



Aggregate Facility Study SPP-2013-AG2-AFS-6

8/28/2014

SPP Engineering, SPP Transmission Service Studies



Table of Contents

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| Table of Contents | 1 |
| Executive Summary | 2 |
| Introduction..... | 3 |
| Financial Analysis | 5 |
| Third-Party Facilities | 6 |
| Study Methodology | 6 |
| Description | 6 |
| Model Development..... | 7 |
| Transmission Request Modeling..... | 8 |
| Transfer Analysis | 8 |
| Curtailment and Redispatch Evaluation..... | 8 |
| Study Results | 9 |
| Study Analysis Results | 9 |
| Example A:..... | 10 |
| Example B:..... | 10 |
| Example C:..... | 11 |
| Study Definitions | 11 |
| Conclusion | 11 |
| Appendix A | 13 |
| BASE CASE SETTINGS: | 13 |
| ACCC CASE SETTINGS:..... | 13 |

Executive Summary

Pursuant to Attachment Z1 of the Southwest Power Pool, Inc. (SPP) Open Access Transmission Tariff (OATT), 14,024 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 \$400 thousand. Additionally, third party facility upgrade costs are indeterminate.
- Total upgrade levelized revenue requirements for all transmission requests after consideration of potential base plan funding is \$0.

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 August 28, 2014. 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 September 12, 2014, 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.

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.
- All requests for long-term transmission service with a signed study agreement received before June 1, 2013 for 2013-AG2 have been included in this second Aggregate Transmission Service Study (ATSS) of 2013.

. The results of the AFS are detailed in Tables 1 through 7. 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 lists costs allocated per request for Service Upgrades assigned in 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, 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 leveled 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 consistent with current SPP Criteria and NERC Reliability Standard Requirements. 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 nine seasonal models to study the aggregate transfers over a variety of requested service periods. The following SPP Transmission Expansion Plan 2014 Build Cases were used to study the impact of the requested service on the transmission system:

- 2014/15 Winter Peak (14WP)
- 2015 Summer Peak (15SP)
- 2015/16 Winter Peak (15WP)
- 2016 Summer Peak (16SP)
- 2016/17 Winter Peak (16WP)
- 2020 Summer Peak (20SP)
- 2020/21 Winter Peak (20WP)
- 2025 Summer Peak (25SP)
- 2025/26 Winter Peak (25WP)

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 to model the requested service. From the seasonal models, two system scenarios were developed. Scenario 0 includes projected usage of transmission included in the SPP 2014 Series Cases. Scenario 5 includes transmission service not already included in the SPP 2014 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.

Curtailement 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 7 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), 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 lists costs allocated per request for Service Upgrades assigned in this AFS.

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 August 28, 2014. 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 September 12, 2014, 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 redispach | Deferred Stop Date without interim redispach | Start Date with interim redispach | Stop Date with interim redispach | Minimum Allocated ATC (MW) within reservation period | Season of Minimum Allocated ATC within reservation period |
|----------|--------------|-------------|------|------|------------------|----------------------|---------------------|---|--|-----------------------------------|----------------------------------|--|---|
| AECC | AG2-2013-001 | 78296916 | SPA | CSWS | 100 | 7/1/2015 | 7/1/2020 | 7/1/2015 | 7/1/2020 | 7/1/2015 | 7/1/2020 | 0 | 16SP |
| AECC | AG2-2013-002 | 78296940 | SPA | OKGE | 100 | 7/1/2015 | 7/1/2020 | 7/1/2015 | 7/1/2020 | 7/1/2015 | 7/1/2020 | 0 | 16SP |
| GRDX | AG2-2013-004 | 78295225 | OKGE | GRDA | 53 | 12/1/2013 | 6/1/2030 | 1/1/2015 | 7/1/2031 | 1/1/2015 | 7/1/2031 | 0 | 14SP |
| GSECGS | AG2-2013-005 | 78291873 | SPS | SPS | 202 | 1/1/2017 | 1/1/2043 | 6/1/2020 | 6/1/2046 | 6/1/2020 | 6/1/2046 | 0 | 20SP |
| HZN | AG2-2013-010 | 78297226 | OKGE | EES | 43 | 1/1/2016 | 1/1/2021 | 6/1/2018 | 6/1/2023 | Note 4 | Note 4 | 0 | 16SP |
| HZN | AG2-2013-011 | 78297228 | OKGE | EES | 43 | 1/1/2016 | 1/1/2021 | 6/1/2018 | 6/1/2023 | Note 4 | Note 4 | 0 | 16SP |
| HZN | AG2-2013-012 | 78297229 | OKGE | EES | 43 | 1/1/2016 | 1/1/2021 | 1/1/2016 | 1/1/2021 | Note 4 | Note 4 | 0 | 16SP |
| KCPS | AG2-2013-013 | 78297422 | KCPL | KCPL | 5974 | 6/1/2014 | 6/1/2029 | 6/1/2015 | 6/1/2030 | 6/1/2015 | 6/1/2030 | 0 | 14SP |
| KCPS | AG2-2013-014 | 78297429 | KCPL | KCPL | 5914 | 6/1/2014 | 6/1/2029 | 6/1/2015 | 6/1/2030 | 6/1/2015 | 6/1/2030 | 0 | 14SP |
| KCPS | AG2-2013-015 | 78297445 | WR | KCPL | 743 | 6/1/2014 | 6/1/2029 | 6/1/2015 | 6/1/2030 | 6/1/2015 | 6/1/2030 | 0 | 14SP |
| KCPS | AG2-2013-016 | 78297452 | WPEK | KCPL | 101 | 6/1/2014 | 6/1/2020 | 6/1/2015 | 6/1/2021 | 6/1/2015 | 6/1/2021 | 0 | 14SP |
| KCPS | AG2-2013-017 | 78297459 | WPEK | KCPL | 60 | 6/1/2014 | 10/1/2018 | 6/1/2015 | 10/1/2019 | 6/1/2015 | 10/1/2019 | 0 | 14SP |
| KCPS | AG2-2013-018 | 78297542 | NPPD | KCPL | 62 | 6/1/2014 | 1/1/2024 | 6/1/2015 | 1/1/2025 | 6/1/2015 | 1/1/2025 | 0 | 14SP |
| KCPS | AG2-2013-019 | 78297546 | SECI | KCPL | 32 | 6/1/2014 | 4/1/2032 | 6/1/2015 | 4/1/2033 | 6/1/2015 | 4/1/2033 | 0 | 14SP |
| KCPS | AG2-2013-020 | 78297553 | WPEK | KCPL | 100 | 6/1/2014 | 4/1/2032 | 6/1/2015 | 4/1/2033 | 6/1/2015 | 4/1/2033 | 0 | 14SP |
| KCPS | AG2-2013-021 | 78297555 | WPEK | KCPL | 50 | 6/1/2014 | 4/1/2032 | 6/1/2015 | 4/1/2033 | 6/1/2015 | 4/1/2033 | 0 | 14SP |
| KCPS | AG2-2013-023 | 78315409 | EES | KCPL | 300 | 6/1/2014 | 6/1/2031 | 6/1/2015 | 6/1/2032 | 6/1/2015 | 6/1/2032 | 0 | 14SP |
| MIDW | AG2-2013-028 | 78053092 | WR | WR | 1 | 1/1/2014 | 1/1/2019 | 1/1/2015 | 1/1/2020 | 1/1/2015 | 1/1/2020 | 0 | 14SP |
| OGE | AG2-2013-029 | 78332271 | OKGE | OKGE | 74 | 12/1/2013 | 6/1/2030 | 1/1/2015 | 7/1/2031 | 1/1/2015 | 7/1/2031 | 0 | 14SP |
| OMPA | AG2-2013-030 | 78294577 | OKGE | OKGE | 29 | 12/1/2013 | 6/1/2030 | 1/1/2015 | 7/1/2031 | 1/1/2015 | 7/1/2031 | 0 | 14SP |

