKT 1	12/1/2009	6/1/2013		
	BANN - RED SPRINGS REC 138KV CKT 1	7/1/2012	7/1/2012		
	BARBER - MEDICINE LODGE 115KV CKT 1	12/1/2009	6/1/2013		
	BARBER - SAWYER 115KV CKT 1	12/1/2009	6/1/2013		
	BARBER (BARBER 4) 138/115/2.72KV TRANSFORMER CKT 1	12/1/2009	6/1/2013		
	BEELINE - EXPLORER GLENPOOL TAP 138KV CKT 1	6/1/2009	6/1/2009		
	CANTON - TALOGA 69KV CKT 1	6/1/2011	6/1/2013		
	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		
	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2011	6/1/2013		
	EXPLORER GLENPOOL TAP - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009		
	EXPLORER GLENPOOL TAP - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009		
	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		
	G03-05T 138.00 - PARADISE 138KV CKT 1	6/1/2010	6/1/2013		
	GREENLEAF - KNOB HILL 115KV CKT 1 MKEC	6/1/2013	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		
	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1	6/1/2006	6/1/2008		
	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		
	MCNAB REC - TURK 115KV CKT 1	7/1/2012	7/1/2012		
	NORTHWEST - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	Spearville 345/115/13.8kV Transformer CKT 3	10/1/2013	6/1/2015		
	SUB 110 - ORONOGO JCT. - SUB 167 - RIVERTON 161KV CKT 1	6/1/2011	6/1/2011		
	TALOGA (TALOGA) 138/69/13.8KV TRANSFORMER CKT 1	10/1/2010	6/1/2013		
	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		
	WOODWARD - WOODWARD EHV 138KV CKT 2	1/1/2010	1/1/2010		
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010		

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

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

Customer Study Number
WRGS 2012-AG3-006

Customer	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date Without Redispatch	Deferred Stop Date Without Redispatch	Potential Base Plan Funding Allowable	Point-to-Point Base Rate	Allocated E & C Cost	Total Revenue Requirements
WRGS	77409994	SPS	EES	106	1/1/2014	1/1/2019	6/1/2019	6/1/2024	\$ -	\$ 8,140,800	\$ 2,282,042	\$ 4,077,347
									\$ -	\$ 8,140,800	\$ 2,282,042	\$ 4,077,347

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
77409994	HOLT - NELIGH 345KV CKT 1	10/1/2014	6/1/2019		Yes	\$ 2,282,042	\$ 30,656,000	\$ 4,077,347
Total						\$ 2,282,042	\$ 30,656,000	\$ 4,077,347

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77409994	HARPER - MILAN TAP 138KV CKT 1 #1	6/1/2014	12/1/2014		Yes
	HAYS PLANT - SOUTH HAYS 115KV CKT 1 #2	6/1/2014	6/1/2016		
	Line - Clark County - Thistle 345 kV dbl Ckt	6/1/2014	1/1/2015		Yes
	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	6/1/2014	7/1/2014		Yes
	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	6/1/2014	7/1/2014		Yes
	Line - Spearville - Clark County 345 kV dbl Ckt	6/1/2014	1/1/2015		Yes
	Line - Thistle - Wichita 345 kV dbl Ckt PW	6/1/2014	1/1/2015		Yes
	Line - Thistle - Wichita 345 kV dbl Ckt WERE	6/1/2014	1/1/2015		Yes
	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	6/1/2014	1/1/2015		Yes
	Line - Thistle - Woodward 345 kV dbl Ckt PW	6/1/2014	1/1/2015		Yes
	Line - Tuco - Woodward 345 kV line OKGE	6/1/2014	6/1/2014		
	Line - Tuco - Woodward 345 kV line SPS	6/1/2014	6/1/2014		
	XFR - Thistle 345/138 kV	6/1/2014	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.

