# Aggregate Facility Study SPP-2015-AG1-AFS-1

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SPP Engineering, SPP Transmission Service Studies



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# **Executive Summary**

Pursuant to Attachment Z1 of the Southwest Power Pool, Inc. (SPP) Open Access Transmission Tariff (OATT), 5,351 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 \$339 million. Additionally, \$20 million in E&C cost for third party facility upgrades are assignable to the customer.
- Total upgrade levelized revenue requirements for all transmission requests after consideration of potential base plan funding is \$782 million.

To accommodate the requested SPP Transmission Service, third-party facilities must be upgraded when the third-party transmission provider determines that they are constrained. Third-party facilities include both first-tier neighboring facilities outside SPP and Transmission Owner facilities within SPP that are not under the SPP OATT. In this AFS, third-party facilities were identified. Total E&C cost estimates for required third-party facility upgrades are applicable.

SPP will tender a Letter of Intent on April 29, 2015. 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 May 14, 2015, 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 March 1, 2015 for 2015-AG1 have been included in this first Aggregate Transmission Service Study (ATSS) of 2015.

. 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 levelized revenue requirements for SPP system Network Upgrades.

All modeled facilities within the Transmission Provider system were monitored during the development of this study, as well as certain facilities in first-tier neighboring systems. Third-party facilities must be upgraded when it is determined that they are overloaded while accommodating the requested Transmission Service. An agreement between the Customer and third party owner detailing the mitigation of the third party impact must be provided to the Transmission Provider prior to tendering of a Transmission Service Agreement. These facilities also include those owned by members of the Transmission Provider who have not placed their facilities under the Transmission Provider's OATT. Upgrades on the Southwest Power Administration network requires prepayment of the upgrade cost prior to construction of the upgrade.

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

# Study Methodology

# **Description**

The facility study analysis was conducted to determine the steady-state impact of the requested service on the SPP and first tier non-SPP control area systems. The steady-state analysis was performed 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 AECI, AMRN (Ameren), and ENTR (Entergy) control areas. A 2 % TDF cutoff was applied to WAPA. For voltage monitoring, a 0.02 per unit change in voltage must occur due to the transfer or modeling upgrades to be considered a valid limit to the transfer.

# **Model Development**

SPP used eight seasonal models to study the aggregate transfers over a variety of requested service periods. The following SPP Transmission Expansion Plan 2014 Build 1 Cases were used to study the impact of the requested service on the transmission system:

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 1<sup>st</sup>-Tier) and voltage threshold (0.02 change) were applied to determine the impacted facilities. The PSS/E options chosen to conduct the analysis can be found in Appendix A.

# **Curtailment and Redispatch Evaluation**

During any period in which SPP determines that a transmission constraint exists on and may impair Transmission System reliability, SPP will take whatever actions are reasonably necessary to maintain reliability. If SPP determines Transmission System reliability can be maintained by redispatching resources, it will evaluate the interim curtailment of existing confirmed service or interim redispatch of units to provide service prior to completion of any assigned Network Upgrades. Any redispatch may not unduly discriminate between the Transmission Owners' use of the Transmission System on behalf of their Native Load Customers and any Transmission Customer's use of the Transmission System to serve its designated load. Redispatch was evaluated to provide only interim service during the time frame prior to completion of any assigned Network Upgrades. 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 April 29, 2015. 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 May 14, 2015, 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:

X 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
Excld 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 99999.0

table:

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:  $\underline{X}$  Phase shift adjustment

\_ Flat start

\_ Lock DC taps

\_\_Lock switched shunts

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

Customer	Study Number	Reservation	POR	POD	Requested Amount	Requested Start Date	Requested Stop Date	Deferred Start Date without interim redispatch	Deferred Stop Date without interim redispatch	Start Date with interim redispatch	Stop Date with interim redispatch	Minimum Allocated ATC (MW) within reservation period	Season of Minimum Allocated ATC within reservation period
AEPM	AG1-2015-001	80780823	MPS	CSWS	80	5/31/2016	5/31/2021	6/1/2019	6/1/2024	6/1/2019	6/1/2024	0	16SP
AEPM	AG1-2015-002	80780827	MPS	CSWS	40	5/31/2016	5/31/2021	6/1/2019	6/1/2024	6/1/2019	6/1/2024	0	16SP
APM	AG1-2015-056	80853948	AECI	MPS	3	6/30/2016	6/30/2026	6/1/2019	6/1/2029	6/1/2019	6/1/2029	0	20SP
BRPS	AG1-2015-003	80873830		NPPD	46	1/1/2018	1/1/2029	1/1/2018	1/1/2029	1/1/2018	1/1/2029		25SP
BRPS	AG1-2015-004	80882173	NPPD	NPPD	73	1/1/2018	1/1/2029	1/1/2018	1/1/2029	1/1/2018	1/1/2029	0	25SP
CWEP	AG1-2015-005	80912680		SPA	2	8/31/2015	6/30/2030	9/1/2015	7/1/2030	9/1/2015	7/1/2030		16SP
EDE	AG1-2015-006	80889436	EDE	EDE	35	8/31/2015	8/31/2020	9/1/2015	9/1/2020	9/1/2015	9/1/2020		16SP
ETEC	AG1-2015-007	80515981	OKGE	CSWS	102	1/1/2016	1/1/2036	6/1/2018	6/1/2038	1/1/2016	1/1/2036		16SP
FPLP	AG1-2015-008	80838247	NPPD	WR	89	1/1/2017	1/1/2022	6/1/2019	6/1/2024	6/1/2019	6/1/2024		20SP
FPLP	AG1-2015-009	80838259	WR	WR	199	1/1/2016	1/1/2021	6/1/2019	6/1/2024	6/1/2019	6/1/2024		16SP
FPLP	AG1-2015-010		OKGE	GRDA	98	1/1/2016	1/1/2021	1/1/2016	1/1/2021	1/1/2016	1/1/2021		16SP
FPLP	AG1-2015-011	80838283	WR	WR	174	1/1/2017	1/1/2022	6/1/2018	6/1/2023	1/1/2017	1/1/2022		20SP
FPLP	AG1-2015-012	80838291		SPS	80	1/1/2017	1/1/2022	10/1/2018	10/1/2023	10/1/2018	10/1/2023		20SP
FPLP	AG1-2015-013	80838292	SPS	SPS	120	1/1/2017	1/1/2022	6/1/2019	6/1/2024	6/1/2019	6/1/2024		20SP
FPLP	AG1-2015-014	80838298		CSWS	250	1/1/2017	1/1/2022	6/1/2019	6/1/2024	6/1/2019	6/1/2024		20SP
FPLP	AG1-2015-015	80838301	CSWS	OKGE	250	1/1/2017	1/1/2022	1/1/2017	1/1/2022	1/1/2017	1/1/2022		20SP
GRDX	AG1-2015-016	80838668	GRDA	GRDA	100	8/31/2015	8/31/2020	7/25/2016	7/25/2021	7/25/2016	7/25/2021	0	16SP
GRDX	AG1-2015-017	80838673	GRDA	GRDA	98	8/31/2015	8/31/2020	6/1/2019	6/1/2024	7/25/2016	7/25/2021		16SP
GRDX	AG1-2015-018	80849320	CSWS	GRDA	90	12/1/2016	12/1/2021	12/1/2016	12/1/2021	12/1/2016	12/1/2021	0	20SP
HZN	AG1-2015-019	80566529	CSWS	EES	45	1/1/2018	1/1/2023	1/1/2018	1/1/2023	1/1/2018	1/1/2023	0	25SP
HZN	AG1-2015-020	80566532	CSWS	EES	45	1/1/2018	1/1/2023	1/1/2018	1/1/2023	1/1/2018	1/1/2023	0	25SP
HZN	AG1-2015-021	80566535	CSWS	EES	45	1/1/2018	1/1/2023	1/1/2018	1/1/2023	1/1/2018	1/1/2023	0	25SP
HZN	AG1-2015-022	80707447	SPS	EES	80	1/1/2018	1/1/2023	6/1/2018	6/1/2023	1/1/2018	1/1/2023	0	25SP
HZN	AG1-2015-023	80889467	SPS	EES	80	1/1/2018	1/1/2023	6/1/2018	6/1/2023	1/1/2018	1/1/2023	0	25SP
HZN	AG1-2015-024	80889471	SPS	EES	80	1/1/2018	1/1/2023	6/1/2018	6/1/2023	1/1/2018	1/1/2023	0	25SP
KCPS	AG1-2015-025	80878929	WR	KCPL	150	8/31/2015	3/1/2036	6/1/2018	1/1/2039	6/1/2017	1/1/2038	0	16SP
KCPS	AG1-2015-026	80887601	MPS	KCPL	300	5/31/2016	5/31/2037	5/31/2016	5/31/2037	5/31/2016	5/31/2037	0	16SP
KCPS	AG1-2015-027	80888058	MPS	KCPL	200	5/31/2016	5/31/2037	5/31/2016	5/31/2037	5/31/2016	5/31/2037	0	16SP
KMEA	AG1-2015-028	80715468	KCPL	KCPL	10	1/1/2016	1/1/2021	1/1/2016	1/1/2021	1/1/2016	1/1/2021	0	16SP
KMEA	AG1-2015-029	80850246	NPPD	WR	1	9/30/2015	4/30/2025	9/30/2015	4/30/2025	9/30/2015	4/30/2025	0	16SP
KPP	AG1-2015-030	80716628	WR	WR	22	1/1/2016	1/1/2037	6/1/2018	6/1/2039	6/1/2017	6/1/2038	0	16SP
KPP	AG1-2015-031	80716676	WR	WR	25	3/31/2016	3/31/2037	6/1/2018	6/1/2039	3/31/2016	3/31/2037	0	16SP
KPP	AG1-2015-032	80888916	WR	WR	6	8/31/2015	5/31/2026	9/1/2015	6/1/2026	9/1/2015	6/1/2026	0	16SP
LESM	AG1-2015-033	80792594	NPPD	LES	74	1/1/2016	1/1/2021	1/1/2016	1/1/2021	1/1/2016	1/1/2021	0 16SP	
LESM	AG1-2015-034	80792734	WR	LES	101	1/1/2016	1/1/2021	6/1/2019	6/1/2024	6/1/2019	6/1/2024	0	16SP
MOWR	AG1-2015-035	80848073	SPA	KCPL	3	8/31/2015	8/31/2020	9/1/2015	9/1/2020	9/1/2015	9/1/2020	0 16SP	
MOWR	AG1-2015-036	80848092	MPS	MPS	25	8/31/2015	8/31/2020	1/21/2017	1/21/2022	1/21/2017	1/21/2022	0 16SP	
MOWR	AG1-2015-037	80868666	WR	MPS	5	5/31/2016	5/31/2021	5/31/2016	5/31/2021	5/31/2016	5/31/2021	0 16SP	
NPPM	AG1-2015-038	80882955	NPPD	NPPD	60	8/31/2015	8/31/2025	9/1/2015	9/1/2025	9/1/2015	9/1/2025	0	16SP
NTEC	AG1-2015-039	80516599	OKGE	CSWS	102	1/1/2016	1/1/2036	1/1/2016	1/1/2036	1/1/2016	1/1/2036	0	16SP
OPPM	AG1-2015-040	80008188	WAUE	OPPD	400	1/1/2018	6/30/2037	6/1/2019	11/1/2038	6/1/2019	11/1/2038	0	25SP

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

PEC	AG1-2015-041	80899734 WFEC	WFEC	87	8/31/2015	8/31/2020	9/1/2015	9/1/2020	9/1/2015	9/1/2020	0 16SP
PEC	AG1-2015-042	80910503 CSWS	WFEC	75	8/31/2015	8/31/2020	6/1/2018	6/1/2023	9/1/2015	9/1/2020	0 16SP
RESN	AG1-2015-043	80888988 OKGE	OKGE	201	1/1/2017	1/1/2022	6/1/2019	6/1/2024	6/1/2019	6/1/2024	0 20SP
SPSM	AG1-2015-044	80868905 SPS	SPS	30	9/30/2016	9/30/2031	9/30/2016	9/30/2031	9/30/2016	9/30/2031	0 20SP
SPSM	AG1-2015-045	80871942 SPS	SPS	70	12/1/2016	12/1/2041	10/1/2018	12/1/2041	12/1/2016	12/1/2041	0 20SP
SPSM	AG1-2015-046	80871945 SPS	SPS	70	12/1/2016	12/1/2041	10/1/2018	12/1/2041	12/1/2016	12/1/2041	0 20SP
SPSM	AG1-2015-047	80872689 OKGE	SPS	249	1/1/2018	12/1/2034	6/1/2019	12/1/2034	6/1/2019	12/1/2034	0 25SP
UCU	AG1-2015-048	80499812 WPEK	MPS	50	11/26/2016	11/25/2031	6/1/2018	6/1/2033	11/26/2016	11/26/2031	0 20SP
WFEC	AG1-2015-049	80271483 SPS	WFEC	25	8/31/2016	8/31/2041	6/1/2018	6/1/2043	8/31/2016	8/31/2041	0 20SP
WFEC	AG1-2015-050	80647634 OKGE	WFEC	50	1/1/2016	1/1/2036	6/1/2018	6/1/2038	1/1/2016	1/1/2036	0 16SP
WFEC	AG1-2015-051	80912733 OKGE	WFEC	100	8/31/2015	5/31/2035	6/1/2019	3/1/2039	6/1/2019	3/1/2039	0 16SP
WRGS	AG1-2015-052	80812246 WR	WR	200	9/30/2015	9/30/2025	6/1/2019	6/1/2029	6/1/2019	6/1/2029	0 16SP
WRGS	AG1-2015-053	80812328 WR	WR	200	6/30/2016	9/30/2025	6/1/2019	9/1/2028	6/1/2019	9/1/2028	0 20SP
WRGS	AG1-2015-054	80888798 SECI	EES	106	12/31/2016	4/30/2022	6/1/2019	10/1/2024	6/1/2019	10/1/2024	0 20SP
WRGS	AG1-2015-055	80888821 SECI	EES	50	10/31/2015	10/31/2016	6/1/2018	6/1/2019	10/31/2015	10/31/2016	0 16SP
				5351							