14024

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

Note 2: Start dates with and without redispach 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 redispach" 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 |
|--|--------------|-------------|--|---|---|-------|--|--|--|---|
| AECC | AG2-2013-001 | 78296916 | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | Schedule 9 & 11 Charges |
| AECC | AG2-2013-002 | 78296940 | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | Schedule 9 & 11 Charges |
| GRDX | AG2-2013-004 | 78295225 | \$0 | \$0 | \$0 | | Indeterminate | \$0 | \$0 | Schedule 9 & 11 Charges |
| GSECGS | AG2-2013-005 | 78291873 | \$400,040 | \$0 | \$400,040 | | \$0 | \$0 | \$0 | Schedule 9 & 11 Charges |
| HZN | AG2-2013-010 | 78297226 | \$0 | \$0 | \$0 | 6,7 | \$98,548 | \$0 | \$3,038,208 | \$3,038,208 |
| HZN | AG2-2013-011 | 78297228 | \$0 | \$0 | \$0 | 6,7 | \$101,452 | \$0 | \$3,038,208 | \$3,038,208 |
| HZN | AG2-2013-012 | 78297229 | \$0 | \$0 | \$0 | 6,7 | \$0 | \$0 | \$3,038,208 | \$3,038,208 |
| KCPS | AG2-2013-013 | 78297422 | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | Schedule 9 & 11 Charges |
| KCPS | AG2-2013-014 | 78297429 | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | Schedule 9 & 11 Charges |
| KCPS | AG2-2013-015 | 78297445 | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | Schedule 9 & 11 Charges |
| KCPS | AG2-2013-016 | 78297452 | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | Schedule 9 & 11 Charges |
| KCPS | AG2-2013-017 | 78297459 | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | Schedule 9 & 11 Charges |
| KCPS | AG2-2013-018 | 78297542 | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | Schedule 9 & 11 Charges |
| KCPS | AG2-2013-019 | 78297546 | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | Schedule 9 & 11 Charges |
| KCPS | AG2-2013-020 | 78297553 | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | Schedule 9 & 11 Charges |
| KCPS | AG2-2013-021 | 78297555 | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | Schedule 9 & 11 Charges |
| KCPS | AG2-2013-023 | 78315409 | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | Schedule 9 & 11 Charges |
| MIDW | AG2-2013-028 | 78053092 | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | Schedule 9 & 11 Charges |
| OGE | AG2-2013-029 | 78332271 | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | Schedule 9 & 11 Charges |
| OMPA | AG2-2013-030 | 78294577 | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | Schedule 9 & 11 Charges |
| Grand Total | | | \$400,040 | | \$400,040 | | | \$0 | | |
| <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 requests: 78297226, 78297228, and 78297229. System impacts were identified by only modeling mutually exclusive request 78297226.</p> <p>Note 7: ATSS cost allocation includes all customers' mutually exclusive requests in SPP-2013-AG2.</p> | | | | | | | | | | |

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

Customer Study Number
 AECC AG2-2013-001

| 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 |
|----------|-------------|-----|------|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| AECC | 78296916 | SPA | CSWS | 100 | 7/1/2015 | 7/1/2020 | | | \$ - | \$ - | \$ - | \$ - |
| | | | | | | | | | \$ - | \$ - | \$ - | \$ - |

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|-------------|--------------|-----|-----|---------------------|----------------------|----------------------|------------------|----------------------------|
| 78296916 | None | | | | | \$ - | \$ - | \$ - |
| Total | | | | | | \$ - | \$ - | \$ - |