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77409994	Cherry Co - Gentleman 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co - Holt Co 345 kV Ckt1	6/1/2014	1/1/2018		Yes
	Cherry Co 345 kV Terminal Upgrades	6/1/2014	1/1/2018		Yes
	Elk City to Gracemont 345kV AEPW	10/1/2014	3/1/2018		Yes
	Elk City to Gracemont 345kV OKGE	10/1/2014	3/1/2018		Yes
	Neligh - Hoskins 345 kV Ckt1	6/1/2014	3/1/2019		Yes
	Neligh 345/115 kV Transformer	6/1/2014	3/1/2019		Yes

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77409994	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerate	6/1/2014	6/1/2017		Yes
	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerate	6/1/2014	6/1/2017		Yes
	GLASS MOUNTAIN - MOORELAND 138KV CKT 1	6/1/2014	6/1/2015		Yes
	HARPER - MILAN TAP 138KV CKT 1 #2 Accelerate	6/1/2014	6/1/2017		Yes
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2014	6/1/2017		Yes
	MEDICINE LODGE - PRATT 115KV CKT 1	6/1/2014	6/15/2014		Yes

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

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

Reservation	Upgrade Name	DUN	EOC	Earliest Start Date	Redispatch Available
77409994	ALBION - PETERSBURG 115KV CKT 1	1/1/2013	1/1/2013		
	ALTUS SW - NAVAJO 69KV CKT 1	6/1/2013	6/1/2013		
	BARBER - MEDICINE LODGE 115KV CKT 1	12/1/2009	6/1/2013		
	BARBER (BARBER 4) 138/115/2.72KV TRANSFORMER CKT 1	12/1/2009	6/1/2013		
	BEELINE - EXPLORER GLENPOOL TAP 138KV CKT 1	6/1/2009	6/1/2009		
	CANTON - TALOGA 69KV CKT 1	6/1/2011	6/1/2013		
	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		
	CIRCLE - RICE_CO 230KV CKT 1	10/1/2012	11/15/2012		
	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2011	6/1/2013		
	EXPLORER GLENPOOL TAP - RIVERSIDE STATION 138KV CKT 1 AEPW	6/1/2009	6/1/2009		
	EXPLORER GLENPOOL TAP - RIVERSIDE STATION 138KV CKT 1 OKGE	6/1/2009	6/1/2009		
	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		
	G03-05T 138.00 - PARADISE 138KV CKT 1	6/1/2010	6/1/2013		
	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		
	GREENLEAF - KNOB HILL 115KV CKT 1 MKEC	6/1/2013	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		
	Judson Large - North Judson Large 115KV CKT 2	10/1/2013	6/1/2015		
	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1	6/1/2006	6/1/2008		
	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		
	MCNAB REC - TURK 115KV CKT 1	7/1/2012	7/1/2012		
	NELIGH - PETERSBURG 115KV CKT 1	1/1/2013	1/1/2013		
	North Judson Large - Spearville 115KV CKT 2	10/1/2013	6/1/2015		
	NORTHWEST - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	RICE_CO 230/115KV TRANSFORMER CKT 1	10/1/2012	11/15/2012		
	Spearville 345/115/13.8kv Transformer CKT 3	10/1/2013	6/1/2015		
	SUB 110 - ORONOGO JCT. - SUB 167 - RIVERTON 161KV CKT 1	6/1/2011	6/1/2011		
	TALOGA (TALOGA) 138/69/13.8KV TRANSFORMER CKT 1	10/1/2010	6/1/2013		
	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		
	WOODWARD - WOODWARD EHV 138KV CKT 2	1/1/2010	1/1/2010		
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010		