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

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

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

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

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

AEPM AG1-2015-002 80780827 \$30,721 \$0 \$30,721 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	11 Charges 11 Charges 11 Charges \$526,880 11 Charges
APM AG1-2015-056 80853948 \$669,443 \$0 \$69,443 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	11 Charges 11 Charges 11 Charges 11 Charges 11 Charges 11 Charges \$17,947,740
BRPS         AG1-2015-003         80873830         \$1,363,825         \$0         \$1,363,825         \$0         \$0         \$0         \$chedule 9 & \$c	11 Charges 11 Charges \$526,880 11 Charges 11 Charges \$17,947,740
BRPS         AG1-2015-004         80882173         \$252,671         \$0         \$252,671         \$0         \$0         \$0         \$0         \$chedule 9 &	\$526,880 11 Charges 11 Charges 11 Charges \$17,947,740
CWEP         AG1-2015-005         80912680         \$0         \$0         \$0         \$0         \$526,880           EDE         AG1-2015-006         80889436         \$0         \$40,488,180         \$40,130,340         \$11,620         \$0         \$0         \$22,986         \$20,344,800         \$0         \$0         \$22,986         \$20,344,800         \$0         \$0         \$22,986         \$20,344,800         \$0         \$0         \$0         \$22,986         \$20,344,800         \$0         \$0         \$0         \$22,986         \$20,344,800         \$0	\$526,880 11 Charges 11 Charges \$17,947,740
EDE         AG1-2015-006         8088936         \$0         \$0         \$0         \$0         \$0         \$chedule 9 &           ETEC         AG1-2015-007         80515981         \$1,589,467         \$0         \$1,589,467         \$0         \$0         \$0         \$chedule 9 &           FPLP         AG1-2015-008         80838247         \$4,410,757         \$4,410,757         \$0         \$0         \$9,484,155         \$17,947,740           FPLP         AG1-2015-009         80838259         \$20,186,296         \$20,186,300         \$0         \$0         \$40,488,180         \$40,130,340           FPLP         AG1-2015-010         80838270         \$11,620         \$11,620         \$0         \$0         \$22,986         \$20,344,800	11 Charges 11 Charges \$17,947,740
ETEC         AG1-2015-007         80515981         \$1,589,467         \$0         \$1,589,467         \$0         \$0         \$0         \$0 Schedule 9 & \$0           FPLP         AG1-2015-008         80838247         \$4,410,757         \$4,410,757         \$0         \$0         \$9,484,155         \$17,947,740           FPLP         AG1-2015-009         80838259         \$20,186,296         \$20,186,300         \$0         \$0         \$40,488,180         \$40,130,340           FPLP         AG1-2015-010         80838270         \$11,620         \$11,620         \$0         \$0         \$22,986         \$20,344,800	11 Charges \$17,947,740
FPLP         AG1-2015-008         80838247         \$4,410,757         \$4,410,757         \$0         \$0         \$9,484,155         \$17,947,740           FPLP         AG1-2015-009         80838259         \$20,186,296         \$20,186,300         \$0         \$0         \$40,488,180         \$40,130,340           FPLP         AG1-2015-010         80838270         \$11,620         \$11,620         \$0         \$0         \$22,986         \$20,344,800	\$17,947,740
FPLP         AG1-2015-009         80838259         \$20,186,296         \$20,186,300         \$0         \$0         \$40,488,180         \$40,130,340           FPLP         AG1-2015-010         80838270         \$11,620         \$11,620         \$0         \$22,986         \$20,344,800	
FPLP AG1-2015-010 80838270 \$11,620 \$11,620 \$0 \$0 \$22,986 \$20,344,800	740,400,100
	\$20,344,800
[11 [Ad1-2013-011   00030203  \$13,407,332  \$13,407,330  \$0    \$0  \$33,333,020  \$33,000,040	\$39,353,820
FPLP AG1-2015-012 80838291 \$822,928 \$822,928 \$0 \$0 \$1,653,537 \$10,636,800	\$10,636,800
FPLP AG1-2015-013 80838292 \$1,234,392 \$0 \$0 \$2,616,069 \$15,955,200	\$15,955,200
FPLP AG1-2015-014 80838298 \$288,1301 \$288,1301 \$0 \$0 \$476,474 \$29,532,300	\$29.532.300
FPLP AGI-2015-015 80838301 S0 S0 S0 S0 S0 S19,522,4000	\$19,524,000
GRDX AG1-2015-016 80838668 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	
GRDX AG1-2015-017 80838673 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	
GRDX AG1-2015-018 80849320 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	
HZN AG1-2015-019 80566529 \$739,585 \$739,585 \$0 6 \$0 \$1,586,963 \$3,514,320	\$3,514,320
HZN AG1-2015-020 80566532 \$748,216 \$748,216 \$0 6 \$0 \$1,605,663 \$3,514,320	\$3,514,320
HZN AG1-2015-021 80566535 \$599,966 \$0 7 \$0 \$1,287,852 \$3,514,320	\$3,514,320
HZN AG1-2015-022 80707447 \$1,525,446 \$1,525,446 \$0 7 \$0 \$3,268,804 \$6,247,680	\$6.247.680
HZN AG1-2015-023 80889467 \$1,540,743 \$1,540,743 \$0 7 \$0 \$3,301,938 \$6,247,680	\$6,247,680
HZN AG1-2015-024 80889471 \$1,277,120 \$1,277,120 \$0 \$2,736,804 \$6,247,680	\$6,247,680
KCPS AG1-2015-025 80878929 \$6,725,197 \$0 \$0 \$22,736,730 \$0	\$22,736,730
KCPS AG1-2015-026 80887601 \$68.195 \$68.195 \$0 \$0 \$228,847 \$0	\$228,847
KCPS AG1-2015-027 80888058 \$32,643 \$32,643 \$0 \$0 \$109,543 \$0	\$109,543
KMEA AG1-2015-028 80715468 \$2,406 \$0 \$2,406 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	
KMEA AG1-2015-029 80850246 S56,594 S0 S56,594 S0 S0 Shedule 9 &	
KPP AG1-2015-030 80716628 \$2,062,793 \$0 \$2,062,793 \$0 \$0 \$0 \$0 \$chedule 9 &	
KPP AG1-2015-031 80716676 \$2,382,801 \$6,573 \$2,376,228 \$0 \$16,590 \$0	\$16,590
KPP AG1-2015-032 80888916 \$1.116,753 \$36,753 \$1,080,000 \$0 \$72,586 \$0	\$72,586
LESM AG1-2015-033 80792594 S0	
LESM AG1-2015-034 80792734 \$10,177,914 \$10,177,910 \$0 \$21,192,270 \$0	\$21,192,270
MOWR AG1-2015-035 80848073 \$24,575 \$0 \$0 \$45,028 \$170,640	\$170.640
MOWR AG1-2015-036 80848092 S0 S0 S0 S0 S0 S0 S0 S0Schedule 9 &	1 -,
MOWR AG1-2015-037 80868666 \$36,163 \$36,163 \$0 \$0 \$70,213 \$0	\$70,213
NPPM AG1-2015-038 80882955 \$0 \$0 \$0 9 \$13,662,520 \$0 \$0 \$0\$ \$chedule 9 &	
NTEC   AGI-2015-039   80516599   \$0   \$0   \$0   \$0   \$0   \$0   \$0	
OPPM AGI-2015-040 80008188 \$30,032,193 \$30,032,190 \$0 \$0 \$92,897,690 \$0	\$92,897,690

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

PEC	AG1-2015-041	80899734	\$0	\$0	\$0		\$0	\$0	\$0	Schedule 9 & 11 Charges
PEC	AG1-2015-042	80910503	\$2,276,132	\$0	\$2,276,132		\$0	\$0	\$0	Schedule 9 & 11 Charges
RESN	AG1-2015-043	80888988	\$24,411,620	\$24,411,620	\$0		\$0	\$52,960,500	\$15,697,296	\$52,960,500
SPSM	AG1-2015-044	80868905	\$15,601	\$15,601	\$0		\$6,245,157	\$40,337	\$0	\$40,337
SPSM	AG1-2015-045	80871942	\$391,238	\$0	\$391,238		\$0	\$0	\$0	Schedule 9 & 11 Charges
SPSM	AG1-2015-046	80871945	\$391,238	\$0	\$391,238		\$0	\$0	\$0	Schedule 9 & 11 Charges
SPSM	AG1-2015-047	80872689	\$143,301,860	\$98,481,860	\$44,820,000		\$0	\$312,490,078	\$0	\$312,490,078
UCU	AG1-2015-048	80499812	\$8,997,722	\$8,997,722	\$0		\$0	\$25,214,980	\$0	\$25,214,980
WFEC	AG1-2015-049	80271483	\$939,495	\$0	\$939,495		\$0	\$0	\$0	Schedule 9 & 11 Charges
WFEC	AG1-2015-050	80647634	\$1,462,155	\$1,462,155	\$0	8	\$0	\$5,223,160	\$0	\$5,223,160
WFEC	AG1-2015-051	80912733	\$17,668,934	\$17,668,930	\$0		\$0	\$66,728,280	\$0	\$66,728,280
WRGS	AG1-2015-052	80812246	\$21,818,002	\$21,818,000	\$0		\$0	\$52,443,120	\$0	\$52,443,120
WRGS	AG1-2015-053	80812328	\$8,303,920	\$8,303,920	\$0		\$0	\$21,387,600	\$0	\$21,387,600
WRGS	AG1-2015-054	80888798	\$0	\$0	\$0		\$0	\$0	\$8,830,054	\$8,830,054
WRGS	AG1-2015-055	80888821	\$0	\$0	\$0		\$0	\$0	\$780,960	\$780,960
<b>Grand Total</b>			\$338,936,304		\$57,763,693			\$781,740,797		

Note 1: Letter of Credit required for financial security for transmission owner for network upgrades is determined by allocated engineering and construction costs less engineering and construction costs for upgrades when network customer is the transmission owner less the E & C allocation of expedited projects. Letter of Credit is required for upgrades assigned to PTP requests. The amount of the letter of credit will be adjusted down on an annual basis to reflect cost recovery based on revenue allocation. This letter of credit is not required for those facilities that are fully base plan funded. The Letter Of Credit Amount listed is based on meeting OATT Attachment J requirements for base plan funding.

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

Note 3: Revenue Requirements (RR) are based upon deferred end dates if applicable. Deferred dates are based upon customer's choice to pursue redispatch. Achievable Base Plan Avoided RR in the case of a Base Plan upgrade being displaced or deferred by an earlier in service date for a Requested Upgrade shall be determined per Attachment J, Section VII.C methodology. Assumption of a 40 year service life is utilized for Base Plan funded projects. A present worth analysis of RR on a common year basis between the Base Plan and Requested Upgrades was performed to determine avoided Base Plan RR due to the displacement or deferral of the Base Plan upgrade. The incremental increase in present worth of a Requested Upgrade on a common year basis as a Base Plan upgrade is assigned to the transmission requests impacting the upgrade based on the displacement or deferral. If the displacement analysis results in lower RR due to the shorter amortization period of the requested upgrade when compared to a base plan amortization period, then no direct assignment of the upgrade cost is made due to the displacement to an earlier start date.

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

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

Note 6: Mutually exclusive requests: 80566532 and 80566535. System impacts were identified by only modeling mutually exclusive request 80566529.

Note 7: Mutually exclusive requests: 80889467 and 80889471. System impacts were identified by only modeling mutually exclusive request 80707447.

Note 8: Mutually exclusive request 78997137. System impacts were identified by only modeling mutually exclusive request 80912733.

Note 9: Reservation 80516599 studied as reservation 80515981.

Customer Study Number AEPM AG1-2015-001

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
AEPM	80780823	MPS	CSWS	80	5/31/2016	5/31/2021	6/1/2019	6/1/2024	\$ 61,442	\$ -	\$ 61,442	\$ 97,161
		•		•	•	•	•	•	\$ 61,442	\$ -	\$ 61,442	\$ 97.161

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
80780823	EARLSBORO 4138.00 - MAUD 138KV CKT 1	6/1/2021	6/1/2021			\$ 61,442	\$ 358,434	\$ 97,161
,					Total	\$ 61,442	\$ 358,434	\$ 97.161

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

						Earliest Start	Redispatch
Reservation	Upgrade Name			DUN	EOC	Date	Available
80780823	CIMARRON - DRAPER LAKE 345KV	CKT 1		10/1/2021	10/1/2021		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80780823	HUGO - VALLIANT 345KV CKT 1	7/1/2012	7/1/2012		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	Longview - KC South 161kV Ckt 1	1/31/2011	1/31/2011		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	Valliant 345 kV (AEP)	7/1/2012	7/1/2012		

Third Party Limitations.

				Earliest Start	Redispatch	*Allocated E & C	İ	
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	*Total E & C Cost	
80780823	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1 AECC	6/1/2017	6/1/2019		No	\$ -	\$ -	
					Total	\$ -	\$ -	

<sup>\*</sup>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.

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number AEPM AG1-2015-002

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
AEPM	80780827	MPS	CSWS	40	5/31/2016	5/31/2021	6/1/2019	6/1/2024	\$ 30,721	\$ -	\$ 30,721	\$ 48,580
		•	•	•	•	•	•	•	\$ 30,721	\$ -	\$ 30,721	\$ 48,580

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
80780827	EARLSBORO 4138.00 - MAUD 138KV CKT 1	6/1/2021	6/1/2021			\$ 30,721	\$ 358,434	\$ 48,580
,					Total	\$ 30,721	\$ 358,434	\$ 48,580

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

						Earliest Start	Redispatch
Reservation	Upgrade Name			DUN	EOC	Date	Available
80780827	CIMARRON - DRAPER LAKE 345KV	/ CKT 1		10/1/2021	10/1/2021		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80780827	HUGO - VALLIANT 345KV CKT 1	7/1/2012	7/1/2012		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	Longview - KC South 161kV Ckt 1	1/31/2011	1/31/2011		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	Valliant 345 kV (AEP)	7/1/2012	7/1/2012		

Third Party Limitations.

				Earliest Start	Redispatch	*Allocated E & C	Ì
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	*Total E & C Cost
80780827	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1 AECC	6/1/2017	6/1/2019		No	\$ -	\$ -
					Total	\$ -	\$ -

<sup>\*</sup>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.

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer	Study Number
A DAA	AG1 201E 0E6

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
APM	80853948	AECI	MPS	3	6/30/2016	6/30/2026	6/1/2019	6/1/2029	\$ 69,443	\$ -	\$ 69,443	\$ 197,728
									\$ 69,443	\$ -	\$ 69,443	\$ 197,728

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
80853948	Holt - Neligh 345 kV	10/1/2017	6/1/2019			\$ 994	\$ 30,656,000	\$ 2,561
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2016	6/1/2018			\$ 68,382	\$ 34,259,472	\$ 194,965
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$ 67	\$ 395,000	\$ 201
					Total	\$ 69,443	\$ 65,310,472	\$ 197,728

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80853948	EASTOWN7 345.00 (EASTOWN 345) 345/161/13.8KV TRANSFORMER CKT 1	5/1/2014	5/1/2014		
	IATAN - ST JOE 345KV CKT 1	12/15/2009	12/15/2009		
	latan 161 kV	12/15/2009	12/15/2009		
	latan 345/161 kV transformer	12/15/2009	12/15/2009		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - 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 ungrades				

Customer Study Number BRPS AG1-2015-003

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
BRPS	80873830	MEC	NPPD	46	1/1/2018	1/1/2029	1/1/2018	1/1/2029	\$ 1,363,825	\$ -	\$ 1,363,825	\$ 3,303,590
									\$ 1,363,825	\$ -	\$ 1,363,825	\$ 3,303,590

				Earliest Start	Redispatch	Alloca	ted E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Total E & C Cost	Requirements
80873830	Holt - Neligh 345 kV	10/1/2017	6/1/2019			\$	1,363,825	\$ 30,656,000	\$ 3,303,590
					Total	Ś	1.363.825	\$ 30.656.000	\$ 3,303,590

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80873830	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2011	6/1/2013		
	GREENLEAF - KNOB HILL 115KV CKT 1 (MKEC)	6/1/2013	6/1/2013		
	Hoskins - Dixon County 230kV Line Upgrade	10/24/2015	10/24/2015		
	HUGO - VALLIANT 345KV CKT 1	7/1/2012	7/1/2012		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	Twin Church - Dixon County 230kV Line Upgrade	10/24/2015	10/24/2015		
	Valliant 345 kV (AEP)	7/1/2012	7/1/2012		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number BRPS AG1-2015-004

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
BRPS	80882173	NPPD	NPPD	73	1/1/2018	1/1/2029	1/1/2018	1/1/2029	\$ 252,671	\$ -	\$ 252,671	\$ 624,995
									\$ 252,671	\$ -	\$ 252,671	\$ 624,995