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 |
|-------------|--|----------|----------|---------------------|----------------------|
| 78296916 | 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 | | |
| | HUGO POWER PLANT - VALLIANT 345 KV AEPW | 7/1/2012 | 7/1/2012 | | |
| | HUGO POWER PLANT - VALLIANT 345KV CKT 1 WFEC | 7/1/2012 | 7/1/2012 | | |
| | MANDEVILTP4 - SE TEXARKANA 138KV CKT 1 | 7/1/2012 | 7/1/2012 | | |
| | MANDEVILTP4 - TURK 138KV CKT 1 | 7/1/2012 | 7/1/2012 | | |
| | MCNAB REC - TURK 115KV CKT 1 | 7/1/2012 | 7/1/2012 | | |
| | OKAY - TURK 138KV CKT 1 | 7/1/2012 | 7/1/2012 | | |
| | SUGAR HILL - TURK 138KV 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**
 AECC AG2-2013-002

| 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 |
|----------|-------------|-----|------|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| AECC | 78296940 | SPA | OKGE | 100 | 7/1/2015 | 7/1/2020 | | | \$ - | \$ - | \$ - | \$ - |
| | | | | | | | | | \$ - | \$ - | \$ - | \$ - |

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|--------------|--------------|-----|-----|---------------------|----------------------|----------------------|------------------|----------------------------|
| 78296940 | None | | | | | \$ - | \$ - | \$ - |
| Total | | | | | | \$ - | \$ - | \$ - |

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

**Reservation 78296940 studied as relevation 78296916

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

Customer Study Number
GRDX AG2-2013-004

| 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 |
|----------|-------------|------|------|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| GRDX | 78295225 | OKGE | GRDA | 53 | 12/1/2013 | 6/1/2030 | 1/1/2015 | 7/1/2031 | \$ - | \$ - | \$ - | \$ - |
| | | | | | | | | | \$ - | \$ - | \$ - | \$ - |

| Reservation | Redispatch Available | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|-----------------|----------------------|----------------------|------------------|----------------------------|
| 78295225 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 |
|-------------|---|----------|----------|---------------------|----------------------|
| 78295225 | CLAREMORE (CLRAUTO1) 161/69/13.8KV TRANSFORMER CKT 1 | 6/1/2021 | 6/1/2021 | | |
| | CLAREMORE (CLRAUTO2) 161/69/13.8KV TRANSFORMER CKT 2 | 6/1/2021 | 6/1/2021 | | |
| | Solution(s) for 2015ITPNT-RON0114, 2015ITPNT-RON0115, 2015ITPNT-RON0116, 2015ITPNT-RON0117, 2015ITPNT-RON0118, 2015ITPNT-RON0119, and 2015ITPNT-RON0120 | 6/1/2015 | TBD | | |
| | Solution(s) for 2015ITP10-RON0015, 2015ITP10-RON0016, 2015ITPNT-RON0742, and 2015ITPNT-RON0743 | 6/1/2017 | TBD | | |
| | Solution(s) for 2015ITPNT-RON0114, 2015ITPNT-RON0115, 2015ITPNT-RON0116, 2015ITPNT-RON0117, 2015ITPNT-RON0118, and 2015ITPNT-RON0119 | 6/1/2015 | TBD | | |

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 |
|-------------|---|----------|----------|---------------------|----------------------|
| 78295225 | NORTHWEST - TATONGA 345KV CKT 1 | 1/1/2010 | 1/1/2010 | | |
| | SUB 110 - ORONOGO JCT. - SUB 167 - RIVERTON 161KV CKT 1 | 6/1/2011 | 6/1/2011 | | |
| | TATONGA - WOODWARD 345KV CKT 1 | 1/1/2010 | 1/1/2010 | | |

Third Party Limitations.

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | *Allocated E & C Cost | *Total E & C Cost |
|-------------|--|----------|----------|---------------------|----------------------|-----------------------|-------------------|
| 78295225 | 4MEMORAL 138.00 - LUTHER 138KV CKT 1 | 6/1/2021 | 6/1/2021 | | | 100.00% | 100.00% |
| | LUTHER 138/69KV TRANSFORMER CKT 1 | 6/1/2021 | 6/1/2021 | | | 100.00% | 100.00% |
| | SUB 184 - NEOSHO SOUTH JCT. 161/69KV TRANSFORMER CKT 1 | 6/1/2021 | 6/1/2021 | | | 100.00% | 100.00% |
| Total | | | | | | \$ - | \$ - |

*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
 GSECGS AG2-2013-005

| 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 |
|----------|-------------|-----|-----|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| GSECGS | 78291873 | SPS | SPS | 202 | 1/1/2017 | 1/1/2043 | 6/1/2020 | 6/1/2046 | \$ 400,040 | - | \$ 400,040 | \$ 1,998,072 |
| | | | | | | | | | \$ 400,040 | \$ - | \$ 400,040 | \$ 1,998,072 |

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|--------------|---|----------|----------|---------------------|----------------------|----------------------|-------------------|----------------------------|
| 78291873 | TUCO INTERCHANGE (GE M102345) 230/115/13.2KV TRANSFORMER CKT 1 Acceleration | 6/1/2017 | 6/1/2017 | | | \$ 400,040 | \$ 400,040 | \$ 1,998,072 |
| Total | | | | | | \$ 400,040 | \$ 400,040 | \$ 1,998,072 |

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 |
|-------------|--|----------|----------|---------------------|----------------------|
| 78291873 | CARLISLE INTERCHANGE (WH XHS70711) 230/115/13.2KV TRANSFORMER CKT 1 | 6/1/2023 | 6/1/2023 | | |
| | HEREFORD INTERCHANGE (PENN C004705) 115/69/13.2KV TRANSFORMER CKT 2 | 6/1/2021 | 6/1/2021 | | |
| | HEREFORD INTERCHANGE (PENN C019505) 115/69/13.2KV TRANSFORMER CKT 1 | 6/1/2021 | 6/1/2021 | | |
| | LUBBOCK SOUTH INTERCHANGE - SOUTH PLAINS REC-WOODROW INTERCHANGE 115KV CKT 1 | 6/1/2023 | 6/1/2023 | | |
| | MURPHY SUB - South Plains REC-Frankford Sub 115KV CKT 1 | 6/1/2023 | 6/1/2023 | | |
| | SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1 | 6/1/2023 | 6/1/2023 | | |
| | WOLFFORTH INTERCHANGE (WH 7001668) 230/115/13.2KV TRANSFORMER CKT 1 | 6/1/2023 | 6/1/2023 | | |