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

Transmission Owner	Upgrade	Solution	Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)	Estimated Engineering & Construction Cost
AEPW	CHAPEL HILL REC - WELSH REC 138KV CKT 1	Rebuild 4.39 miles, and replace switches	6/1/2019	6/1/2019	\$ 5,268,000
AEPW	ERCOT North HVDC Tie Expansion	Add 200 MW HVDC Tie	5/1/2014	6/1/2019	\$ 65,000,000
AEPW	OKLAUNION 345KV SVC	Add +100/-50 SVC on 345 kV bus at Oklaunion.	5/1/2014	6/1/2019	\$ 18,500,000
AEPW	TERRA NITROGEN TAP - VERDIGRIS 138KV CKT 1	Rebuild 4.31 miles with 1533.3 ACSR/TW	6/1/2014	6/1/2017	\$ 5,172,000
KACP	Iatan - Jeffrey Energy Center 345 kV KACP	Build 14.2 miles of new 345 kV	6/1/2014	6/1/2019	\$ 14,089,880
KACY	KAW WEST 5 161/69KV TRANSFORMER CKT 1	Note 1	6/1/2014	6/1/2014	\$ -
NPPD	HOLT - NELIGH 345KV CKT 1	Build new 16 miles 345 kV Holt - Neligh and associated terminal equipment	10/1/2014	6/1/2019	\$ 30,656,000
SPS	AMARILLO SOUTH INTERCHANGE - SWISHER COUNTY INTERCHANGE 230KV CKT 1	Upgrade 800A wave trap at both AMARILLO SOUTH 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.	10/1/2014	6/1/2016	\$ 160,000
SPS	CANYON WEST SUB - DAWN SUB 115KV CKT 1	Rebuild 13.7 mile 115 kV line.	1/1/2015	6/1/2017	\$ 10,412,000
SPS	Carlisle - SP Erskine 115 kV Ckt 1	Reconductor 1.49 miles from Carlisle to SP-Erskine.	6/1/2019	6/1/2019	\$ 886,550
SPS	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1	Replace Terminal Equipment	10/1/2015	6/1/2016	\$ 240,000
SPS	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	Rebuild 8.41 mile 115 kV line.	1/1/2015	6/1/2017	\$ 6,391,600
SPS	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	Rebuild 3.54 mile 115 kV line.	1/1/2015	6/1/2017	\$ 2,690,400
SPS	HITCHLAND INTERCHANGE () 230/115/13.2KV TRANSFORMER CKT 2 Accelerate	Build a second 230/115/13.2 kV transformer at Hitchland.	6/1/2015	6/1/2017	\$ 473,414
WERE	Iatan - Jeffrey Energy Center 345 kV WERE	Build 56.8 miles of new 345 kV	6/1/2014	6/1/2019	\$ 128,776,067
WFEC	LAKE CREEK - LONEWOLF 69KV CKT 1	Replace Terminal Equipment	6/1/2014	6/1/2016	\$ 225,000
WFEC	SOUTHWESTERN STATION - WASHITA 138KV CKT 2	Add Second 138 kV line	10/1/2014	6/1/2017	\$ 2,260,000

Note 1: Upgrade scope is at the discretion of Kansas Public Board of Utilities.

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	Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)
MIPU	BLUE SPRING SOUTH - BLUE SPRINGS EAST 161KV CKT 1 #1 Accelerate	Upgrade wave trap.	6/1/2014	6/1/2015
MIPU	BLUE SPRING SOUTH - BLUE SPRINGS EAST 161KV CKT 1 #2 Accelerate	Reconductor 2.5 mile from Blue Springs South - Blue Springs East 161 kV to 795 ACSS. Upgrade substation equipment to 2000 Amps.	6/1/2014	6/1/2016
MIPU	BLUE SPRING SOUTH - PRAIRIE LEE 161KV CKT 1 #2 Accelerate	Reconductor 3.21 miles from Blue Springs South to Prairie Lee 161 kV to 954 ACSS. Upgrade substation equipment to 2000 Amps.	6/1/2014	6/1/2016
MKEC	CLEARWATER - MILAN TAP 138KV CKT 1 MKEC Accelerate	Rebuild MKEC portion of the 5.6 mile Clearwater-Milan Tap 115 kV with bundled 1192.5 kcmil ACSR conductor (Bunting)	6/1/2014	6/1/2017
MKEC	HARPER - MILAN TAP 138KV CKT 1 #2 Accelerate	Reconductor 22.1 mile Harper to Milan Tap 138 kV line.	6/1/2014	6/1/2017
MKEC	MEDICINE LODGE - PRATT 115KV CKT 1	Rebuild 26 mile line	6/1/2014	6/15/2014
OKGE	HANCOCK - MUSKOGEE 161KV CKT 1 Accelerate	Upgrade the Muskogee CT rating from 800 amps to 1200 amps.	6/1/2014	10/1/2015
SPS	CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1	Rebuild 3.73 miles to at least 107 MVA Summer Rate B and 127 MVA Winter Rate B.	1/1/2015	6/1/2017
SPS	Mustang to Shell CO2 115 kV	Build 6.3 mile 115 kV line from Mustang to Shell CO2 Build a new 6.9 mile 115kV line between the Mustang and Shell CO2 substations.	6/1/2019	6/1/2019
WERE	CLEARWATER - MILAN TAP 138KV CKT 1 WERE Accelerate	Rebuild Westar portion of the Clearwater-Milan tap 115 kV with bundled 1192.5 kcmil ACSR conductor (Bunting)	6/1/2014	6/1/2017
WERE	EVANS ENERGY CENTER NORTH - MAIZE 138KV CKT 1 #1	Upgrade disconnect switches, wavetrap, breaker, jumpers to at least 413 MVA Summer Rate B.	6/1/2019	6/1/2019
WERE	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	Rebuild the JEC - Hoyt 345kV line as a single circuit with new conductor, poles, and shield wire and substation work	6/1/2014	6/1/2017
WFEC	CANTON - TALOGA 69KV CKT 1	UPGRADE CANTON TO TALOGA TO 336.4	6/1/2014	6/1/2015
WFEC	GLASS MOUNTAIN - MOORELAND 138KV CKT 1	Reset CT	6/1/2014	6/1/2015