				Earliest Start	Redispatch	Allocat	ed E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Total E & C Cost	Requirements
80882173	Holt - Neligh 345 kV	10/1/2017	6/1/2019			\$	193,137	\$ 30,656,000	\$ 467,835
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2016	6/1/2018			\$	59,037	\$ 34,259,472	\$ 155,777
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$	497	\$ 395,000	\$ 1,383
		•			Total	Ś	252,671	\$ 65,310,472	\$ 624,995

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80882173	Ainsworth - Ainsworth Wind 115 kV Ckt 1	1/1/2018	6/1/2019		
	BUCKNER - SPEARVILLE 345 KV CKT 1 Terminal Upgrades	6/1/2016	7/25/2016		
	Mingo 345/115 kV Ckt 2 Transformer	6/1/2017	6/1/2017		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80882173	Albion - Petersburg 115kV Ckt 1 GEN-2006-044N Upgrade	12/31/2012	12/31/2012		
	Hoskins - Dixon County 230kV Line Upgrade	10/24/2015	10/24/2015		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	Neligh - Petersburg North 115kV Ckt 1	12/31/2012	12/31/2012		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	Twin Church - Dixon County 230kV Line Upgrade	10/24/2015	10/24/2015		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number
CWEP AG1-2015-005

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
CWEP	80912680	SPA	SPA	2	8/31/2015	6/30/2030	9/1/2015	7/1/2030	\$ -	\$ 526,880	\$ -	\$ -
									\$ -	\$ 526,880	\$ -	\$ -

			Earliest Start	Redispatch	Allocated E & C		Total Revenue	
Reservation Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements	
80912680 None					\$ -	\$ -	\$ -	
				Total	\$ -	\$ -	\$ -	1

 $<sup>\</sup>hbox{*Credits may be required for applicable generation interconnection network upgrades}.$ 

Customer Study Number EDE AG1-2015-006

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
EDE	80889436	EDE	EDE	35	8/31/2015	8/31/2020	9/1/2015	9/1/2020	\$ -	\$ -	\$ -	\$ -
		•	•	•	•	•	•	•	\$ -	\$ -	\$ -	\$ -

			Earliest Start	Redispatch	Allocated E & C		Total Revenue	
Reservation Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements	
80889436 None					\$ -	\$ -	\$	.]
				Total	\$ -	\$ -	\$ .	. ]

 $<sup>\</sup>hbox{*Credits may be required for applicable generation interconnection network upgrades}.$ 

Customer Study Number ETEC AG1-2015-007

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
ETEC	80515981	OKGE	CSWS	102	1/1/2016	1/1/2036	6/1/2018	6/1/2038	\$ 1,589,467	\$ -	\$ 1,589,467	\$ 4,690,124
		•	•	•	•	•		•	\$ 1.589,467	\$ -	\$ 1,589,467	\$ 4.690.124

				Earliest Start	Redispatch	Base Plan	Directly Assigned	Allocated E & C			Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Funding for Wind	for Wind	Cost	Total	I E & C Cost	Requirements
80515981	Holt - Neligh 345 kV	10/1/2017	6/1/2019			\$ 176,083	\$ -	\$ 176,083	3 \$	30,656,000	\$ 475,996
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2016	6/1/2018		Yes	\$ 1,396,481	\$ -	\$ 1,396,483	1 \$	34,259,472	\$ 4,161,032
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$ 16,903	\$ -	\$ 16,903	\$	395,000	\$ 53,096
					Total	\$ 1,589,467	\$ -	\$ 1,589,467	7 \$	65,310,472	\$ 4,690,124

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80515981	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		
	Multi - Viola 345/138kV Transformer and 138 kV Lines to Clearwater and Gill	6/1/2016	6/1/2017		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80515981	HUGO - VALLIANT 345KV CKT 1	7/1/2012	7/1/2012		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	Valliant 345 kV (AEP)	7/1/2012	7/1/2012		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number FPLP AG1-2015-008

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
FPLP	80838247	NPPD	WR	89	1/1/2017	1/1/2022	6/1/2019	6/1/2024	\$ -	\$ 17,947,740	\$ 4,410,757	\$ 9,484,155
									\$ -	\$ 17,947,740	\$ 4,410,757	\$ 9,484,155

				Earliest Start	Redispatch	Base Plan	Direc	tly Assigned	Allocated E & C			Total	Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Funding for Wind	for W	/ind	Cost	Tota	I E & C Cost	Requir	rements
80838247	Holt - Neligh 345 kV	10/1/2017	6/1/2019		No	\$ -	\$	692,061	\$ 692,061	\$	30,656,000	\$	1,537,709
	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	10/1/2015	6/1/2018		Yes	\$ -	\$	1,940,870	\$ 1,940,870	\$	37,200,528	\$	3,656,896
	WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2016	6/1/2018		Yes	\$ -	\$	891,667	\$ 891,667	\$	9,056,700	\$	2,151,420
	WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2016	6/1/2018		Yes	\$ -	\$	886,159	\$ 886,159	\$	9,056,700	\$	2,138,130
		•			Total	ς -	\$	4 410 757	\$ 4 410 757	\$	85 969 928	\$	9 484 155

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838247	BENTON 138kV Terminal Equipment	6/1/2016	6/1/2017		
	BPU - CITY OF MCPHERSON PLANT - WEST MCPHERSON 115KV CKT 1	6/1/2021	6/1/2021		
	BUCKNER - SPEARVILLE 345 KV CKT 1 Terminal Upgrades	6/1/2016	7/25/2016		
	Caldwell 138 kV cap bank	6/1/2017	6/1/2018		
	Multi - Viola 345/138kV Transformer and 138 kV Lines to Clearwater and Gill	6/1/2016	6/1/2017		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838247	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2011	6/1/2013		
	FLATRDG3 - HARPER 138KV CKT 1	12/1/2009	6/1/2013		
	GREENLEAF - KNOB HILL 115KV CKT 1 (MKEC)	6/1/2013	6/1/2013		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number FPLP AG1-2015-009

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
FPLP	80838259	WR	WR	199	1/1/2016	1/1/2021	6/1/2019	6/1/2024	\$ -	\$ 40,130,340	\$ 20,186,296	\$ 40,488,180
									\$ -	\$ 40,130,340	\$ 20,186,296	\$ 40,488,180

				Earliest Start	Redispatch	Base Plan	Directly A	ssigned	Allocated E & C		Tota	al Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Funding for Wind	for Wind		Cost	Total E & C Cost	Requ	uirements
80838259	HAYS PLANT - VINE STREET 115KV CKT 1	10/1/2015	6/1/2018		Yes	\$ -	\$	82,470	\$ 82,470	\$ 168,788	\$	155,386
	Heizer 115kV 24Mvar cap bank	6/1/2016	6/1/2017		No	\$ -	\$	441,063	\$ 441,063	\$ 888,000	\$	843,56
	Holt - Neligh 345 kV	10/1/2017	6/1/2019		No	\$ -	\$	905,971	\$ 905,971	\$ 30,656,000	\$	2,013,00
	KNOLL - N HAYS3 115.00 115KV CKT 1	10/1/2015	6/1/2018		Yes	\$ -	\$	717,131	\$ 717,131	\$ 1,467,722	\$	1,351,18
	N HAYS3 115.00 - VINE STREET 115KV CKT 1	10/1/2015	6/1/2018		Yes	\$ -	\$ 1	,337,449	\$ 1,337,449	\$ 2,737,301	\$	2,519,95
	Pawnee 115 kV Add 2.7Mvar cap bank	6/1/2021	6/1/2021			\$ -	\$	49,825	\$ 49,825	\$ 99,900	\$	75,74
	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	10/1/2015	6/1/2018		Yes	\$ -	\$ 12	2,578,475	\$ 12,578,475	\$ 37,200,528	\$	23,699,77
	WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2016	6/1/2018		Yes	\$ -	\$ 2	,043,276	\$ 2,043,276	\$ 9,056,700	\$	4,930,03
	WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2016	6/1/2018		Yes	\$ -	\$ 2	,030,636	\$ 2,030,636	\$ 9,056,700	\$	4,899,53
			•		Total	\$ -	\$ 20	0.186.296	\$ 20.186.296	\$ 91.331.639	Ś	40.488.18

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838259	Anthony - Harper 138 kV Ckt 1	6/1/2016	12/31/2017		
	BENTON 138kV Terminal Equipment	6/1/2016	6/1/2017		Yes
	BPU - CITY OF MCPHERSON PLANT - WEST MCPHERSON 115KV CKT 1	6/1/2021	6/1/2021		
	Caldwell 138 kV cap bank	6/1/2017	6/1/2018		
	Multi - Geary County 345/115 kV and Geary - Chapman 115 kV	6/1/2016	6/1/2018		
	Multi - Viola 345/138kV Transformer and 138 kV Lines to Clearwater and Gill	6/1/2016	6/1/2017		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838259	BARBER (BARBER 4) 138/115/2.72KV TRANSFORMER CKT 1	12/1/2009	6/1/2013		
	FLATRDG3 - HARPER 138KV CKT 1	12/1/2009	6/1/2013		
	FLATRDG3 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number FPLP AG1-2015-010

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
FPLP	80838270	OKGE	GRDA	98	1/1/2016	1/1/2021	1/1/2016	1/1/2021	\$ -	\$ 20,344,800	\$ 11,620	\$ 22,986
									\$ -	\$ 20,344,800	\$ 11,620	\$ 22,986

Reservation Upg	rade Name	DUN		 	Base Plan Funding for Wind	Directly Assigned	Allocated E & C Cost	Total E & C Cost	Total Revenu	
80838270 SWIS	SSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017		\$ -	\$ 11,6	0 \$ 11,620	\$ 395,000	\$ 22	2,986
•				Total	ς -	\$ 11.6	0 \$ 11.620	\$ 395,000	\$ 22	2 986

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838270	HANCOCK - MUSKOGEE 161KV CKT 1 Accelerate	6/1/2017	6/1/2017		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838270	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010		

 $<sup>\</sup>hbox{$^*$Credits may be required for applicable generation interconnection network upgrades.}$ 

Customer Study Number FPLP AG1-2015-011

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
FPLP	80838283	WR	WR	174	1/1/2017	1/1/2022	6/1/2018	6/1/2023	\$ -	\$ 35,088,840	\$ 19,487,392	\$ 39,353,816
									\$ -	\$ 35,088,840	\$ 19,487,392	\$ 39,353,816

				FII+ Ct+	Do dianotale	David Blan	D:	ath a factor and	A.II	t-150C			T-4-	
				Earliest Start	Redispatch	Base Plan	Dire	ctly Assigned	Alloca	ted E & C		l.	Lotal	al Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Funding for Wind	for \	Vind	Cost		Total	I E & C Cost	Requi	uirements
80838283	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2016	6/1/2018		Yes	\$ -	\$	15,929,037	\$	15,929,037	\$	34,259,472	\$	32,144,247
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$ -	\$	29,157	\$	29,157	\$	395,000	\$	62,031
	WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2016	6/1/2018		Yes	\$ -	\$	1,770,070	\$	1,770,070	\$	9,056,700	\$	3,584,849
	WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2016	6/1/2018		Yes	\$ -	\$	1,759,128	\$	1,759,128	\$	9,056,700	\$	3,562,689
•					Total	\$ -	\$	19,487,392	\$	19,487,392	\$	52,767,872	\$	39,353,816

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838283	BENTON 138kV Terminal Equipment	6/1/2016	6/1/2017		
	BPU - CITY OF MCPHERSON PLANT - WEST MCPHERSON 115KV CKT 1	6/1/2021	6/1/2021		
	Caldwell 138 kV cap bank	6/1/2017	6/1/2018		
	Multi - Viola 345/138kV Transformer and 138 kV Lines to Clearwater and Gill	6/1/2016	6/1/2017		

				Earliest Start	Redispatch	
Reservation	Upgrade Name	DUN	EOC	Date	Available	
80838283	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006			

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number FPLP AG1-2015-012

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
FPLP	80838291	SPS	SPS	80	1/1/2017	1/1/2022	10/1/2018	10/1/2023	\$ -	\$ 10,636,800	\$ 822,928	\$ 1,653,537
									\$ -	\$ 10,636,800	\$ 822,928	\$ 1,653,537

Reservation	Upgrade Name	DUN				Base Plan Funding for Wind	,		Allocated E & C	Total E & C Cost		Revenue
				Date	Available	runding for wind	TOT WITH					
80838291	Andrews - Hobbs 345 kV Ckt 1 Voltage Conversion & Andrews 345/115kV Ckt 1 Accelerate	6/1/2017	6/1/2018			\$ -	\$	264,909	\$ 264,909	\$ 3,049,140	\$	539,469
	CARLISLE INTERCHANGE (WH XHS70711) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	10/1/2016	10/1/2018		No	\$ -	\$	277,789	\$ 277,789	\$ 764,834	\$	555,930
	CUNNINGHAM STATION - HOBBS INTERCHANGE 115KV CKT 1	6/1/2017	6/1/2017			\$ -	\$	48,654	\$ 48,654	\$ 324,585	\$	104,646
	EDCO 230 kV Double Bus Double Breaker Accelerate	10/1/2016	12/1/2017		Yes	\$ -	\$	13,171	\$ 13,171	\$ 483,405	\$	27,508
	WOLFFORTH INTERCHANGE (WH 7001668) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	6/1/2017	6/1/2018			\$ -	\$	218,405	\$ 218,405	\$ 875,070	\$	425,983
					Total	ς -	\$	822 928	\$ 822 928	\$ 5,497,034	ı s	1 653 537

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838291	Amoco - Sundown 230 kV Terminal Upgrades	10/1/2017	10/1/2017		
	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	6/1/2021	6/1/2021		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838291	CUNNINGHAM STATION - MADDOX STATION 115KV CKT 1	6/1/2021	6/1/2021		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838291	Harrington Mid - Nichols 230 kV Ckt 2	12/1/2012	12/1/2012		
	Harrington West - Nichols 230kV Ckt 1	12/1/2012	12/1/2012		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number FPLP AG1-2015-013

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
FPLP	80838292	SPS	SPS	120	1/1/2017	1/1/2022	6/1/2019	6/1/2024	\$ -	\$ 15,955,200	\$ 1,234,392	\$ 2,616,069
		•	•	•	•	•			\$ -	\$ 15,955,200	\$ 1,234,392	\$ 2,616,069

				Earliest Start	Redispatch	Base Plan	Directly A	Assigned	Allocated E & C		Total	Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Funding for Wind	for Wind		Cost	Total E & C Cost	Requi	irements
80838292	Andrews - Hobbs 345 kV Ckt 1 Voltage Conversion & Andrews 345/115kV Ckt 1 Accelerate	6/1/2017	6/1/2018			\$ -	\$	397,364	\$ 397,364	\$ 3,049,140	\$	853,635
	CARLISLE INTERCHANGE (WH XHS70711) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	10/1/2016	10/1/2018		No	\$ -	\$	416,684	\$ 416,684	\$ 764,834	\$	879,250
	CUNNINGHAM STATION - HOBBS INTERCHANGE 115KV CKT 1	6/1/2017	6/1/2017			\$ -	\$	72,981	\$ 72,981	\$ 324,585	\$	165,600
	EDCO 230 kV Double Bus Double Breaker Accelerate	10/1/2016	12/1/2017		Yes	\$ -	\$	19,756	\$ 19,756	\$ 483,405	\$	43,527
	WOLFFORTH INTERCHANGE (WH 7001668) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	6/1/2017	6/1/2018			\$ -	\$	327,607	\$ 327,607	\$ 875,070	\$	674,057
		•			Total	\$ -	<b>\$</b> :	1.234.392	\$ 1,234,392	\$ 5,497,034	Ś	2.616.069