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 |
|-------------|---|-----------|----------|---------------------|----------------------|
| 78291873 | Andrews - Battle Axe 345 kV Ckt 1 | 6/1/2017 | 6/1/2020 | | No |
| | Andrews - Hobbs 345 kV Ckt 1 Voltage Conversion | 6/1/2017 | 6/1/2020 | | No |
| | Andrews 345/115 kV Ckt 1 Transformer | 6/1/2017 | 6/1/2020 | | No |
| | Battle Axe - China Draw 345 kV Ckt 1 | 6/1/2017 | 6/1/2020 | | No |
| | Battle Axe - Road Runner 345 kV Ckt 1 | 6/1/2017 | 6/1/2020 | | No |
| | Battle Axe 345 kV Ckt 1 Terminal Upgrades | 6/1/2017 | 6/1/2020 | | No |
| | Battle Axe 345/115 kV Ckt 1 Transformer | 6/1/2017 | 6/1/2020 | | No |
| | China Draw 345 kV Ckt 1 Terminal Upgrades #2 (Battle Axe) | 6/1/2017 | 6/1/2020 | | No |
| | MULTI - Tuco-New Deal 345 kV | 6/1/2021 | 6/1/2021 | | |
| | Solution (s) for 2015ITPNT-RON0013 and 2015ITP10-RON1763 | 10/1/2017 | TBD | | |
| | Solution(s) for 2015ITP10-RON1830, 2015ITP10-RON1831, 2015ITP10-RON1832, and 2015ITP10-RON183 | 1/1/2017 | TBD | 10/1/2016 | |

Planned Projects

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available |
|-------------|--------------------------------|----------|----------|---------------------|----------------------|
| 78291873 | Indiana - Stanton 115 kV Ckt 1 | 6/1/2021 | 6/1/2021 | | |
| | Tuco - Lubbock East 115kV | 6/1/2021 | 6/1/2021 | | |
| | Tuco - Stanton 115kV Ckt 1 | 6/1/2021 | 6/1/2021 | | |

*Credits may be required for applicable generation interconnection network upgrades.
 **MULTI - Tuco-New Deal 345kV - SPS is reviewing the feasibility of least cost alternatives.

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

Customer **Study Number**
HZN AG2-2013-010

| 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 |
|----------|-------------|------|-----|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| HZN | 78297226 | OKGE | EES | 43 | 1/1/2016 | 1/1/2021 | 6/1/2018 | 6/1/2023 | \$ - | \$ 3,038,208 | \$ - | \$ - |
| | | | | | | | | | \$ - | \$ 3,038,208 | \$ - | \$ - |

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|--------------|--------------|-----|-----|---------------------|----------------------|----------------------|------------------|----------------------------|
| 78297226 | None | | | | | \$ - | \$ - | \$ - |
| Total | | | | | | \$ - | \$ - | \$ - |

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 |
|-------------|---|----------|----------|---------------------|----------------------|
| 78297226 | 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 | | |
| | SUB 110 - ORONOGO JCT. - SUB 167 - RIVERTON 161KV CKT 1 | 6/1/2011 | 6/1/2011 | | |

Third Party Limitations.

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | *Allocated E & C Cost | *Total E & C Cost |
|--------------|--|----------|----------|---------------------|----------------------|-----------------------|-------------------|
| 78297226 | CLAY - SPRINGFIELD 161KV CKT 1 SWPA #2 | 1/1/2016 | 6/1/2018 | | | \$ 98,548 | \$ 200,000 |
| Total | | | | | | \$ 98,548 | \$ 200,000 |

*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**
HZN AG2-2013-011

| 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 |
|----------|-------------|------|-----|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| HZN | 78297228 | OKGE | EES | 43 | 1/1/2016 | 1/1/2021 | 6/1/2018 | 6/1/2023 | \$ - | \$ 3,038,208 | \$ - | \$ - |
| | | | | | | | | | \$ - | \$ 3,038,208 | \$ - | \$ - |

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|--------------|--------------|-----|-----|---------------------|----------------------|----------------------|------------------|----------------------------|
| 78297228 | None | | | | | \$ - | \$ - | \$ - |
| Total | | | | | | \$ - | \$ - | \$ - |

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 |
|-------------|---|----------|----------|---------------------|----------------------|
| 78297228 | 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 | | |
| | SUB 110 - ORONOGO JCT. - SUB 167 - RIVERTON 161KV CKT 1 | 6/1/2011 | 6/1/2011 | | |

Third Party Limitations.

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | *Allocated E & C Cost | *Total E & C Cost |
|--------------|--|----------|----------|---------------------|----------------------|-----------------------|-------------------|
| 78297228 | CLAY - SPRINGFIELD 161KV CKT 1 SWPA #2 | 1/1/2016 | 6/1/2018 | | | \$ 101,452 | \$ 200,000 |
| Total | | | | | | \$ 101,452 | \$ 200,000 |

*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**
HZN AG2-2013-012

| 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 |
|----------|-------------|------|-----|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| HZN | 78297229 | OKGE | EES | 43 | 1/1/2016 | 1/1/2021 | | | \$ - | \$ 3,038,208 | \$ - | \$ - |
| | | | | | | | | | \$ - | \$ 3,038,208 | \$ - | \$ - |

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|--------------|--------------|-----|-----|---------------------|----------------------|----------------------|------------------|----------------------------|
| 78297229 | None | | | | | \$ - | \$ - | \$ - |
| Total | | | | | | \$ - | \$ - | \$ - |