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

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)
ITCGP	Line - Clark County - Thistle 345 kV dbl Ckt	Build a new 86 mile double circuit 345 kV line with at least 3000 A 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 necessary terminal equipment.	6/1/2014	1/1/2015
ITCGP	Line - Spearville - Clark County 345 kV dbl Ckt	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 necessary terminal equipment.	6/1/2014	1/1/2015
ITCGP	XFR - Thistle 345/138 kV	Install a 400 MVA 345/138 kV transformer at the new 345 kV Thistle substation.	6/1/2014	1/1/2015
KACP	IATAN - NASHUA 345KV CKT 1	Tap Nashua 345kV bus in Hawthorn - St. Joseph 345 kV line. Build new 345 kV line from Iatan to Nashua, Add Nashua 345/161 kV	6/1/2014	6/1/2015
MIDW	HAYS PLANT - SOUTH HAYS 115KV CKT 1 #2	Tear down and rebuild of existing South Hays - Hays Plant 115 kV line. Tentative plans include rebuilding on existing right-of-way with the possibility of re-routing a portion of the line to new right-of-way as necessary.	6/1/2014	6/1/2016
MKEC	HARPER - MILAN TAP 138KV CKT 1 #1	Replace Wave Trap at Harper Substation	6/1/2014	12/1/2014
OKGE	Line - Hitchland - Woodward 345 kV dbl Ckt OKGE	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 interception from the Hitchland substation. Upgrade the Woodward District EHV substation with the necessary breakers and term	6/1/2014	7/1/2014
OKGE	Line - Thistle - Woodward 345 kV dbl Ckt OKGE	Build a new 79 mile double circuit 345 kV line with at least 3000 A capacity from the Woodward District EHV substation to the Kansas/Oklahoma state border towards the Thistle substation. Upgrade the Woodward District EHV substation with the necessary brea	6/1/2014	1/1/2015
OKGE	Line - Tuco - Woodward 345 kV line OKGE	Build new 345 kV line from Woodward EHV to Border - Project costs now include Border reactor substation	6/1/2014	6/1/2014
PW	Line - Thistle - Wichita 345 kV dbl Ckt PW	Build a new 78 mile double circuit 345 kV line with at least 3000 A capacity from the Wichita substation to the new Thistle 345 kV substation.	6/1/2014	1/1/2015
PW	Line - Thistle - Woodward 345 kV dbl Ckt PW	Build a new 30 mile double circuit 345 kV line with at least 3000 A capacity from the Thistle substation to the Kansas/Oklahoma state border towards the Woodward District EHV substation.	6/1/2014	1/1/2015
SPS	Carlisle Interchange - Wolfforth Interchange 230 kV Ckt 1	Build 15 miles of new 230 kV line from Carlisle to Wolfforth South and install necessary terminal equipment.	6/1/2019	6/1/2019
SPS	Line - Hitchland - Woodward 345 kV dbl Ckt SPS	Build 30 mile double circuit 345 kV line with at least 3000 A capacity from the Hitchland substation to the OGE interception point from the Woodward District EHV substation. Upgrade the Hitchland substation with the necessary breakers and terminal equipme	6/1/2014	7/1/2014
SPS	Line - Tuco - Woodward 345 kV line SPS	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 Tuco.	6/1/2014	6/1/2014
WERE	Line - Thistle - Wichita 345 kV dbl Ckt WERE	Upgrade the Wichita substation with the necessary breakers and terminal equipment to accommodate two new 345 kV circuits from the new Thistle 345 kV substation	6/1/2014	1/1/2015