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838292	Amoco - Sundown 230 kV Terminal Upgrades	10/1/2017	10/1/2017		
	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	6/1/2021	6/1/2021		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838292	CUNNINGHAM STATION - MADDOX STATION 115KV 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.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838292	Harrington Mid - Nichols 230 kV Ckt 2	12/1/2012	12/1/2012		
	Harrington West - Nichols 230kV Ckt 1	12/1/2012	12/1/2012		

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

					Earliest Start	Redispatch
	Reservation	Upgrade Name	DUN	EOC	Date	Available
Γ	80838292	Potter to Tolk 345 kV	10/1/2017	6/1/2019	6/1/2019	Yes

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Study Number Customer FPLP AG1-2015-014

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
FPLP	80838298	OKGE	CSWS	250	1/1/2017	1/1/2022	6/1/2019	6/1/2024	\$ -	\$ 29,532,3	00 \$ 288,13	0 \$ 476,474
									\$ -	\$ 29,532,3	00 \$ 288,13	0 \$ 476,474

Reservation	Upgrade Name	DUN		 	Base Plan Funding for Wind	,		Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
80838298	EARLSBORO 4138.00 - MAUD 138KV CKT 1	6/1/2021	6/1/2021		\$ -	\$	266,271	\$ 266,271	\$ 358,434	\$ 421,0
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017		\$ -	\$	21,859	\$ 21,859	\$ 395,000	\$ 55,4
				Total	\$ -	Ś	288.130	\$ 288,130	\$ 753,434	\$ 476.4

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

				Earliest Start	Redispatch	ı
Reservation	Upgrade Name	DUN	EOC	Date	Available	ı
80838298	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021			ı

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838298	HUGO - VALLIANT 345KV CKT 1	7/1/2012	7/1/2012		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	Southwestern Station - Washita 138kV Ckt 1	10/1/2005	10/1/2005		
	Southwestern Station - Washita 138kV Ckt 1 (AEP)	10/1/2005	10/1/2005		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	Valliant 345 kV (AEP)	7/1/2012	7/1/2012		

Third Party Limitations.

				Earliest Start	Redispatch	*Allocated E & C		1
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	*Total E & C Cost	1
80838298	CHAMBER SPRINGS - FARMINGTON AECC 161KV CKT 1 AECC	6/1/2017	6/1/2019		No	\$ -	\$ -	J
					Total	¢ -	¢ .	1

<sup>\*</sup>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.

Customer Study Number FPLP AG1-2015-015

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
FPLP	80838301	CSWS	OKGE	250	1/1/2017	1/1/2022	1/1/2017	1/1/2022	\$ -	\$ 19,524,000	\$ -	\$ -
		•	•	•	•	•		•	\$ -	\$ 19,524,000	\$ -	\$ -

Reservation Upgrade Name	DUN	EOC	Earliest Start Date		Base Plan Funding for Wind		Allocated E & C		Total Revenue Requirements
80838301 None					\$ -	\$ -	\$ -	\$ -	\$ -
				Total	٠.	¢ .	¢ .	¢ .	¢ .

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838301	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838301	HUGO - VALLIANT 345KV CKT 1	7/1/2012	7/1/2012		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	Valliant 345 kV (AEP)	7/1/2012	7/1/2012		

 $<sup>\</sup>hbox{^*Credits may be required for applicable generation interconnection network upgrades}.$ 

Customer Study Number GRDX AG1-2015-016

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
GRDX	80838668	GRDA	GRDA	100	8/31/2015	8/31/2020	7/25/2016	7/25/2021	\$ -	\$ -	\$ -	\$ -
		•	•	•	•	•	•	•	\$ -	\$ -	\$ -	\$ -

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
80838668	None					\$ -	\$ -	\$ -
•					Total	\$ -	\$ -	\$ -

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838668	CLAREMORE (CLRAUTO1) 161/69/13.8KV TRANSFORMER CKT 1	6/1/2021	6/1/2021		
	CLAREMORE (CLRAUTO1) 161/69/13.8KV TRANSFORMER CKT 2	6/1/2021	6/1/2021		
	CPP TRANSF #2 - WILGRO 69KV CKT 1	6/1/2016	7/25/2016		No
	STILLWATER KINZIE (KINAUTO1) 138/69/13.8KV TRANSFORMER CKT 1	6/1/2017	6/1/2019		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838668	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number GRDX AG1-2015-017

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
GRDX	80838673	GRDA	GRDA	98	8/31/2015	8/31/2020	6/1/2019	6/1/2024	\$ -	\$ -	\$ -	\$ -
		•		•	•	•	•	•	\$ -	\$ -	\$ -	\$ -

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
80838673	None					\$ -	\$ -	\$
						\$ -	Ś -	Ś

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838673	CLAREMORE (CLRAUTO1) 161/69/13.8KV TRANSFORMER CKT 1	6/1/2021	6/1/2021		
	CLAREMORE (CLRAUTO1) 161/69/13.8KV TRANSFORMER CKT 2	6/1/2021	6/1/2021		
	CPP TRANSF #2 - WILGRO 69KV CKT 1	6/1/2016	7/25/2016		No
	STILLWATER KINZIE (KINAUTO1) 138/69/13.8KV TRANSFORMER CKT 1	6/1/2017	6/1/2019		Yes

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80838673	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

 $<sup>\</sup>hbox{$^*$Credits may be required for applicable generation interconnection network upgrades.}$ 

Customer Study Number GRDX AG1-2015-018

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
GRDX	80849320	CSWS	GRDA	90	12/1/2016	12/1/2021	12/1/2016	12/1/2021	\$ -	\$ -	\$	\$ -
		•			•	•	•	•	\$ -	\$ -	Ś	· Ś -

80849320 None S - S - S - S - S	Reservation Upgrade Name	DUN	EOC	Earliest Start Date	Base Plan Funding for Wind		Allocated E & C		Total Revenue Requirements
	80849320 None				\$ -	\$ -	\$ -	\$ -	\$ -

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80849320	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		
	CLAREMORE (CLRAUTO1) 161/69/13.8KV TRANSFORMER CKT 1	6/1/2021	6/1/2021		
	CLAREMORE (CLRAUTO1) 161/69/13.8KV TRANSFORMER CKT 2	6/1/2021	6/1/2021		
	CPP TRANSF #2 - WILGRO 69KV CKT 1	6/1/2016	7/25/2016		
	STILLWATER KINZIE (KINAUTO1) 138/69/13.8KV TRANSFORMER CKT 1	6/1/2017	6/1/2019		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80849320	HANCOCK - MUSKOGEE 161KV CKT 1 Accelerate	6/1/2017	6/1/2017		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80849320	Fairfax - Pawnee 138kV Ckt 1	6/30/2014	6/1/2014		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	Osage - Shidler 138kV	1/15/2014	1/15/2014		
	Pawnee 138 kV	6/30/2014	6/1/2014		
	Shidler 138 kV	2/8/2014	2/8/2014		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

Third Party Limitations.

				Earliest Start	Redispatch	*Allocated E & C	
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	*Total E & C Cost
80849320	FAIRFAX 138/69KV TRANSFORMER CKT 1	6/1/2017	6/1/2017			\$ -	\$ -
					Total	ė	ė

<sup>\*</sup>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.

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number HZN AG1-2015-019

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	uested Stop Date Without		Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
HZN	80566529	CSWS	EES	45	1/1/2018	1/1/2023	1/1/2018	1/1/2023	\$ -	\$ 3,514,320	\$ 739,585	\$ 1,586,963
									\$ -	\$ 3,514,320	\$ 739,585	\$ 1,586,963

Reservation	Upgrade Name	DUN		 	Base Plan Funding for Wind	Directly Assigned	Alloca Cost	ted E & C	Total E		Total Re	
80566529	Holt - Neligh 345 kV	10/1/2017	6/1/2019		\$ -	\$ 127,83	1 \$	127,831	\$ :	30,656,000	\$	258,922
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2016	6/1/2018		\$ -	\$ 606,12	5 \$	606,125	\$ 3	34,259,472	\$ 1	1,315,163
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017		\$ -	\$ 5,62	9 \$	5,629	\$	395,000	\$	12,878
				Total	\$ -	\$ 739.58	5 Ś	739,585	\$ E	65.310.472	\$ 1	1.586.963

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80566529	BUCKNER - SPEARVILLE 345 KV CKT 1 Terminal Upgrades	6/1/2016	7/25/2016		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80566529	HUGO - VALLIANT 345KV CKT 1	7/1/2012	7/1/2012		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	Southwestern Station - Washita 138kV Ckt 1	10/1/2005	10/1/2005		
	Southwestern Station - Washita 138kV Ckt 1 (AEP)	10/1/2005	10/1/2005		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	Valliant 345 kV (AEP)	7/1/2012	7/1/2012		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number HZN AG1-2015-020

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	equested Stop Date Without		Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
HZN	80566532	CSWS	EES	45	1/1/2018	1/1/2023	1/1/2018	1/1/2023	\$ -	\$ 3,514,320	\$ 748,216	\$ 1,605,663
									\$ -	\$ 3,514,320	\$ 748,216	\$ 1,605,663

Reservation	Upgrade Name	DUN				Base Plan Funding for Wind	Directly Assi		Allocated E & C	Tota		Total Reve	
	Holt - Neligh 345 kV	10/1/2017		Date	Available	\$ -		28,119			30,656,000	- 1	259,506
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2016	6/1/2018			\$ -	\$ 6	14,346	\$ 614,346	\$	34,259,472	\$ 1,3	333,001
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$ -	\$	5,751	\$ 5,751	\$	395,000	\$	13,157
					Total	\$ -	\$ 7	48.216	\$ 748.216	Ś	65.310.472	\$ 1.6	605.663

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80566532	BUCKNER - SPEARVILLE 345 KV CKT 1 Terminal Upgrades	6/1/2016	7/25/2016		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80566532	HUGO - VALLIANT 345KV CKT 1	7/1/2012	7/1/2012		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	Southwestern Station - Washita 138kV Ckt 1	10/1/2005	10/1/2005		
	Southwestern Station - Washita 138kV Ckt 1 (AEP)	10/1/2005	10/1/2005		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	Valliant 345 kV (AEP)	7/1/2012	7/1/2012		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number HZN AG1-2015-021

							Deferred Start Deferred Stop		Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
HZN	80566535	CSWS	EES	45	1/1/2018	1/1/2023	1/1/2018	1/1/2023	\$ -	\$ 3,514,320	\$ 599,966	\$ 1,287,852
									\$ -	\$ 3,514,320	\$ 599,966	\$ 1,287,852

Reservation	Upgrade Name	DUN				Base Plan Funding for Wind	Directly Assigned	Allo Cost	cated E & C	Total		Total Re	
				Date	Available	runaing for wina						- 1	
	Holt - Neligh 345 kV	10/1/2017	6/1/2019			\$ -	\$ 100,6		100,655		30,656,000		203,877
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2016	6/1/2018			\$ -	\$ 494,4		494,430	\$	34,259,472	\$ 1	1,072,808
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$ -	\$ 4,8	31 \$	4,881	\$	395,000	\$	11,166
							\$ 599.9	6 \$	599.966	Ś	65.310.472	\$ 1	1.287.852

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80566535	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80566535	HUGO - VALLIANT 345KV CKT 1	7/1/2012	7/1/2012		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	Southwestern Station - Washita 138kV Ckt 1	10/1/2005	10/1/2005		
	Southwestern Station - Washita 138kV Ckt 1 (AEP)	10/1/2005	10/1/2005		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	Valliant 345 kV (AEP)	7/1/2012	7/1/2012		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number HZN AG1-2015-022

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
HZN	80707447	SPS	EES	80	1/1/2018	1/1/2023	6/1/2018	6/1/2023	\$ -	\$ 6,247,680	\$ 1,525,446	\$ 3,268,804
									\$ -	\$ 6,247,680	\$ 1,525,446	\$ 3,268,804

				Earliest Start	Redispatch	Alloca	ted E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Total E & C Cost	Requirements
80707447	Holt - Neligh 345 kV	10/1/2017	6/1/2019			\$	294,934	\$ 30,656,000	\$ 597,391
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2016	6/1/2018		Yes	\$	1,218,103	\$ 34,259,472	\$ 2,643,025
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$	12,409	\$ 395,000	\$ 28,388
					Total	Ś	1.525.446	\$ 65,310,472	\$ 3,268,804

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80707447	BUCKNER - SPEARVILLE 345 KV CKT 1 Terminal Upgrades	6/1/2016	7/25/2016		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80707447	HUGO - VALLIANT 345KV CKT 1	7/1/2012	7/1/2012		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	Valliant 345 kV (AEP)	7/1/2012	7/1/2012		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number HZN AG1-2015-023

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
HZN	80889467	SPS	EES	80	1/1/2018	1/1/2023	6/1/2018	6/1/2023	\$ -	\$ 6,247,680	\$ 1,540,743	\$ 3,301,938
									\$ -	\$ 6,247,680	\$ 1,540,743	\$ 3,301,938

				Earliest Start	Redispatch	Alloca	ted E & C		Total R	levenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Total E & C Cost	Require	ements
808894	67 Holt - Neligh 345 kV	10/1/2017	6/1/2019			\$	295,509	\$ 30,656,000	\$	598,555
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2016	6/1/2018		Yes	\$	1,232,607	\$ 34,259,472	\$	2,674,496
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$	12,627	\$ 395,000	\$	28,887
					Total	Ś	1.540.743	\$ 65.310.472	Ś	3.301.938

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80889467	BUCKNER - SPEARVILLE 345 KV CKT 1 Terminal Upgrades	6/1/2016	7/25/2016		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80889467	HUGO - VALLIANT 345KV CKT 1	7/1/2012	7/1/2012		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	Valliant 345 kV (AEP)	7/1/2012	7/1/2012		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number HZN AG1-2015-024

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
HZN	80889471	SPS	EES	80	1/1/2018	1/1/2023	6/1/2018	6/1/2023	\$ -	\$ 6,247,680	\$ 1,277,120	\$ 2,736,804
									\$ -	\$ 6,247,680	\$ 1,277,120	\$ 2,736,804

				Earliest Start	Redispatch	Allocat	ed E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Total E & C Cost	Requirements
80889471	Holt - Neligh 345 kV	10/1/2017	6/1/2019			\$	246,620	\$ 30,656,000	\$ 499,53
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2016	6/1/2018		Yes	\$	1,019,421	\$ 34,259,472	\$ 2,211,92
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$	11,079	\$ 395,000	\$ 25,34
					Total	Ś	1.277.120	\$ 65.310.472	\$ 2,736,80

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80889471	BUCKNER - SPEARVILLE 345 KV CKT 1 Terminal Upgrades	6/1/2016	7/25/2016		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80889471	HUGO - VALLIANT 345KV CKT 1	7/1/2012	7/1/2012		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	Valliant 345 kV (AEP)	7/1/2012	7/1/2012		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number KCPS AG1-2015-025

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KCPS	80878929	WR	KCPL	150	8/31/2015	3/1/2036	6/1/2018	1/1/2039	\$ -	\$ -	\$ 6,725,197	\$ 22,736,735
									\$ -	\$ -	\$ 6,725,197	\$ 22,736,735