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 |
|-------------|---|----------|----------|---------------------|----------------------|
| 78297229 | 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 | | |
| | SUB 110 - ORONOGO JCT. - SUB 167 - RIVERTON 161KV CKT 1 | 6/1/2011 | 6/1/2011 | | |

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

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

Customer **Study Number**
 KCPS AG2-2013-013

| 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 |
|----------|-------------|------|------|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| KCPS | 78297422 | KCPL | KCPL | 5974 | 6/1/2014 | 6/1/2029 | 6/1/2015 | 6/1/2030 | \$ - | \$ - | \$ - | \$ - |
| | | | | | | | | | \$ - | \$ - | \$ - | \$ - |

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|--------------|--------------|-----|-----|---------------------|----------------------|----------------------|------------------|----------------------------|
| 78297422 | 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**
 KCPS AG2-2013-014

| 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 |
|----------|-------------|------|------|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| KCPS | 78297429 | KCPL | KCPL | 5914 | 6/1/2014 | 6/1/2029 | 6/1/2015 | 6/1/2030 | \$ - | \$ - | \$ - | \$ - |
| | | | | | | | | | \$ - | \$ - | \$ - | \$ - |

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|--------------|--------------|-----|-----|---------------------|----------------------|----------------------|------------------|----------------------------|
| 78297429 | None | | | | | \$ - | \$ - | \$ - |
| Total | | | | | | \$ - | \$ - | \$ - |

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 |
|-------------|--|----------|----------|---------------------|----------------------|
| 78297429 | EASTOWN7 345.00 (EASTOWN 345) 345/161/13.8KV TRANSFORMER CKT 1 | 5/1/2014 | 5/1/2014 | | |
| | 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 | | |
| | SUB 110 - ORONOGO JCT. - SUB 167 - RIVERTON 161KV CKT 1 | 6/1/2011 | 6/1/2011 | | |

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

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

Customer **Study Number**
 KCPS AG2-2013-015

| 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 |
|----------|-------------|-----|------|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| KCPS | 78297445 | WR | KCPL | 743 | 6/1/2014 | 6/1/2029 | 6/1/2015 | 6/1/2030 | \$ - | \$ - | \$ - | \$ - |
| | | | | | | | | | \$ - | \$ - | \$ - | \$ - |

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|-------------|--------------|-----|-----|---------------------|----------------------|----------------------|------------------|----------------------------|
| 78297445 | 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**
 KCPS AG2-2013-016

| 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 |
|----------|-------------|------|------|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| KCPS | 78297452 | WPEK | KCPL | 101 | 6/1/2014 | 6/1/2020 | 6/1/2015 | 6/1/2021 | \$ - | \$ - | \$ - | \$ - |
| | | | | | | | | | \$ - | \$ - | \$ - | \$ - |

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | Base Plan Funding for Wind | Directly Assigned for Wind | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|-------------|--------------|-----|-----|---------------------|----------------------|----------------------------|----------------------------|----------------------|------------------|----------------------------|
| 78297452 | 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 |
|-------------|--|-----------|----------|---------------------|----------------------|
| 78297452 | Multi - Gentleman - Cherry Co. - Holt Co. 345 kV | 10/1/2016 | 1/1/2018 | | |

*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**
 KCPS AG2-2013-017

| 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 |
|----------|-------------|------|------|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| KCPS | 78297459 | WPEK | KCPL | 60 | 6/1/2014 | 10/1/2018 | 6/1/2015 | 10/1/2019 | \$ - | \$ - | \$ - | \$ - |
| | | | | | | | | | \$ - | \$ - | \$ - | \$ - |

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | Base Plan Funding for Wind | Directly Assigned for Wind | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|-------------|--------------|-----|-----|---------------------|----------------------|----------------------------|----------------------------|----------------------|------------------|----------------------------|
| 78297459 | 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**
 KCPS AG2-2013-018

| 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 |
|----------|-------------|------|------|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| KCPS | 78297542 | NPPD | KCPL | 62 | 6/1/2014 | 1/1/2024 | 6/1/2015 | 1/1/2025 | \$ - | \$ - | \$ - | \$ - |
| | | | | | | | | | \$ - | \$ - | \$ - | \$ - |

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|--------------|--------------|-----|-----|---------------------|----------------------|----------------------|------------------|----------------------------|
| 78297542 | 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 |
|-------------|--|-----------|----------|---------------------|----------------------|
| 78297542 | Multi - Gentleman - Cherry Co. - Holt Co. 345 kV | 10/1/2016 | 1/1/2018 | | |

*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**
 KCPS AG2-2013-019

| 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 |
|----------|-------------|------|------|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| KCPS | 78297546 | SECI | KCPL | 32 | 6/1/2014 | 4/1/2032 | 6/1/2015 | 4/1/2033 | \$ - | \$ - | \$ - | \$ - |
| | | | | | | | | | \$ - | \$ - | \$ - | \$ - |

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | Base Plan Funding for Wind | Directly Assigned for Wind | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|-------------|--------------|-----|-----|---------------------|----------------------|----------------------------|----------------------------|----------------------|------------------|----------------------------|
| 78297546 | 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**
 KCPS AG2-2013-020

| 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 |
|----------|-------------|------|------|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| KCPS | 78297553 | WPEK | KCPL | 100 | 6/1/2014 | 4/1/2032 | 6/1/2015 | 4/1/2033 | \$ - | \$ - | \$ - | \$ - |
| | | | | | | | | | \$ - | \$ - | \$ - | \$ - |

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | Base Plan Funding for Wind | Directly Assigned for Wind | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|-------------|--------------|-----|-----|---------------------|----------------------|----------------------------|----------------------------|----------------------|------------------|----------------------------|
| 78297553 | 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**
 KCPS AG2-2013-021

| 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 |
|----------|-------------|------|------|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| KCPS | 78297555 | WPEK | KCPL | 50 | 6/1/2014 | 4/1/2032 | 6/1/2015 | 4/1/2033 | \$ - | \$ - | \$ - | \$ - |
| | | | | | | | | | \$ - | \$ - | \$ - | \$ - |