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

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

Transmission Owner	Upgrade	Solution	Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)
AEPW	Elk City to Gracemont 345kV AEPW	Build new 46.5 mile 345 kV line from Elk City to Gracemont (AEP portion).	10/1/2014	3/1/2018
AEPW	Multi - Centerton - Osage Creek 345 kV	Install new 345/161 kV transformer at Kings River (Previous name Osage Creek); Install 9 miles of 345 kV line from Shipe Road to East Rogers; Install 32 miles of 345 kV line from East Rogers to Kings River (previous Osage Creek).	6/1/2014	6/1/2016
AEPW	Multi - Flint Creek – Centerton 345 kV and Centerton- East Centerton 161 kV	Install 9 miles of 161 kV from new Shipe Road Substation to East Centerton Substation; Install 345/161 kV transformer at Shipe Road; Install 18 miles of new 345 kV, 2-954 ACSR line.	6/1/2014	6/1/2014
AEPW	Welsh REC - Wilkes 138KV Ckt	Rebuild 23.7 miles of 138 kV line from Wilkes to Welsh Reserve with 1926.9 ACSR/TW. Upgrade switches at both ends and wave traps, jumpers, CT ratios, and relay settings at Wilkes.	6/1/2019	6/1/2019
NPPD	Cherry Co - Gentleman 345 kV Ckt1	Build new 345 kV Transmission Line from GGS 345 kV Substation to a new Cherry County 345 kV Substation (76 miles).	6/1/2014	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).	6/1/2014	1/1/2018
NPPD	Cherry Co 345 kV Terminal Upgrades	Build new Cherry County 345 kV Substation.	6/1/2014	1/1/2018
NPPD	Neligh - Hoskins 345 kV Ckt1	Build a new 50 mile 345 kV line from Hoskins to Neligh	6/1/2014	3/1/2019
NPPD	Neligh 345/115 kV Transformer	Construct new substation at Neligh. Install a new 345/115 kV transformer at Neligh.	6/1/2014	3/1/2019
OKGE	Elk City to Gracemont 345kV OKGE	Build new 46.5 mile 345 kV line from Elk City to Gracemont (OGE portion).	10/1/2014	3/1/2018
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.	6/1/2014	6/1/2016
SPS	CANYON EAST SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	Rebuild 18 miles to at least 107 MVA Summer Rate B and 127 MVA Winter Rate B.	1/1/2015	6/1/2017
SPS	Indiana - SP Erskine 115 kV Ckt 1	Reconductor 4 miles from Indiana to SP-Erskine.	6/1/2019	6/1/2019
SPS	Indiana - Stanton 115 kV Ckt 1	Reconductor 1.5 miles line from Indiana to Stanton.	6/1/2019	6/1/2019
SPS	MULTI - Tuco-New Deal 345 kV	New 345/155kV transformer between Tuco and Stanton, Build new 345kV line between Tuco and high side of new transformer between Tuco and Stanton, Build new 115kV line between Stanton and low side of new transformer between Tuco and Stanton	6/1/2019	6/1/2019
WERE	BUTLER - WEAVER 138KV CKT 1	Rebuild 16.31 miles	6/1/2014	6/1/2017
WERE	Viola - Clearwater 138kV Ckt1	Build new 138kV line between new Viola substation 345/138 kV transformer and existing Clearwater 138 kV substation.	10/1/2014	6/1/2018
WERE	Viola - Gill 138kV Ckt1	Build new 138kV line between new Viola substation 345/138 kV transformer and existing Gill 138 kV substation.	10/1/2014	6/1/2018
WERE	Viola 345/138kV Transformer Ckt 1	Install new 345/138 kV transformer at Viola substation	10/1/2014	6/1/2018
WFEC	FLETCHER - MARLOW JCT 69KV CKT 1	Replace Terminal Equipment	6/1/2019	6/1/2019
WFEC	PAOLI - PAYNE 138.00 138KV CKT 1	Reset CT	6/1/2019	6/1/2019