				Earliest Start	Redispatch	Base Plan	Direct	ly Assigned	Allocated E & C		Tota	al Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Funding for Wind	for Wi	nd	Cost	Total E & C Cost	Requ	uirements
80878929	ARKANSAS CITY - PARIS 69KV CKT 1	6/1/2017	6/1/2017			\$ -	\$	61,282	\$ 61,282	\$ 145,77	3 \$	217,602
	Holt - Neligh 345 kV	10/1/2017	6/1/2019			\$ -	\$	328,326	\$ 328,326	\$ 30,656,00	0 \$	986,946
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2016	6/1/2018		Yes	\$ -	\$	4,930,268	\$ 4,930,268	\$ 34,259,47	2 \$	16,542,732
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$ -	\$	71,915	\$ 71,915	\$ 395,00	0 \$	255,162
	Wellington 69kV Cap Bank	10/1/2015	6/1/2017		No	\$ -	\$	1,333,406	\$ 1,333,406	\$ 1,619,28	0 \$	4,734,293
		•			Total	\$ -	\$	6 725 197	\$ 6.725.197	\$ 67,075,52	5 5	22 736 735

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80878929	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		
	Multi - Viola 345/138kV Transformer and 138 kV Lines to Clearwater and Gill	6/1/2016	6/1/2017		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80878929	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	Osage - Shidler 138kV	1/15/2014	1/15/2014		
	Shidler 138 kV	2/8/2014	2/8/2014		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number KCPS AG1-2015-026

							Deferred Start		Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KCPS	80887601	MPS	KCPL	300	5/31/2016	5/31/2037	5/31/2016	5/31/2037	\$ -	\$ -	\$ 68,195	\$ 228,847
									\$ -	\$ -	\$ 68,195	\$ 228,847

					Earliest Start	Redispatch	Base Plan	Directly Assigned	Allocated E & C		Total Revenue	
	Reservation	Upgrade Name	DUN	EOC	Date	Available	Funding for Wind	for Wind	Cost	Total E & C Cost	Requirements	
ſ	80887601	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$ -	\$ 68,195	\$ 68,195	\$ 395,000	\$ 228,847	1
						Total	\$ -	\$ 68.195	\$ 68,195	\$ 395,000	\$ 228.847	7

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80887601	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number KCPS AG1-2015-027

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KCPS	80888058	MPS	KCPL	200	5/31/2016	5/31/2037	5/31/2016	5/31/2037	\$ -	\$ -	\$ 32,643	\$ 109,543
		•	•		•	•	•		\$ -	\$ -	\$ 32,643	\$ 109,543

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
80888058	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$ 32,643	\$ 395,000	\$ 109,543
					Total	\$ 32,643	\$ 395,000	\$ 109.543

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80888058	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number KMEA AG1-2015-028

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KMEA	80715468	KCPL	KCPL	10	1/1/2016	1/1/2021	1/1/2016	1/1/2021	\$ 2,406	\$ -	\$ 2,406	\$ 4,759
									\$ 2,406	\$ -	\$ 2,406	\$ 4,759

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
80715468	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$ 2,406	\$ 395,000	\$ 4,759
•					Total	\$ 2,406	\$ 395,000	\$ 4.759

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80715468	EASTOWN7 345.00 (EASTOWN 345) 345/161/13.8KV TRANSFORMER CKT 1	5/1/2014	5/1/2014		
	IATAN - ST JOE 345KV CKT 1	12/15/2009	12/15/2009		
	latan 161 kV	12/15/2009	12/15/2009		
	latan 345/161 kV transformer	12/15/2009	12/15/2009		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number KMEA AG1-2015-029

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KMEA	80850246	NPPD	WR	1	9/30/2015	4/30/2025	9/30/2015	4/30/2025	\$ 56,594	\$ -	\$ 56,594	\$ 106,446
									\$ 56,594	\$ -	\$ 56,594	\$ 106,446

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
80850246	Holt - Neligh 345 kV	10/1/2017	6/1/2019			\$ 11,33	4 \$ 30,656,000	\$ 22,836
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2016	6/1/2018			\$ 17,22	1 \$ 34,259,472	\$ 36,968
	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	10/1/2015	6/1/2018			\$ 28,03	9 \$ 37,200,528	\$ 46,642
					Total	\$ 56.59	4 \$ 102.116.000	\$ 106,446

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80850246	BUCKNER - SPEARVILLE 345 KV CKT 1 Terminal Upgrades	6/1/2016	7/25/2016		
	CRAWFORD - NEOSHO 69KV CKT 1	6/1/2021	6/1/2021		
	Mingo 345/115 kV Ckt 2 Transformer	6/1/2017	6/1/2017		
	Multi - Geary County 345/115 kV and Geary - Chapman 115 kV	6/1/2016	6/1/2018		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80850246	Albion - Petersburg 115kV Ckt 1 GEN-2006-044N Upgrade	12/31/2012	12/31/2012		
	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2011	6/1/2013		
	Fort Randall - Madison County 230kV Ckt 1	10/1/2014	10/1/2014		
	GREENLEAF - KNOB HILL 115KV CKT 1 (MKEC)	6/1/2013	6/1/2013		
	Kelly - Madison County 230kV Ckt 1	10/1/2014	10/1/2014		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	Neligh - Petersburg North 115kV Ckt 1	12/31/2012	12/31/2012		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number KPP AG1-2015-030

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KPP	80716628	WR	WR	22	1/1/2016	1/1/2037	6/1/2018	6/1/2039	\$ 2,062,793	\$ -	\$ 2,062,793	\$ 6,237,257
									\$ 2,062,793	\$ -	\$ 2,062,793	\$ 6,237,257

				Earliest Start	Redispatch	Allocated E & C			Total Rev	venue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Total E & C Cost	Requirem	nents
80716628	ARKANSAS CITY - PARIS 69KV CKT 1	6/1/2017	6/1/2017			\$	37,161	\$ 145,773	\$	133,482
	NORTH STREET - NORTHVIEW 115KV CKT 1	6/1/2021	6/1/2021			\$	893,385	\$ 2,348,355	\$	2,631,077
	NORTH STREET - NORTHVIEW 115KV CKT 2	6/1/2021	6/1/2021			\$	893,385	\$ 2,348,355	\$	2,631,077
	Wellington 69kV Cap Bank	10/1/2015	6/1/2017		No	\$	134,443	\$ 1,619,280	\$	482,876
	WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2016	6/1/2018			\$	52,370	\$ 9,056,700	\$	179,924
	WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2016	6/1/2018		Yes	\$	52,049	\$ 9,056,700	\$	178,821
		•	•		Total	Ś	2,062,793	\$ 24,575,163	Ś i	6.237.257

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80716628	BENTON 138kV Terminal Equipment	6/1/2016	6/1/2017		Yes
	Multi - Geary County 345/115 kV and Geary - Chapman 115 kV	6/1/2016	6/1/2018		Yes
	Multi - Viola 345/138kV Transformer and 138 kV Lines to Clearwater and Gill	6/1/2016	6/1/2017		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80716628	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 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	Longview - KC South 161kV Ckt 1	1/31/2011	1/31/2011		
	RIVER ROAD - SAWYER 115KV CKT 1	12/1/2009	6/1/2013		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number KPP AG1-2015-031

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KPP	80716676	WR	WR	25	3/31/2016	3/31/2037	6/1/2018	6/1/2039	\$ 2,376,228	\$ -	\$ 2,382,801	\$ 6,621,212
									\$ 2,376,228	\$ -	\$ 2,382,801	\$ 6,621,212

				Earliest Start	Redispatch	Base Plan	Directly Assigned	Allocated E & 0	2		Tota	al Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Funding for Wi	d for Wind	Cost		Total E & C Cost	Requ	uirements
80716676	ARKANSAS CITY - PARIS 69KV CKT 1	6/1/2017	6/1/2017			\$ 42,2	.7 \$ -	\$ 42	,217	\$ 145,773	\$	140,072
	NORTH STREET - NORTHVIEW 115KV CKT 1	6/1/2021	6/1/2021			\$ 1,018,2	\$7 \$	\$ 1,018	,237	\$ 2,348,355	\$	2,754,623
	NORTH STREET - NORTHVIEW 115KV CKT 2	6/1/2021	6/1/2021			\$ 1,018,2	\$7 \$	\$ 1,018	,237	\$ 2,348,355	\$	2,754,623
	SHELDON - SW7&BENNET7 115.00 115KV CKT 1	6/1/2021	6/1/2021			\$ 13,3	4 \$ 6,573	\$ 19	,917	\$ 324,585	\$	50,274
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$ 1,4	9 \$	\$ 1	,489	\$ 395,000	\$	4,937
	Wellington 69kV Cap Bank	10/1/2015	6/1/2017			\$ 151,4	1 \$	\$ 151	,431	\$ 1,619,280	\$	502,389
	WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2016	6/1/2018		Yes	\$ 65,8	8 \$	\$ 65	,838	\$ 9,056,700	\$	207,784
	WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2016	6/1/2018		Yes	\$ 65,4	5 \$	\$ 65	,435	\$ 9,056,700	\$	206,512
					Total	\$ 2,376,2	8 \$ 6,573	\$ 2,382	,801	\$ 25,294,748	\$	6,621,212

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80716676	Anthony - Harper 138 kV Ckt 1	6/1/2016	12/31/2017		
	BENTON 138kV Terminal Equipment	6/1/2016	6/1/2017		Yes
	BUCKNER - SPEARVILLE 345 KV CKT 1 Terminal Upgrades	6/1/2016	7/25/2016		Yes
	Multi - Geary County 345/115 kV and Geary - Chapman 115 kV	6/1/2016	6/1/2018		Yes
	Multi - Viola 345/138kV Transformer and 138 kV Lines to Clearwater and Gill	6/1/2016	6/1/2017		Yes

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80716676	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2011	6/1/2013		
	GREENLEAF - KNOB HILL 115KV CKT 1 (MKEC)	6/1/2013	6/1/2013		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number KPP AG1-2015-032

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
KPP	80888916	WR	WR	6	8/31/2015	5/31/2026	9/1/2015	6/1/2026	\$ 1,080,000	\$ -	\$ 1,116,753	\$ 2,205,563
									\$ 1,080,000	\$ -	\$ 1,116,753	\$ 2,205,563

				Earliest Start	Redispatch	Alloca	ted E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Total E & C Cost	Requirements
80888916	ARKANSAS CITY - PARIS 69KV CKT 1	6/1/2017	6/1/2017			\$	5,113	\$ 145,773	\$ 11,955
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2016	6/1/2018			\$	208,653	\$ 34,259,472	\$ 462,415
	NORTH STREET - NORTHVIEW 115KV CKT 1	6/1/2021	6/1/2021			\$	436,733	\$ 2,348,355	\$ 832,675
	NORTH STREET - NORTHVIEW 115KV CKT 2	6/1/2021	6/1/2021			\$	436,733	\$ 2,348,355	\$ 832,675
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$	1,629	\$ 395,000	\$ 3,806
	WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2016	6/1/2018			\$	13,990	\$ 9,056,700	\$ 31,117
	WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2016	6/1/2018			\$	13,902	\$ 9,056,700	\$ 30,921
				•	Total	Ś	1.116.753	\$ 57,610,355	\$ 2,205,563

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80888916	BENTON 138kV Terminal Equipment	6/1/2016	6/1/2017		
	Multi - Viola 345/138kV Transformer and 138 kV Lines to Clearwater and Gill	6/1/2016	6/1/2017		

				Earliest Start	Redispatch	
Reservation	Upgrade Name	DUN	EOC	Date	Available	
80888916	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006			

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number LESM AG1-2015-033

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
LESM	80792594	NPPD	LES	74	1/1/2016	1/1/2021	1/1/2016	1/1/2021	\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -

			Earliest Start	Redispatch	Base Plan	Directly Assigned	Allocated E & C		Total Revenue
Reservation Upgrade Name	DUN	EOC	Date	Available	Funding for Wind	for Wind	Cost	Total E & C Cost	Requirements
80792594 None					\$ -	\$ -	\$ -	\$ -	\$ -
			•	Total	¢ .	¢ .	¢ .	¢ .	¢ .

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80792594	Fort Randall - Madison County 230kV Ckt 1	10/1/2014	10/1/2014		
	Kelly - Madison County 230kV Ckt 1	10/1/2014	10/1/2014		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number LESM AG1-2015-034

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
LESM	80792734	WR	LES	101	1/1/2016	1/1/2021	6/1/2019	6/1/2024	\$ -	\$ -	\$ 10,177,914	\$ 21,192,266
									\$ -	\$ -	\$ 10,177,914	\$ 21,192,266

				Earliest Start	Redispatch	Base Plan	Directl	y Assigned	Allocated E & C			Total I	Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Funding for Wind	for Wi	nd	Cost	Tota	al E & C Cost	Requir	rements
80792734	HAYS PLANT - VINE STREET 115KV CKT 1	10/1/2015	6/1/2018		Yes	\$ -	\$	1,670	\$ 1,670	\$	168,788	\$	3,147
	Holt - Neligh 345 kV	10/1/2017	6/1/2019		No	\$ -	\$	882,838	\$ 882,838	\$	30,656,000	\$	1,961,602
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2016	6/1/2018		Yes	\$ -	\$	3,223,218	\$ 3,223,218	\$	34,259,472	\$	7,748,996
	KNOLL - N HAYS3 115.00 115KV CKT 1	10/1/2015	6/1/2018		Yes	\$ -	\$	14,520	\$ 14,520	\$	1,467,722	\$	27,358
	N HAYS3 115.00 - VINE STREET 115KV CKT 1	10/1/2015	6/1/2018		Yes	\$ -	\$	27,079	\$ 27,079	\$	2,737,301	\$	51,021
	SHELDON - SW7&BENNET7 115.00 115KV CKT 1	6/1/2021	6/1/2021			\$ -	\$	304,668	\$ 304,668	\$	324,585	\$	599,575
	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	10/1/2015	6/1/2018		Yes	\$ -	\$	5,699,600	\$ 5,699,600	\$	37,200,528	\$ :	10,738,918
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$ -	\$	24,321	\$ 24,321	\$	395,000	\$	61,649
					Total	\$ -	\$	10,177,914	\$ 10,177,914	\$	107,209,396	\$ :	21,192,266

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80792734	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		

			Earliest Start	Redispatch
Upgrade Name	DUN	EOC	Date	Available
CLIFTON - GREENLEAF 115KV CKT 1	6/1/2011	6/1/2013		
GREENLEAF - KNOB HILL 115KV CKT 1 (MKEC)	6/1/2013	6/1/2013		
LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	Upgrade Name CLIFTON - GREENLEAF 115KV CKT 1 GREENLEAF - KNOB HILL 115KV CKT 1 (MKEC) LACYGNE - WEST GARDNER 345KV CKT 1 MATHEWSON - NORTHWEST 345KV CKT 1 MATHEWSON - TATONGA 345KV CKT 1 TATONGA - WOODWARD 345KV CKT 1	CLIFTON - GREENLEAF 115KV CKT 1         6/1/2011           GREENLEAF - KNOB HILL 115KV CKT 1 (MKEC)         6/1/2013           LACYGNE - WEST GARDNER 345KV CKT 1         6/1/2003           MATHEWSON - NORTHWEST 345KV CKT 1         1/1/2010           MATHEWSON - TATONGA 345KV CKT 1         1/1/2010	Upgrade Name         DUN         EOC           CLIFTON - GREENLEAF 115KV CKT 1         6/1/2013         6/1/2013           GREENLEAF - KNOB HILL 115KV CKT 1 (MKEC)         6/1/2013         6/1/2013           LACYGNE - WEST GARDNER 345KV CKT 1         6/1/2006         6/1/2006           MATHEWSON - NORTHWEST 345KV CKT 1         1/1/2010         1/1/2010           MATHEWSON - TATONGA 345KV CKT 1         1/1/2010         1/1/2010	Upgrade Name         DUN         EOC         Date           CLIFTON - GREENLEAF 115KV CKT 1         6/1/2013         6/1/2013         6/1/2013         6/1/2013         6/1/2013         6/1/2013         6/1/2013         6/1/2013         6/1/2013         6/1/2013         6/1/2013         6/1/2013         6/1/2006         6/1/2006         6/1/2006         6/1/2006         6/1/2006         6/1/2006         6/1/2006         6/1/2006         6/1/2006         6/1/2006         6/1/2006         1/1/2010