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | Base Plan Funding for Wind | Directly Assigned for Wind | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|-------------|--------------|-----|-----|---------------------|----------------------|----------------------------|----------------------------|----------------------|------------------|----------------------------|
| 78297555 | 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**
 KCPS AG2-2013-023

| 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 |
|----------|-------------|-----|------|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| KCPS | 78315409 | EES | KCPL | 300 | 6/1/2014 | 6/1/2031 | 6/1/2015 | 6/1/2032 | \$ - | \$ - | \$ - | \$ - |
| | | | | | | | | | \$ - | \$ - | \$ - | \$ - |

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|-------------|--------------|-----|-----|---------------------|----------------------|----------------------|------------------|----------------------------|
| 78315409 | 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
MIDW AG2-2013-028

| 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 |
|----------|-------------|-----|-----|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| MIDW | 78053092 | WR | WR | 1 | 1/1/2014 | 1/1/2019 | 1/1/2015 | 1/1/2020 | \$ - | \$ - | \$ - | \$ - |
| | | | | | | | | | \$ - | \$ - | \$ - | \$ - |

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|-------------|--------------|-----|-----|---------------------|----------------------|----------------------|------------------|----------------------------|
| 78053092 | 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 |
|-------------|--|-----------|----------|---------------------|----------------------|
| 78053092 | Multi - Gentleman - Cherry Co. - Holt Co. 345 kV | 10/1/2016 | 1/1/2018 | | |

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 |
|-------------|--|-----------|----------|---------------------|----------------------|
| 78053092 | 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 | | |
| | FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1 | 12/1/2009 | 6/1/2013 | | |

*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**
 OGE AG2-2013-029

| 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 |
|----------|-------------|------|------|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| OGE | 78332271 | OKGE | OKGE | 74 | 12/1/2013 | 6/1/2030 | 1/1/2015 | 7/1/2031 | \$ - | \$ - | \$ - | \$ - |
| | | | | | | | | | \$ - | \$ - | \$ - | \$ - |

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|--------------|--------------|-----|-----|---------------------|----------------------|----------------------|------------------|----------------------------|
| 78332271 | 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 |
|-------------|-----------------------------------|----------|----------|---------------------|----------------------|
| 78332271 | Park Lane - Seminole 138 kV Ckt 1 | 6/1/2015 | 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 |
|-------------|--|----------|----------|---------------------|----------------------|
| 78332271 | BEELINE - EXPLORER GLENPOOL TAP 138KV CKT 1 | 6/1/2009 | 6/1/2009 | | |
| | 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 | | |
| | 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
 OMPA AG2-2013-030

| 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 |
|----------|-------------|------|------|------------------|----------------------|---------------------|--|---------------------------------------|---------------------------------------|--------------------------|----------------------|----------------------------|
| OMPA | 78294577 | OKGE | OKGE | 29 | 12/1/2013 | 6/1/2030 | 1/1/2015 | 7/1/2031 | \$ - | \$ - | \$ - | \$ - |
| | | | | | | | | | \$ - | \$ - | \$ - | \$ - |

| Reservation | Upgrade Name | DUN | EOC | Earliest Start Date | Redispatch Available | Allocated E & C Cost | Total E & C Cost | Total Revenue Requirements |
|-------------|--------------|-----|-----|---------------------|----------------------|----------------------|------------------|----------------------------|
| 78294577 | 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 |
|-------------|--|----------|----------|---------------------|----------------------|
| 78294577 | OMPA-MARLOW - RUSH SPRINGS TAP 138KV CKT 1 | 6/1/2021 | 6/1/2021 | | |

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 |
|-------------|---|-----------|----------|---------------------|----------------------|
| 78294577 | CANTON - TALOGA 69KV CKT 1 | 6/1/2011 | 6/1/2013 | | |
| | FT SUPPLY 138/69KV TRANSFORMER CKT 1 | 12/1/2006 | 6/1/2008 | | |
| | 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 - 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 |
|--------------------|---|---|--------------------------------------|--|---|
| SPS | TUCO INTERCHANGE (GE M102345) 230/115/13.2KV TRANSFORMER CKT 1 Acceleration | Replace 1st 230/115 kV transformer at Tuco with 230/115 kV 288 MVA transformer. | 6/1/2017 | 6/1/2017 | \$400,040.00 |

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

| Transmission Owner | Upgrade | Solution | Earliest Date Upgrade Required (DUN) | Estimated Date of Upgrade Completion (EOC) |
|--------------------|--------------------------------|--|--------------------------------------|--|
| SPS | Indiana - Stanton 115 kV Ckt 1 | Reconductor 1.5 miles line from Indiana to Stanton. | 6/1/2021 | 6/1/2021 |
| SPS | Tuco - Lubbock East 115kV | Build new 22.77-mile 115kV line between Lubbock and the low side of new transformer between Tuco and Lubbock East. | 6/1/2021 | 6/1/2021 |
| SPS | Tuco - Stanton 115kV Ckt 1 | Build new 17-mile 115kV line between Stanton and low side of new transformer between Tuco and Stanton. | 6/1/2021 | 6/1/2021 |