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

Transmission Owner	Upgrade	Solution	Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)
AEPW	ALUMAX TAP - BANN 138KV CKT 1	Replace six (6) 138 kV switches, five at Bann & one at Alumax Tap. Rebuild 0.67 miles of 1024 ACAR with 2156 ACSR. Replace wavetrap & jumpers @ Bann. Replace breaker 3300 @ Bann.	6/1/2008	6/1/2008
AEPW	ASHDOWN REC (MILLWOOD) - OKAY 138KV CKT 1	Reconductor and convert line to 138 kV and replace switches at Ashdown REC	7/1/2012	7/1/2012

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

AEPW	ASHDOWN REC (MILLWOOD) - PATTERSON 138KV CKT 1	Reconductor Line & Convert Line to 138 kV and convert Patterson station to breaker-and-a half configuration	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	EXPLORER GLENPOOL TAP - RIVERSIDE STATION 138KV CKT 1 AEPW	Reconductor 1.82 miles with ACCC. Replace wave trap jumpers at Riverside.	6/1/2009	6/1/2009
AEPW	HUGO POWER PLANT - VALLIANT 345 KV AEPW	Valliant 345 KV line terminal	7/1/2012	7/1/2012
AEPW	MANDEVILTP4 - SE TEXARKANA 138KV CKT 1	Build new Turk-SE Texarkana 138 kV line and add SE Texarkana 138 kV terminal.	7/1/2012	7/1/2012
AEPW	MANDEVILTP4 - TURK 138KV CKT 1	Build new Turk-SE Texarkana 138 kV line and add SE Texarkana 138 kV terminal.	7/1/2012	7/1/2012
AEPW	MCNAB REC - TURK 115KV CKT 1	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 Turk - Hope 115 kV line.	7/1/2012	7/1/2012
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
KACP	LACYGNE - WEST GARDNER 345KV CKT 1	KCPL Sponsored Project to Reconductor Line to be In-Service by 6/1/2006	6/1/2006	6/1/2006
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	ALEXANDER - PRATT 115KV CKT 1	Rebuild line	12/1/2009	6/1/2013
MKEC	ALEXANDER - SAWYER 3 115.00 115KV CKT 1	Rebuild line	12/1/2009	6/1/2013
MKEC	BARBER - MEDICINE LODGE 115KV CKT 1	Rebuild line	12/1/2009	6/1/2013
MKEC	BARBER - SAWYER 115KV CKT 1	Rebuild line	12/1/2009	6/1/2013
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
MKEC	Judson Large - North Judson Large 115KV CKT 2	Construct approximately 1 mile of new 115kV for 2nd circuit	10/1/2013	6/1/2015
MKEC	North Judson Large - Spearville 115KV CKT 2	Construct approximately 15 miles of new 115kV for 2nd circuit	10/1/2013	6/1/2015
MKEC	Spearville 345/115/13.8kV Transformer CKT 3	Install 345/115/13.8kV Transformer CKT 3 at Spearville	10/1/2013	6/1/2015
NPPD	ALBION - PETERSBURG 115KV CKT 1	Replace Breaker Switch 1106-D and jumpers at Albion. Replace main bus at Petersburg. Upgrade and replace transmission structures on 115 kV line to facilitate 100 degrees Centigrade line operation.	1/1/2013	1/1/2013