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number MOWR AG1-2015-035

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
MOWR	80848073	SPA	KCPL	3	8/31/2015	8/31/2020	9/1/2015	9/1/2020	\$ -	\$ 170,640	\$ 24,575	\$ 45,028
									\$ -	\$ 170,640	\$ 24,575	\$ 45,028

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
808480	3 HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2016	6/1/2018			\$ 24,380	\$ 34,259,472	\$ 44,652
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$ 195	\$ 395,000	\$ 377
		•			Total	\$ 24,575	\$ 34,654,472	\$ 45,028

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80848073	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number MOWR AG1-2015-036

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
MOWR	80848092	MPS	MPS	25	8/31/2015	8/31/2020	1/21/2017	1/21/2022	\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
80848092	None					\$ -	\$ -	\$ -
•					Total	\$ -	Ś -	\$ -

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

					Earliest Start	Redispatch
Re	eservation	Upgrade Name	DUN	EOC	Date	Available
	80848092	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		
Г		HARRIONSVILLE NORTH - RALPH GREEN 69KV CKT 1	6/1/2016	1/21/2017		No
Г		South Waverly 161/69 kV Ckt 1 Transformer	6/1/2016	1/21/2017		Yes

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80848092	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	Longview - KC South 161kV Ckt 1	1/31/2011	1/31/2011		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number MOWR AG1-2015-037

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
MOWR	80868666	WR	MPS	5	5/31/2016	5/31/2021	5/31/2016	5/31/2021	\$ -	\$ -	\$ 36,163	\$ 70,213
									\$ -	\$ -	\$ 36,163	\$ 70,213

Reservation	Upgrade Name	DUN		 	Base Plan Funding for Wind	Directly As		Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2016			\$ -	\$	33,440		\$ 34,259,472	
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017		\$ -	\$	2,723	\$ 2,723	\$ 395,000	\$ 5,551
				Total	\$ -	Ś	36.163	\$ 36.163	\$ 34,654,472	\$ 70.213

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80868666	HARRIONSVILLE NORTH - RALPH GREEN 69KV CKT 1	6/1/2016	1/21/2017		
	South Waverly 161/69 kV Ckt 1 Transformer	6/1/2016	1/21/2017		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80868666	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2011	6/1/2013		
	GREENLEAF - KNOB HILL 115KV CKT 1 (MKEC)	6/1/2013	6/1/2013		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
***					

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number NPPM AG1-2015-038

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
NPPM	80882955	NPPD	NPPD	60	8/31/2015	8/31/2025	9/1/2015	9/1/2025	\$ -	\$ -	\$ -	\$ -
		•	•	•	•	•	•	•	\$ -	\$ -	\$ -	\$ -

				Earliest Start	Redispatch	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements
80882955	None					\$ -	\$ -	\$
		Total	\$ -	Ś -	Ś			

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80882955	CLIFTON - GREENLEAF 115KV CKT 1	6/1/2011	6/1/2013		
	Fort Randall - Madison County 230kV Ckt 1	10/1/2014	10/1/2014		
	GREENLEAF - KNOB HILL 115KV CKT 1 (MKEC)	6/1/2013	6/1/2013		
	Hoskins - Dixon County 230kV Line Upgrade	10/24/2015	10/24/2015		
	Kelly - Madison County 230kV Ckt 1	10/1/2014	10/1/2014		
	Twin Church - Dixon County 230kV Line Upgrade	10/24/2015	10/24/2015		

# Third Party Limitations.

				Earliest Start	Redispatch	*All	ocated E & C		
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		*Total E	& C Cost
80882955	FT RANDAL - SPENCER 115KV CKT 1	6/1/2016	6/1/2016			\$	10,662,520	\$ 1	10,662,520
	SUB C-SUB E 115KV CKT 1	6/1/2021	6/1/2021			\$	3,000,000	\$	3,000,000
					Total	\$	13,662,520	\$ 1	13,662,520

<sup>\*</sup>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.

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number NTEC AG1-2015-039

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
NTEC	80516599	OKGE	CSWS	102	1/1/2016	1/1/2036	1/1/2016	1/1/2036	\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -

				Earliest Start	Redispatch	Allocated E & C		Total Revenue	
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements	
80516599	None					\$ -	\$ -	\$ -	]
					Total	\$ -	\$ -	Ś .	

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades. Reservation 80516599 studied as reservation 80515981.

Customer Study Number OPPM AG1-2015-040

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
OPPM	80008188	WAUE	OPPD	400	1/1/2018	6/30/2037	6/1/2019	11/1/2038	\$ -	\$ -	\$ 30,032,193	\$ 92,897,689
									\$ -	\$ -	\$ 30,032,193	\$ 92,897,689

				Earliest Start	Redispatch	Alloc	ated E & C			Total	Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Total	E & C Cost	Requi	rements
80008188	Holt - Neligh 345 kV	10/1/2017	6/1/2019		No	\$	22,540,232	\$	30,656,000	\$	75,006,795
	SUB 1201 - SUB 1206 161KV CKT 1	6/1/2021	6/1/2021			\$	7,491,961	\$	7,491,961	\$	17,890,894
					Total	Ś	30.032.193	Ś	38.147.961	Ś	92.897.689

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80008188	BUCKNER - SPEARVILLE 345 KV CKT 1 Terminal Upgrades	6/1/2016	7/25/2016		
	Sub 3459 345/161 kV Transformer	6/1/2021	6/1/2021		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number PEC AG1-2015-041

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
PEC	80899734	WFEC	WFEC	87	8/31/2015	8/31/2020	9/1/2015	9/1/2020	\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -

			Earliest Start	Redispatch	Allocated E & C		Total Revenue	
Reservation Upgrade Name	DUN	EOC	Date	Available	Cost	Total E & C Cost	Requirements	
80899734 None					\$ -	\$ -	\$ -	]
				Total	\$ -	\$ -	\$ -	1

 $<sup>\</sup>hbox{*Credits may be required for applicable generation interconnection network upgrades}.$ 

Customer Study Number PEC AG1-2015-042

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
PEC	80910503	CSWS	WFEC	75	8/31/2015	8/31/2020	6/1/2018	6/1/2023	\$ 2,276,132	\$ -	\$ 2,276,132	\$ 4,508,045
									\$ 2,276,132	\$ -	\$ 2,276,132	\$ 4,508,045

				Earliest Start	Redispatch	Alloca	ited E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Total E & C Cost	Requirements
80910503	Wind Farm Switching - Mooreland	10/1/2015	6/1/2018		Yes	\$	180,515	\$ 950,000	\$ 359,809
	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1	6/1/2016	6/1/2018		Yes	\$	670,497	\$ 3,390,798	\$ 1,307,633
	Woodward District - Wind Farm Switching Reconductor	10/1/2015	6/1/2018		Yes	\$	1,425,120	\$ 7,500,000	\$ 2,840,603
		•			Total	Ś	2.276.132	\$ 11.840.798	\$ 4.508.045

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80910503	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80910503	BLUCAN5 4 138.00 - PARADISE 138KV CKT 1	6/1/2010	6/1/2013		
	HUGO - VALLIANT 345KV CKT 1	7/1/2012	7/1/2012		
	HUGO 345/138KV TRANSFORMER CKT 1	7/1/2012	7/1/2012		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	Valliant 345 kV (AEP)	7/1/2012	7/1/2012		
	WOODWARD - IODINE 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 2	1/1/2010	1/1/2010		
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number RESN AG1-2015-043

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
RESN	80888988	OKGE	OKGE	201	1/1/2017	1/1/2022	6/1/2019	6/1/2024	\$ -	\$ 15,697,296	\$ 24,411,620	\$ 52,960,498
									\$ -	\$ 15,697,296	\$ 24,411,620	\$ 52,960,498

				Earliest Start	Redispatch	Base Plan	Directly Assig	ned	Allocated E & C			Total	Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Funding for Wind	for Wind		Cost	Total E	& C Cost	Requi	rements
80888988	Holt - Neligh 345 kV	10/1/2017	6/1/2019			\$ -	\$ 44	8,306	\$ 448,306	\$ 3	30,656,000	\$	996,103
	Potter to Tolk 345 kV	10/1/2017	6/1/2019		No	\$ -	\$ 21,58	8,545	\$ 21,588,545	\$ 16	68,852,765	\$	45,330,710
	ROMAN NOSE - SOUTHARD 138KV CKT 1	6/1/2017	6/1/2017			\$ -	\$ 27	6,023	\$ 276,023	\$	358,434	\$	790,264
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$ -	\$ 1	8,127	\$ 18,127	\$	395,000	\$	45,949
	Wind Farm Switching - Mooreland	10/1/2015	6/1/2018		Yes	\$ -	\$ 14	5,781	\$ 145,781	\$	950,000	\$	409,535
	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1	6/1/2016	6/1/2018		Yes	\$ -	\$ 78	3,931	\$ 783,931	\$	3,390,798	\$	2,154,755
	Woodward District - Wind Farm Switching Reconductor	10/1/2015	6/1/2018		Yes	\$ -	\$ 1,15	0,907	\$ 1,150,907	\$	7,500,000	\$	3,233,182
					Total	\$ -	\$ 24,41	1,620	\$ 24,411,620	\$ 21	12,102,997	\$	52,960,498

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80888988	BUCKNER - SPEARVILLE 345 KV CKT 1 Terminal Upgrades	6/1/2016	7/25/2016		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80888988	Harrington Mid - Nichols 230 kV Ckt 2	12/1/2012	12/1/2012		
	Harrington West - Nichols 230kV Ckt 1	12/1/2012	12/1/2012		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - IODINE 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 2	1/1/2010	1/1/2010		
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number SPSM AG1-2015-044

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
SPSM	80868905	SPS	SPS	30	9/30/2016	9/30/2031	9/30/2016	9/30/2031	\$ -	\$ -	\$ 15,601	\$ 40,337
									\$ -	\$ -	\$ 15,601	\$ 40,337

				Earliest Start	Redispatch	Base Plan	Directly Assign	ed A	illocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Funding for Wind	for Wind	C	Cost	Total E & C Cost	Requirements
80868905	CARLISLE INTERCHANGE (WH XHS70711) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	10/1/2016	10/1/2018			\$ -	\$ 1,	070 \$	\$ 1,070	\$ 764,834	\$ 2,585
	CUNNINGHAM STATION - HOBBS INTERCHANGE 115KV CKT 1	6/1/2017	6/1/2017			\$ -	\$ 14,	531 \$	\$ 14,531	\$ 324,585	\$ 37,751
		•		•	Total	ς -	\$ 15	501	\$ 15.601	\$ 1.089.419	\$ 40.337

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80868905	PCA Interchange - Quahada 115 kV Ckt 1	6/1/2017	6/1/2017		
	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	6/1/2021	6/1/2021		

 ${\color{blue} \textbf{Construction Pending - The requested service is contingent upon completion of the following upgrades. Cost is not assignable to the transmission customer.}$ 

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80868905	CUNNINGHAM STATION - MADDOX STATION 115KV CKT 1	6/1/2021	6/1/2021		
	TUCO INTERCHANGE (GE M102345) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	6/1/2017	6/1/2018		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80868905	Harrington Mid - Nichols 230 kV Ckt 2	12/1/2012	12/1/2012		
	Harrington West - Nichols 230kV Ckt 1	12/1/2012	12/1/2012		

Third Party Limitations.

				Earliest Start	Redispatch	*Allo	cated E & C	
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		*Total E & C Cost
80868905	LEA COUNTY REC -MHOON - LEA COUNTY REC-LOVINGTON INTERCHANGE 69KV CKT 1	6/1/2021	6/1/2021			\$	6,245,157	\$ 6,245,157
					Total	\$	6,245,157	\$ 6,245,157

<sup>\*</sup>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.

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number SPSM AG1-2015-045

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
SPSM	80871942	SPS	SPS	70	12/1/2016	12/1/2041	10/1/2018	12/1/2041	\$ 391,238	\$ -	\$ 391,238	\$ 1,329,760
									\$ 391,238	\$ -	\$ 391,238	\$ 1,329,760

				Earliest Start	Redispatch	Allocat	ed E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Total E & C Cost	Requirements
80871942	Andrews - Hobbs 345 kV Ckt 1 Voltage Conversion & Andrews 345/115kV Ckt 1 Accelerate	6/1/2017	6/1/2018			\$	337,905	\$ 3,049,140	\$ 1,141,053
	CARLISLE INTERCHANGE (WH XHS70711) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	10/1/2016	10/1/2018		Yes	\$	5,579	\$ 764,834	\$ 18,505
	CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1 Accelerate	6/1/2017	6/1/2017			\$	23,357	\$ 66,667	\$ 83,194
	CUNNINGHAM STATION - HOBBS INTERCHANGE 115KV CKT 1	6/1/2017	6/1/2017			\$	24,397	\$ 324,585	\$ 87,009
					Total	¢	301 238	\$ 4.205.226	\$ 1,320,760

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80871942	LIVSTNRIDGE3115.00 - WIPP SUB 115KV CKT 1	6/1/2021	6/1/2021		
	POTASH JUNCTION INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 1	6/1/2021	6/1/2021		
	SAND DUNES SUB - WIPP SUB 115KV CKT 1	6/1/2021	6/1/2021		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80871942	CUNNINGHAM STATION - MADDOX STATION 115KV 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.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80871942	Harrington Mid - Nichols 230 kV Ckt 2	12/1/2012	12/1/2012		
	Harrington West - Nichols 230kV Ckt 1	12/1/2012	12/1/2012		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80871942	FDCO 230 kV Double Bus Double Breaker Accelerate	10/1/2016	12/1/2017	12/1/2017	Yes

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number SPSM AG1-2015-046

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
SPSM	80871945	SPS	SPS	70	12/1/2016	12/1/2041	10/1/2018	12/1/2041	\$ 391,238	\$ -	\$ 391,238	\$ 1,329,760
									\$ 391,238	\$ -	\$ 391,238	\$ 1,329,760

				Earliest Start	Redispatch	Allocate	ed E & C		Total	Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Total E & C Cost	Requir	rements
80871945	Andrews - Hobbs 345 kV Ckt 1 Voltage Conversion & Andrews 345/115kV Ckt 1 Accelerate	6/1/2017	6/1/2018			\$	337,905	\$ 3,049,140	\$	1,141,053
	CARLISLE INTERCHANGE (WH XHS70711) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	10/1/2016	10/1/2018		Yes	\$	5,579	\$ 764,834	\$	18,505
	CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1 Accelerate	6/1/2017	6/1/2017			\$	23,357	\$ 66,667	\$	83,194
	CUNNINGHAM STATION - HOBBS INTERCHANGE 115KV CKT 1	6/1/2017	6/1/2017			\$	24,397	\$ 324,585	\$	87,009
					Total	\$	391.238	\$ 4.205.226	Ś	1.329.760

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80871945	LIVSTNRIDGE3115.00 - WIPP SUB 115KV CKT 1	6/1/2021	6/1/2021		
	POTASH JUNCTION INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 1	6/1/2021	6/1/2021		
	SAND DUNES SUB - WIPP SUB 115KV CKT 1	6/1/2021	6/1/2021		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80871945	CUNNINGHAM STATION - MADDOX STATION 115KV 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.