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) |
|--------------------|--|---|--------------------------------------|--|
| SPS | CARLISLE INTERCHANGE (WH XHS70711) 230/115/13.2KV TRANSFORMER CKT 1 | Increase Carlisle 230/115 kV transformer to 250 MVA. | 6/1/2023 | 6/1/2023 |
| SPS | HEREFORD INTERCHANGE (PENN C004705) 115/69/13.2KV TRANSFORMER CKT 2 | Upgrade 2nd 115/69 kV transformer at Hereford to 84 MVA. | 6/1/2021 | 6/1/2021 |
| SPS | HEREFORD INTERCHANGE (PENN C019505) 115/69/13.2KV TRANSFORMER CKT 1 | Upgrade 1st 115/69 kV transformer at Hereford to 84 MVA. | 6/1/2021 | 6/1/2021 |
| SPS | LUBBOCK SOUTH INTERCHANGE - SOUTH PLAINS REC-WOODROW INTERCHANGE 115KV CKT 1 | Reconductor Line - 5.98 miles. 115 kV - Lubbock South - Woodrow for 477ACSS rated 276/304 MVA | 6/1/2023 | 6/1/2023 |
| SPS | MURPHY SUB - South Plains REC-Frankford Sub 115KV CKT 1 | Increase Murphy to Frankfrd 115 kV line rating to 159/160 MVA. | 6/1/2023 | 6/1/2023 |
| SPS | SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1 | Increase Sundown 230/115 kV transformer to 250 MVA | 6/1/2023 | 6/1/2023 |
| SPS | WOLFFORTH INTERCHANGE (WH 7001668) 230/115/13.2KV TRANSFORMER CKT 1 | Increase 230/115 kV transformer Wolfforth to 250 MVA. | 6/1/2023 | 6/1/2023 |

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 | OMPA-MARLOW - RUSH SPRINGS TAP 138KV CKT 1 | Rebuild 8.59 miles with 1533.3 ACSR/TW | 6/1/2021 | 6/1/2021 |
| GRDA | CLAREMORE (CLRAUTO1) 161/69/13.8KV TRANSFORMER CKT 1 | Upgrade the 161/69/13.8KV TRANSFORMER to 210 MVA | 6/1/2021 | 6/1/2021 |
| GRDA | CLAREMORE (CLRAUTO2) 161/69/13.8KV TRANSFORMER CKT 2 | Upgrade the 161/69/13.8KV TRANSFORMER to 210 MVA | 6/1/2021 | 6/1/2021 |
| NPPD | Multi - Gentleman - Cherry Co. - Holt Co. 345 kV | Build new 222 mile, 345 kV line from Gentleman - Cherry Co - Holt Co. Build new 345 kV substations at Cherry Co and Holt Co. Terminal upgrades at Gentleman. This project is contingent upon WAPA approval to tap the Grand Island - Fort Thompson 345 kV line. | 10/1/2016 | 1/1/2018 |
| OKGE | Park Lane - Seminole 138 kV Ckt 1 | Replace terminal equipment. | 6/1/2015 | 6/1/2017 |
| SPS | Andrews - Battle Axe 345 kV Ckt 1 | Construct new 70-mile 345 kV line from Battle Axe to Andrews. Line will be routed adjacent to Toboso Flats 115 kV substation. | 6/1/2017 | 6/1/2020 |
| SPS | Andrews - Hobbs 345 kV Ckt 1 Voltage Conversion | Convert existing 30.5-mile 230 kV line from Andrews to Hobbs to 345 kV. Re-terminate line on 345 kV bus at Hobbs. Ratings will be based on current conductors - bundled 795 ACSR. | 6/1/2017 | 6/1/2020 |
| SPS | Andrews 345/115 kV Ckt 1 Transformer | Install new 345/115 kV 448 MVA transformer at Andrews substation and remove two 230/115 kV transformers. Install any necessary 115 kV terminal equipment. | 6/1/2017 | 6/1/2020 |
| SPS | Battle Axe - China Draw 345 kV Ckt 1 | Construct new 35-mile 345 kV line from Battle Axe to China Draw. Install 345 kV breakers and sub as needed for termination. | 6/1/2017 | 6/1/2020 |
| SPS | Battle Axe - Road Runner 345 kV Ckt 1 | Construct new 15-mile 345 kV line from Battle Axe to Road Runner. Install 345 kV bus at Road Runner for 4 transformer or line terminations, expandable for future terminations. | 6/1/2017 | 6/1/2020 |
| SPS | Battle Axe 345 kV Ckt 1 Terminal Upgrades | Construct new 345 kV terminal at the Battle Axe substation. Install any necessary 345 kV terminal equipment for 4 transformer/line terminations in ring configuration expandable to future breaker and a half. | 6/1/2017 | 6/1/2020 |
| SPS | Battle Axe 345/115 kV Ckt 1 Transformer | Install new 345/115 kV 448 MVA transformer at new Battle Axe substation. Install any necessary 115 kV terminal equipment as expandable breaker and half design. | 6/1/2017 | 6/1/2020 |
| SPS | China Draw 345 kV Ckt 1 Terminal Upgrades #2 (Battle Axe) | Install 345 kV terminal at China Draw to terminate the new 345 kV line from Battle Axe. Install any necessary 345 kV terminal equipment. | 6/1/2017 | 6/1/2020 |
| SPS | MULTI - Tuco-New Deal 345 kV | New 345/115kV 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. SPS is reviewing the feasibility of least cost alternatives. | 6/1/2021 | 6/1/2021 |
| TBD | Solution(s) for 2015ITPNT-RON0114, 2015ITPNT-RON0115, 2015ITPNT-RON0116, 2015ITPNT-RON0117, 2015ITPNT-RON0118, 2015ITPNT-RON0119, 2015ITPNT-RON0120, 2015ITPNT-RON0121, 2015ITPNT-RON0122, 2015ITPNT-RON0123, 2015ITPNT-RON0124, 2015ITPNT-RON0125, 2015ITPNT-R | Solution(s) for 2015ITPNT-RON0114, 2015ITPNT-RON0115, 2015ITPNT-RON0116, 2015ITPNT-RON0117, 2015ITPNT-RON0118, 2015ITPNT-RON0119, 2015ITPNT-RON0120, 2015ITPNT-RON0121, 2015ITPNT-RON0122, 2015ITPNT-RON0123, 2015ITPNT-RON0124, 2015ITPNT-RON0125, 2015ITPNT-R | 6/1/2015 | TBD |
| TBD | Solution (s) for 2015ITPNT-RON0013 and 2015ITP10-RON1763 | Solution (s) for 2015ITPNT-RON0013 and 2015ITP10-RON1763 | 10/1/2017 | TBD |
| TBD | Solution(s) for 2015ITP10-RON0015, 2015ITP10-RON0016, 2015ITPNT-RON0742, and 2015ITPNT-RON0743 | Solution(s) for 2015ITP10-RON0015, 2015ITP10-RON0016, 2015ITPNT-RON0742, and 2015ITPNT-RON0743 | 6/1/2017 | TBD |
| TBD | Solution(s) for 2015ITP10-RON1830, 2015ITP10-RON1831, 2015ITP10-RON1832, and 2015ITP10-RON1833 | Solution(s) for 2015ITP10-RON1830, 2015ITP10-RON1831, 2015ITP10-RON1832, and 2015ITP10-RON1833 | 1/1/2017 | TBD |
| TBD | Solution(s) for 2015ITPNT-RON0114, 2015ITPNT-RON0115, 2015ITPNT-RON0116, 2015ITPNT-RON0117, 2015ITPNT-RON0118, 2015ITPNT-RON0119, 2015ITPNT-RON0120, 2015ITPNT-RON0121, 2015ITPNT-RON0122, 2015ITPNT-RON0123, 2015ITPNT-RON0124, 2015ITPNT-RON0125, 2015ITPNT-R | Solution(s) for 2015ITPNT-RON0114, 2015ITPNT-RON0115, 2015ITPNT-RON0116, 2015ITPNT-RON0117, 2015ITPNT-RON0118, 2015ITPNT-RON0119, 2015ITPNT-RON0120, 2015ITPNT-RON0121, 2015ITPNT-RON0122, 2015ITPNT-RON0123, 2015ITPNT-RON0124, 2015ITPNT-RON0125, 2015ITPNT-R | 6/1/2015 | TBD |