NPPD	NELIGH - PETERSBURG 115KV CKT 1	Replace Breaker 1106, jumpers, and 115 kV Switch 1106-D2 at Neligh. Replace main bus at Petersburg. Upgrade and replace transmission structures on 115 kV line to facilitate 100 degrees Centigrade line operation.	1/1/2013	1/1/2013
OKGE	BEELINE - EXPLORER GLENPOOL TAP 138KV CKT 1	Reconductor .92miles of line with Drake ACCC/TW.	6/1/2009	6/1/2009
OKGE	CIMARRON - DRAPER LAKE 345KV CKT 1	Increase capacity of Draper Lake CT and Cimarron wave trap	10/1/2014	6/1/2016
OKGE	EXPLORER GLENPOOL TAP - RIVERSIDE STATION 138KV CKT 1 OKGE	Reconductor 1.82 miles line with Drake ACCC/TW.	6/1/2009	6/1/2009
OKGE	GRACMNT4 138.00 - WASHITA 138KV CKT 2 OKGE	Build 138kV Terminal.	1/1/2012	1/1/2012
OKGE	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1	Replace bus tie with 100MVA transformer	6/1/2006	6/1/2008
OKGE	NORTHWEST - TATONGA 345KV CKT 1	Build 345 kV line	1/1/2010	1/1/2010
OKGE	TATONGA - WOODWARD 345KV CKT 1	Build 345 kV line	1/1/2010	1/1/2010
OKGE	WOODWARD - IODINE 138KV CKT 1	Tap Iodine to Woodward 138 kV line	1/1/2010	1/1/2010
OKGE	WOODWARD - WOODWARD EHV 138KV CKT 1	Build .5 miles of 138 kV and install terminal equipment	1/1/2010	1/1/2010
OKGE	WOODWARD - WOODWARD EHV 138KV CKT 2	Build .5 miles of 138 kV and install terminal equipment	1/1/2010	1/1/2010
OKGE	WOODWARD 345/138KV TRANSFORMER CKT 1	Install 345/138 kV XF	1/1/2010	1/1/2010
SPS	CHERRY6 230.00 - Harrington Station East Bus 230KV CKT 1	Replace wavetrap at Harrington East	6/1/2015	6/1/2015
WERE	LYONS - WHEATLAND 115KV CKT 1 #1	Replace CTs	10/1/2012	7/15/2013
WERE	LYONS - WHEATLAND 115KV CKT 1 #2	Rerate circuit to 1000 amps	10/1/2012	7/15/2013
WFEC	ALTUS SW - NAVAJO 69KV CKT 1	Upgrade Terminal Equipment at Altus SW, 300-600A, new rating conductor 53/65MVA	6/1/2013	6/1/2013
WFEC	CANTON - TALOGA 69KV CKT 1	UPGRADE CANTON TO TALOGA TO 336.4	6/1/2011	6/1/2013
WFEC	G03-05T 138.00 - PARADISE 138KV CKT 1	Upgrade Paradise to G03-05T to 1113	6/1/2010	6/1/2013
WFEC	GRACMNT4 138.00 - WASHITA 138KV CKT 2 WFEC	Build approximately 6 miles of 138kV.	1/1/2012	1/1/2012

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

WFEC	HUGO POWER PLANT - VALLIANT 345KV CKT 1 WFEC	New 19 miles 345 KV	7/1/2012	7/1/2012
WFEC	HUGO POWER PLANT 345/138KV TRANSFORMER CKT 1	New 345/138 kv Auto	7/1/2012	7/1/2012
WFEC	TALOGA (TALOGA) 138/69/13.8KV TRANSFORMER CKT 1	Auto XFMR 56 to 112MVA	10/1/2010	6/1/2013

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
AECI	FAIRFAX 138/69KV TRANSFORMER CKT 1	Replace with 84 MVA unit	6/1/2019	6/1/2019	\$ 2,000,000
SWPA	BUFORD 5 161.00 - BULL SHOALS 161KV CKT 1 Upgrade #1	Replace one structure and make two structures floating deadends	6/1/2015	6/1/2017	\$ 125,000
SWPA	BUFORD 5 161.00 - NORFORK 161KV CKT 1 Upgrade #1	Replace two structures	6/1/2015	6/1/2017	\$ 100,000