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80871945	Harrington Mid - Nichols 230 kV Ckt 2	12/1/2012	12/1/2012		
	Harrington West - Nichols 230kV Ckt 1	12/1/2012	12/1/2012		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80871945	FDCO 230 kV Double Bus Double Breaker Accelerate	10/1/2016	12/1/2017	12/1/2017	Yes

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number SPSM AG1-2015-047

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
SPSM	80872689	OKGE	SPS	249	1/1/2018	12/1/2034	6/1/2019	12/1/2034	\$ 44,820,000	\$ -	\$ 143,301,860	\$ 453,888,297
									\$ 44,820,000	\$ -	\$ 143,301,860	\$ 453,888,297

				Earliest Start	Redispatch	Allo	cated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost	t	Total E & C Cost	Requirements
80872689	Andrews - Hobbs 345 kV Ckt 1 Voltage Conversion & Andrews 345/115kV Ckt 1 Accelerate	6/1/2017	6/1/2018			\$	1,711,058	\$ 3,049,140	\$ 5,513,657
	CARLISLE INTERCHANGE (WH XHS70711) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	10/1/2016	10/1/2018			\$	58,133	\$ 764,834	\$ 184,001
	CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1 Accelerate	6/1/2017	6/1/2017			\$	19,953	\$ 66,667	\$ 67,826
	CUNNINGHAM STATION - HOBBS INTERCHANGE 115KV CKT 1	6/1/2017	6/1/2017			\$	139,627	\$ 324,585	\$ 475,238
	EDCO 230 kV Double Bus Double Breaker Accelerate	10/1/2016	12/1/2017			\$	449,382	\$ 483,405	\$ 1,485,134
	NORTHWEST INTERCHANGE - ROLLHILLS 3115.00 115KV CKT 1	1/1/2018	6/1/2018		Yes	\$	6,120,400	\$ 6,120,400	\$ 18,913,39
	Potter to Tolk 345 kV	10/1/2017	6/1/2019		No	\$	133,903,904	\$ 168,852,765	\$ 423,705,465
	Wind Farm Switching - Mooreland	10/1/2015	6/1/2018		Yes	\$	64,122	\$ 950,000	\$ 284,217
	WOLFFORTH INTERCHANGE (WH 7001668) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	6/1/2017	6/1/2018			\$	329,058	\$ 875,070	\$ 1,015,564
	Woodward District - Wind Farm Switching Reconductor	10/1/2015	6/1/2018		Yes	\$	506,223	\$ 7,500,000	\$ 2,243,80
		•		•	Total	Ś	143.301.860	\$ 188,986,866	\$ 453,888,29

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80872689	Amoco - Sundown 230 kV Terminal Upgrades	10/1/2017	10/1/2017		
	BUCKNER - SPEARVILLE 345 KV CKT 1 Terminal Upgrades	6/1/2016	7/25/2016		
	Canyon West - Dawn 115 kV Ckt 1	1/1/2018	4/1/2018		Yes
	CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1	6/1/2021	6/1/2021		
	Dawn - Panda 115 kV Ckt 1	1/1/2018	4/1/2018		Yes
	Deaf Smith - Panda 115 kV Ckt 1	1/1/2018	4/1/2018		
	LIVSTNRIDGE3115.00 - WIPP SUB 115KV CKT 1	6/1/2021	6/1/2021		
	PECOS INTERCHANGE (WH BCS15041) 230/115/13.2KV TRANSFORMER CKT 1	6/1/2021	6/1/2021		
	POTASH JUNCTION INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 1	6/1/2021	6/1/2021		
	SAND DUNES SUB - WIPP SUB 115KV CKT 1	6/1/2021	6/1/2021		
	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	6/1/2021	6/1/2021		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80872689	CUNNINGHAM STATION - MADDOX STATION 115KV CKT 1	6/1/2021	6/1/2021		
	EAST PLANT INTERCHANGE - MANHATTAN SUB 115KV CKT 1	1/1/2018	6/1/2018		Yes
	TUCO INTERCHANGE (GE M102345) 230/115/13 2KV TRANSFORMER CKT 1 Accelerate	6/1/2017	6/1/2018		Yes

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80872689	Harrington Mid - Nichols 230 kV Ckt 2	12/1/2012	12/1/2012		
	Harrington West - Nichols 230kV Ckt 1	12/1/2012	12/1/2012		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number UCU AG1-2015-048

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
UCU	80499812	WPEK	MPS	50	11/26/2016	11/25/2031	6/1/2018	6/1/2033	\$ -	\$ -	\$ 8,997,722	\$ 25,214,985
									\$ -	\$ -	\$ 8,997,722	\$ 25,214,985

				Earliest Start	Redispatch	Base Plan	Directly Assign	ned	Allocated E & C			Total I	Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Funding for Wind	for Wind		Cost	Total E 8	& C Cost	Requir	rements
80499812	GREENSBURG - SSTARTP3 115.00 115KV CKT 1	6/1/2017	6/1/2018		Yes	\$ -	\$ 5,577	7,343	\$ 5,577,343	\$ !	5,577,343	\$	16,505,188
	HAYS PLANT - VINE STREET 115KV CKT 1	10/1/2015	6/1/2018			\$ -	\$ 1	,180	\$ 1,180	\$	168,788	\$	2,555
	Holt - Neligh 345 kV	10/1/2017	6/1/2019			\$ -	\$ 296	,052	\$ 296,052	\$ 30	0,656,000	\$	747,860
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2016	6/1/2018		Yes	\$ -	\$ 1,801	,268	\$ 1,801,268	\$ 34	4,259,472	\$	4,951,205
	KNOLL - N HAYS3 115.00 115KV CKT 1	10/1/2015	6/1/2018			\$ -	\$ 10	,260	\$ 10,260	\$ :	1,467,722	\$	22,218
	N HAYS3 115.00 - VINE STREET 115KV CKT 1	10/1/2015	6/1/2018			\$ -	\$ 19	,135	\$ 19,135	\$ :	2,737,301	\$	41,437
	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	10/1/2015	6/1/2018		Yes	\$ -	\$ 1,156	5,135	\$ 1,156,135	\$ 3	7,200,528	\$	2,503,635
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$ -	\$ 27	,012	\$ 27,012	\$	395,000	\$	78,276
	Wind Farm Switching - Mooreland	10/1/2015	6/1/2018		Yes	\$ -	\$ 12	,292	\$ 12,292	\$	950,000	\$	40,766
	Woodward District - Wind Farm Switching Reconductor	10/1/2015	6/1/2018		Yes	\$ -	\$ 97	,045	\$ 97,045	\$	7,500,000	\$	321,844
		•			Total	\$ -	\$ 8,997	7,722	\$ 8,997,722	\$ 120	0,912,154	\$ :	25,214,985

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

					Earliest Start	Redispatch
	Reservation	Upgrade Name	DUN	EOC	Date	Available
ſ	80499812	Caldwell 138 kV cap bank	6/1/2017	6/1/2018		
ſ		CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80499812	BARBER - MEDICINE LODGE 115KV CKT 1	12/1/2009	6/1/2013		
	BARBER (BARBER 4) 138/115/2.72KV TRANSFORMER CKT 1	12/1/2009	6/1/2013		
	FLATRDG3 - HARPER 138KV CKT 1	12/1/2009	6/1/2013		
	FLATRDG3 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	Lancer - North Judson Large 115KV CKT 1	10/1/2013	6/1/2016		
	Lancer - Spearville 345KV CKT 1	10/1/2013	6/1/2016		
	Lancer 345/115/13.8kV Transformer CKT 1	10/1/2013	6/1/2016		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number WFEC AG1-2015-049

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
WFEC	80271483	SPS	WFEC	25	8/31/2016	8/31/2041	6/1/2018	6/1/2043	\$ 939,495	\$ -	\$ 939,495	\$ 4,114,745
									\$ 939,495	\$ -	\$ 939,495	\$ 4,114,745

				Earliest Start	Redispatch	Allocate	ed E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Cost		Total E & C Cost	Requirements
80271483	EDCO 230 kV Double Bus Double Breaker Accelerate	10/1/2016	12/1/2017			\$	1,096	\$ 483,405	\$ 3,719
	Holt - Neligh 345 kV	10/1/2017	6/1/2019			\$	39,703	\$ 30,656,000	\$ 126,778
	Wind Farm Switching - Mooreland	10/1/2015	6/1/2018		Yes	\$	69,965	\$ 950,000	\$ 312,252
	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1	6/1/2016	6/1/2018		Yes	\$	276,374	\$ 3,390,798	\$ 1,206,844
	Woodward District - Wind Farm Switching Reconductor	10/1/2015	6/1/2018		Yes	\$	552,357	\$ 7,500,000	\$ 2,465,152
					Total	ς.	939 495	\$ 42,980,203	\$ 4 114 74

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80271483	BUCKNER - SPEARVILLE 345 KV CKT 1 Terminal Upgrades	6/1/2016	7/25/2016		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80271483	BLUCAN5 4 138.00 - PARADISE 138KV CKT 1	6/1/2010	6/1/2013		
	Harrington Mid - Nichols 230 kV Ckt 2	12/1/2012	12/1/2012		
	Harrington West - Nichols 230kV Ckt 1	12/1/2012	12/1/2012		
	HUGO 345/138KV TRANSFORMER CKT 1	7/1/2012	7/1/2012		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - IODINE 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 2	1/1/2010	1/1/2010		
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number WFEC AG1-2015-050

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
WFEC	80647634	OKGE	WFEC	50	1/1/2016	1/1/2036	6/1/2018	6/1/2038	\$ -	\$ -	\$ 1,462,155	\$ 5,223,160
		•		•	•	•	•	•	\$ -	\$ -	\$ 1.462.155	\$ 5,223,160

				Earliest Start	Redispatch	Base Plan	Directly Assigned	Allocated E & C			Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Funding for Wind	for Wind	Cost	Total E & 0	C Cost F	Requirements
80647634	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$ -	\$ 4,4	4 \$ 4,42	4 \$	395,000	\$ 13,897
	Wind Farm Switching - Mooreland	10/1/2015	6/1/2018		Yes	\$ -	\$ 115,8	1 \$ 115,83	1 \$ 9	950,000	\$ 416,562
	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1	6/1/2016	6/1/2018		Yes	\$ -	\$ 427,4	6 \$ 427,44	6 \$ 3,	390,798	\$ 1,504,062
	Woodward District - Wind Farm Switching Reconductor	10/1/2015	6/1/2018		Yes	\$ -	\$ 914,4	4 \$ 914,45	4 \$ 7,	500,000	\$ 3,288,640
					Total	ς -	\$ 1,462.1	5 \$ 1.462.19	5 5 12	235 798	\$ 5,223,160

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80647634	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		
	Multi - Viola 345/138kV Transformer and 138 kV Lines to Clearwater and Gill	6/1/2016	6/1/2017		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80647634	BLUCAN5 4 138.00 - PARADISE 138KV CKT 1	6/1/2010	6/1/2013		
	HUGO - VALLIANT 345KV CKT 1	7/1/2012	7/1/2012		
	HUGO 345/138KV TRANSFORMER CKT 1	7/1/2012	7/1/2012		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	Valliant 345 kV (AEP)	7/1/2012	7/1/2012		
	WOODWARD - IODINE 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 2	1/1/2010	1/1/2010		
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number WFEC AG1-2015-051

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
WFEC	80912733	OKGE	WFEC	100	8/31/2015	5/31/2035	6/1/2019	3/1/2039	\$ -	\$ -	\$ 17,668,934	\$ 66,728,276
									\$ -	\$ -	\$ 17,668,934	\$ 66,728,276

				Earliest Start	Redispatch	Base Plan	Directly Assigne	d Alloc	ated E & C			Total R	Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Funding for Wind	for Wind	Cost		Total E	& C Cost	Require	ements
80912733	Holt - Neligh 345 kV	10/1/2017	6/1/2019			\$ -	\$ 221,6	00 \$	221,600	\$ 3	80,656,000	\$	743,819
	Potter to Tolk 345 kV	10/1/2017	6/1/2019		No	\$ -	\$ 13,360,3	16 \$	13,360,316	\$ 16	8,852,765	\$ 4	16,114,692
	ROMAN NOSE - SOUTHARD 138KV CKT 1	6/1/2017	6/1/2017			\$ -	\$ 82,4	11 \$	82,411	\$	358,434	\$	412,225
	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	6/1/2017	6/1/2017			\$ -	\$ 7,4	43 \$	7,443	\$	395,000	\$	29,959
	WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2016	6/1/2018			\$ -	\$ 56,0	35 \$	56,035	\$	9,056,700	\$	214,692
	Wind Farm Switching - Mooreland	10/1/2015	6/1/2018		Yes	\$ -	\$ 304,5	15 \$	304,515	\$	950,000	\$	1,494,584
	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1	6/1/2016	6/1/2018		Yes	\$ -	\$ 1,232,5	51 \$	1,232,551	\$	3,390,798	\$	5,918,975
	Woodward District - Wind Farm Switching Reconductor	10/1/2015	6/1/2018		Yes	\$ -	\$ 2,404,0	63 \$	2,404,063	\$	7,500,000	\$ 1	11,799,331
					Total	\$ -	\$ 17,668,9	34 \$	17,668,934	\$ 22	1,159,697	\$ 6	66,728,276

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80912733	BUCKNER - SPEARVILLE 345 KV CKT 1 Terminal Upgrades	6/1/2016	7/25/2016		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80912733	BLUCAN5 4 138.00 - PARADISE 138KV CKT 1	6/1/2010	6/1/2013		
	Harrington Mid - Nichols 230 kV Ckt 2	12/1/2012	12/1/2012		
	Harrington West - Nichols 230kV Ckt 1	12/1/2012	12/1/2012		
	HUGO - VALLIANT 345KV CKT 1	7/1/2012	7/1/2012		
	HUGO 345/138KV TRANSFORMER CKT 1	7/1/2012	7/1/2012		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		
	Valliant 345 kV (AEP)	7/1/2012	7/1/2012		
	WOODWARD - IODINE 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 1	1/1/2010	1/1/2010		
	WOODWARD - WOODWARD EHV 138KV CKT 2	1/1/2010	1/1/2010		
	WOODWARD 345/138KV TRANSFORMER CKT 1	1/1/2010	1/1/2010		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number WRGS AG1-2015-052

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
WRGS	80812246	WR	WR	200	9/30/2015	9/30/2025	6/1/2019	6/1/2029	\$ -	\$ -	\$ 21,818,002	\$ 52,443,115
									\$ -	\$ -	\$ 21,818,002	\$ 52,443,115