*The Upgrade and Solution(s) for TBD ("to be determined") Reliability Projects contain the related Need Identification numbers used in the 2015 Integrated Transmission Planning Near-Term Assessment and 2015 Integrated Transmission Planning 10-Year Assessment. The designated Transmission Owner(s), Upgrade(s), and respective Estimated Date of Upgrade Completion has yet to be determined."

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

Network Upgrades requiring credits per Attachment 22 of the SPP OATT.

| Transmission Owner | Upgrade | Solution | Earliest Date Upgrade Required (DUN) | Estimated Date of Upgrade Completion (EOC) |
|--------------------|--|--|--------------------------------------|--|
| AEPW | ASHDOWN REC (MILLWOOD) - OKAY 138KV CKT 1 | Recunductor and convert line to 138 kV and replace switches at Ashdown REC | 7/1/2012 | 7/1/2012 |
| AEPW | ASHDOWN REC (MILLWOOD) - PATTERSON 138KV CKT 1 | Reconductor Line & Convert Line to 138 kV and convert Patterson station to breaker-and-a half cofiguration | 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 | Vallient 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 | OKAY - TURK 138KV CKT 1 | Build two mile, 138 kV, 1590ACSR line section from Turk Sub to existing Okay-Hope 115 kV line and rebuild twelve miles of 115 kV line to Okay Sub to 138 kV, 1590 ACSR , to form a Turk-Okay 138 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 - ORONOJO JCT. - SUB 167 - RIVERTON 161KV CKT 1 | Reconductor Oronogo 59467 to Riverton 59469 with Bundled 556 ACSR | 6/1/2011 | 6/1/2011 |
| KACP | EASTOWN7 345.00 (EASTOWN 345) 345/161/13.8KV TRANSFORMER CKT 1 | Replace 715 MVA transformer. | 5/1/2014 | 5/1/2014 |
| KACP | LACYGNE - WEST GARDNER 345KV CKT 1 | KCPL Sponsored Project to Reconductor Line to be In-Service by 6/1/2006 | 6/1/2006 | 6/1/2006 |
| MKEC | ALEXANDER - PRATT 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 | FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1 | Rebuild 8.05 mile line | 12/1/2009 | 6/1/2013 |
| OKGE | BEELINE - EXPLORER GLENPOOL TAP 138KV CKT 1 | Reconductor .92miles of line with Drake ACCC/TW. | 6/1/2009 | 6/1/2009 |
| OKGE | 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 | 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 - 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 |
| WFEC | CANTON - TALOGA 69KV CKT 1 | UPGRADE CANTON TO TALOGA TO 336.4 | 6/1/2011 | 6/1/2013 |
| WFEC | FT SUPPLY 138/69KV TRANSFORMER CKT 1 | Install 2nd 70 MVA auto at Ft Supply | 12/1/2006 | 6/1/2008 |
| WFEC | HUGO POWER PLANT - VALLIANT 345KV CKT 1 WFEC | New 19 miles 345 KV | 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 | 4MEMORAL 138.00 - LUTHER 138KV CKT 1 | Indeterminate | 6/1/2021 | 6/1/2021 | Indeterminate |
| AECI | LUTHER 138/69KV TRANSFORMER CKT 1 | Indeterminate | 6/1/2021 | 6/1/2021 | Indeterminate |
| AECI | SUB 184 - NEOSHO SOUTH JCT. 161/69KV TRANSFORMER CKT 1 | Indeterminate | 6/1/2021 | 6/1/2021 | Indeterminate |
| SWPA | CLAY - SPRINGFIELD 161KV CKT 1 SWPA #2 | Replace four structures | 1/1/2016 | 6/1/2018 | \$200,000.00 |

Table 7 - Cost Allocation Per Service Upgrade

| Upgrade Name | Customer | Study Number | Reservation | Allocation Percentage | Allocated E & C Cost |
|--|----------|--------------|-------------|-----------------------|----------------------|
| TUCO INTERCHANGE (GE M102345) 230/115/13.2KV TRANSFORMER CKT 1 Accelerator | GSECGS | AG2-2013-005 | 78291873 | 100.00% | \$400,040 |
| | | | | Total: | \$400,040 |