				Earliest Start	Redispatch	Base Plan	Directly Assigned	Allocated E & C		Total	l Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Funding for Wind	for Wind	Cost	Total E & C Cost	Requi	irements
80812246	HAYS PLANT - VINE STREET 115KV CKT 1	10/1/2015	6/1/2018		Yes	\$ -	\$ 83,468	\$ 83,468	\$ 168,788	\$	186,216
	Heizer 115kV 24Mvar cap bank	6/1/2016	6/1/2017		No	\$ -	\$ 446,937	\$ 446,937	\$ 888,000	\$	1,012,154
	Holt - Neligh 345 kV	10/1/2017	6/1/2019		No	\$ -	\$ 969,319	\$ 969,319	\$ 30,656,000	\$	2,497,602
	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	6/1/2016	6/1/2018		Yes	\$ -	\$ 1,383,056	\$ 1,383,056	\$ 34,259,472	\$	3,943,251
	KNOLL - N HAYS3 115.00 115KV CKT 1	10/1/2015	6/1/2018		Yes	\$ -	\$ 725,812	\$ 725,812	\$ 1,467,722	\$	1,619,277
	N HAYS3 115.00 - VINE STREET 115KV CKT 1	10/1/2015	6/1/2018		Yes	\$ -	\$ 1,353,638	\$ 1,353,638	\$ 2,737,301	. \$	3,019,949
	Pawnee 115 kV Add 2.7Mvar cap bank	6/1/2021	6/1/2021			\$ -	\$ 50,075	\$ 50,075	\$ 99,900	\$	90,142
	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	10/1/2015	6/1/2018		Yes	\$ -	\$ 12,711,313	\$ 12,711,313	\$ 37,200,528	\$	28,358,775
	WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2016	6/1/2018		Yes	\$ -	\$ 2,053,544	\$ 2,053,544	\$ 9,056,700	\$	5,876,050
	WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2016	6/1/2018		Yes	\$ -	\$ 2,040,840	\$ 2,040,840	\$ 9,056,700	\$	5,839,698
					Total	\$ -	\$ 21,818,002	\$ 21,818,002	\$ 125,591,111	. \$	52,443,115

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
8081224	6 Anthony - Harper 138 kV Ckt 1	6/1/2016	12/31/2017		
	BENTON 138kV Terminal Equipment	6/1/2016	6/1/2017		Yes
	BPU - CITY OF MCPHERSON PLANT - WEST MCPHERSON 115KV CKT 1	6/1/2021	6/1/2021		
	Caldwell 138 kV cap bank	6/1/2017	6/1/2018		
	Multi - Geary County 345/115 kV and Geary - Chapman 115 kV	6/1/2016	6/1/2018		Yes
	Multi - Viola 345/138kV Transformer and 138 kV Lines to Clearwater and Gill	6/1/2016	6/1/2017		Yes

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
808122	16 BARBER (BARBER 4) 138/115/2.72KV TRANSFORMER CKT 1	12/1/2009	6/1/2013		
	FLATRDG3 - HARPER 138KV CKT 1	12/1/2009	6/1/2013		
	FLATRDG3 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

Customer Study Number WRGS AG1-2015-053

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
WRGS	80812328	WR	WR	200	6/30/2016	9/30/2025	6/1/2019	9/1/2028	\$ -	\$ -	\$ 8,303,920	\$ 21,387,602
									\$ -	\$ -	\$ 8,303,920	\$ 21,387,602

				Earliest Start	Redispatch	Base Plan	Directly Assigned	Allocated E & C		Total Revenue
Reservation	Upgrade Name	DUN	EOC	Date	Available	Funding for Wind	for Wind	Cost	Total E & C Cost	Requirements
80812328	Holt - Neligh 345 kV	10/1/2017	6/1/2019		No	\$ -	\$ 392,55	3 \$ 392,553	\$ 30,656,000	\$ 989,611
	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	10/1/2015	6/1/2018		Yes	\$ -	\$ 3,086,09	6 \$ 3,086,096	\$ 37,200,528	\$ 6,689,771
	WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2016	6/1/2018		Yes	\$ -	\$ 2,165,94	6 \$ 2,165,946	\$ 9,056,700	\$ 6,024,354
	WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	6/1/2016	6/1/2018		Yes	\$ -	\$ 2,152,51	5 \$ 2,152,515	\$ 9,056,700	\$ 5,986,997
	Wind Farm Switching - Mooreland	10/1/2015	6/1/2018		Yes	\$ -	\$ 56,97	9 \$ 56,979	\$ 950,000	\$ 190,773
	Woodward District - Wind Farm Switching Reconductor	10/1/2015	6/1/2018		Yes	\$ -	\$ 449,83	1 \$ 449,831	\$ 7,500,000	\$ 1,506,096
			•		Total	\$ -	\$ 8,303,92	0 \$ 8,303,920	\$ 94,419,928	\$ 21,387,602

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80812328	Anthony - Harper 138 kV Ckt 1	6/1/2016	12/31/2017		
	BENTON 138kV Terminal Equipment	6/1/2016	6/1/2017		Yes
	BPU - CITY OF MCPHERSON PLANT - WEST MCPHERSON 115KV CKT 1	6/1/2021	6/1/2021		
	Caldwell 138 kV cap bank	6/1/2017	6/1/2018		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		
	Multi - Geary County 345/115 kV and Geary - Chapman 115 kV	6/1/2016	6/1/2018		Yes
	Multi - Viola 345/138kV Transformer and 138 kV Lines to Clearwater and Gill	6/1/2016	6/1/2017		Yes

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80812328	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 - HARPER 138KV CKT 1	12/1/2009	6/1/2013		
	FLATRDG3 - MEDICINE LODGE 138KV CKT 1	12/1/2009	6/1/2013		
	LACYGNE - WEST GARDNER 345KV CKT 1	6/1/2006	6/1/2006		
	MATHEWSON - NORTHWEST 345KV CKT 1	1/1/2010	1/1/2010		
	MATHEWSON - TATONGA 345KV CKT 1	1/1/2010	1/1/2010		
	RIVER ROAD - SAWYER 115KV CKT 1	12/1/2009	6/1/2013		
	TATONGA - WOODWARD 345KV CKT 1	1/1/2010	1/1/2010		

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

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

Customer Study Number WRGS AG1-2015-054

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
WRGS	80888798	SECI	EES	106	12/31/2016	4/30/2022	6/1/2019	10/1/2024	\$ -	\$ 8,830,054	\$ -	\$ -
		•		•	•	•	•	•	Ś -	\$ 8,830,054	\$ -	Ś -

80888798 None \$ - \$ - \$ - \$ - \$ -	Reservation Upgrade Name	DUN	EOC	Earliest Start Date	Base Plan Funding for Wind		Allocated E & C	Total E & C Cost	Total Revenue Requirements
	80888798 None				\$ -	\$ -	\$ -	\$ -	\$ -

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80888798	BUCKNER - SPEARVILLE 345 KV CKT 1 Terminal Upgrades	6/1/2016	7/25/2016		
	Caldwell 138 kV cap bank	6/1/2017	6/1/2018		
	CIMARRON - DRAPER LAKE 345KV CKT 1	10/1/2021	10/1/2021		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80888798	Holt - Neligh 345 kV	10/1/2017	6/1/2019	6/1/2019	Yes
	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	10/1/2015	6/1/2018	6/1/2018	Yes
	Wind Farm Switching - Mooreland	10/1/2015	6/1/2018	6/1/2018	Yes
	Woodward District - Wind Farm Switching Reconductor	10/1/2015	6/1/2018	6/1/2018	Yes

<sup>\*</sup>Credits may be required for applicable generation interconnection network upgrades.

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

Customer Study Number WRGS AG1-2015-055

							Deferred Start	Deferred Stop	Potential Base			
				Requested	Requested Start	Requested Stop	Date Without	Date Without	Plan Funding	Point-to-Point	Allocated E & C	Total Revenue
Customer	Reservation	POR	POD	Amount	Date	Date	Redispatch	Redispatch	Allowable	Base Rate	Cost	Requirements
WRGS	80888821	SECI	EES	50	10/31/2015	10/31/2016	6/1/2018	6/1/2019	\$ -	\$ 780,960	\$ -	\$ -
		•		•	•	•	•	•	Ś -	\$ 780,960	\$ -	\$ -

8088821 None S - S - S - S - S	Reservation Upgrade Name	DUN	EOC	Earliest Start Date	Base Plan Funding for Wind		Allocated E & C	Total E & C Cost	Total Revenue Requirements
	80888821 None				\$ -	\$ -	\$ -	\$ -	\$ -

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80888821	Anthony - Harper 138 kV Ckt 1	6/1/2016	12/31/2017		
	BUCKNER - SPEARVILLE 345 KV CKT 1 Terminal Upgrades	6/1/2016	7/25/2016		Yes
	Caldwell 138 kV cap bank	6/1/2017	6/1/2018		

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

				Earliest Start	Redispatch
Reservation	Upgrade Name	DUN	EOC	Date	Available
80888821	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	10/1/2015	6/1/2018	6/1/2018	Yes
	Wind Farm Switching - Mooreland	10/1/2015	6/1/2018	6/1/2018	Yes
	Woodward District - Wind Farm Switching Reconductor	10/1/2015	6/1/2018	6/1/2018	Yes

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

Transmission Owner	, Upgrade	Solution	Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)	Estimated Engineering & Construction Cost
AEPW	EARLSBORO 4138.00 - MAUD 138KV CKT 1	Terminal Equipment	6/1/2021	6/1/2021	\$358,434.00
MIDW	HAYS PLANT - VINE STREET 115KV CKT 1	Rebuild .23 miles of line	10/1/2015	6/1/2018	\$168,788.00
MIDW	Heizer 115kV 24Mvar cap bank	Add 24Mvar of capacitors at Heizer 115 kV	6/1/2016	6/1/2017	\$888,000.00
MIDW	KNOLL - N HAYS3 115.00 115KV CKT 1	Rebuild 2 miles of line	10/1/2015	6/1/2018	\$1,467,722.00
MIDW	N HAYS3 115.00 - VINE STREET 115KV CKT 1	Rebuild 3.73 miles of line	10/1/2015	6/1/2018	\$2,737,301.00
MIDW	Pawnee 115 kV Add 2.7Mvar cap bank	Add 2.7Mvar of capacitors to existing bank at Pawnee 115kV	6/1/2021	6/1/2021	\$99,900.00
MIDW	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	Rebuild 38.56 Miles of line	10/1/2015	6/1/2018	\$37,200,528.00
NPPD	Holt - Neligh 345 kV	Build new 16 miles 345 kV Holt - Neligh and associated terminal equipment	10/1/2017	6/1/2019	\$30,656,000.00
NPPD	SHELDON - SW7&BENNET7 115.00 115KV CKT 1	Terminal Equipment	6/1/2021	6/1/2021	\$324,585.00
OKGE	ROMAN NOSE - SOUTHARD 138KV CKT 1	Terminal Equipment	6/1/2017	6/1/2017	\$358,434.00
OKGE	Wind Farm Switching - Mooreland	Upgrade Teminial Equipment in Wind Farm Switching & Reconductor	10/1/2015	6/1/2018	\$950,000.00
OKGE	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1	Upgrade Transformer to at least 153 MVA	6/1/2016	6/1/2018	\$3,390,798.00
OKGE	Woodward District - Wind Farm Switching Reconductor	Reconductor 12.07 mile Woodward District - Wind Farm Switching 138 kV Line		6/1/2018	\$7,500,000.00
OPPD	SUB 1201 - SUB 1206 161KV CKT 1	Rebuild 8.3 miles of line	6/1/2021	6/1/2021	\$7,491,961.00
SPS SPS SPS	Andrews - Hobbs 345 kV Ckt 1 Voltage Conversion & Andrews 345/115kV Ckt 1 Accelerate  CARLISLE INTERCHANGE (WH XHS70711) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate  CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1 Accelerate	Convert existing 30.5-mile 230 kV line from Andrews to Hobbs to 345 kV. Reterminate line on 345 kV bus at Hobbs. Ratings will be based on current conductors - bundled 795 ACSR. Install new 345/115 kV 448 MVA transformer at Andrews substaton and remove two 230/115 kV transformers. Install any necessary 115 kV terminal equipment.  Upgrade transformer to 250 MVA.  Replace Terminal Equipment	6/1/2017 10/1/2016 6/1/2017	6/1/2018 10/1/2018 6/1/2017	\$3,049,140.00 \$764,834.00 \$66,667.00
SPS	CUNNINGHAM STATION - HOBBS INTERCHANGE 115KV CKT 1	Terminal Equipment	6/1/2017	6/1/2017	\$324,585.00
SPS	EDCO 230 kV Double Bus Double Breaker Accelerate	Build the 230kV main and transfer bus to a double breaker double bus.	10/1/2016	12/1/2017	\$483,405.00
SPS SPS SPS	NORTHWEST INTERCHANGE - ROLLHILLS 3115.00 115KV CKT 1  Potter to Tolk 345 kV  WOLFFORTH INTERCHANGE (WH 7001668) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	Rebuild 8.34 miles of line  Build 111 mile 345 kV line from Potter to Tolk. Further study analysis is needed to verify the need of upgrade given the recently approved Network Upgrades resulting from the High Priority Incremental Load Study.  Upgrade transformer to 250 MVA.	1/1/2018 10/1/2017 6/1/2017	6/1/2018 6/1/2019 6/1/2018	\$6,120,400.00 \$168,852,765.00 \$875,070.00
SUNC	GREENSBURG - SSTARTP3 115.00 115KV CKT 1	Rebuild 7.6 Miles of line	6/1/2017	6/1/2018	\$5,577,343.00
WERE	ARKANSAS CITY - PARIS 69KV CKT 1	Terminal Equipment	6/1/2017	6/1/2017	\$145,773.00
WERE	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	Rebuild 24 miles of line	6/1/2016	6/1/2018	\$34,259,472.00
WERE	NORTH STREET - NORTHVIEW 115KV CKT 1	Rebuild 3.2 Miles of line	6/1/2021	6/1/2021	\$2,348,355.00
WERE	NORTH STREET - NORTHVIEW 115KV CKT 2	Rebuild 3.2 Miles of line	6/1/2021	6/1/2021	\$2,348,355.00
WERE	SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	Replace Terminal Equipment	6/1/2017	6/1/2017	\$395,000.00
WERE	Wellington 69kV Cap Bank	Install two (2) stages of 14.4 MVAR capacitor banks at Wellington 69 kV.	10/1/2015	6/1/2017	\$1,619,280.00
WERE	WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1	Upgrade Transformer to at least 539 MVA	6/1/2016	6/1/2018	\$9,056,700.00
WERE	WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1  KV Ckt 1 Voltage Conversion and Andrews 345/115 kV Ckt 1 Transformer are being re-evaluated for need.	Upgrade Transformer to at least 572 MVA	6/1/2016	6/1/2018	\$9,056,700.00

<sup>\*</sup>Andrews - Hobbs 345 kV Ckt 1 Voltage Conversion and Andrews 345/115 kV Ckt 1 Transformer are being re-evaluated for need.

<sup>\*\*</sup> Potter to Tolk 345kV is being re-evaluated for need.

<sup>\*\*</sup>Holt - Neligh 345kV is being re-evaluated for need.

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

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

Transmission Owner	Upgrade	Solution	Earliest Date Upgrade Required (DUN)	Estimated Date of Upgrade Completion (EOC)
OKGE	HANCOCK - MUSKOGEE 161KV CKT 1 Accelerate	Replace Muskogee Terminal Equipment	6/1/2017	6/1/2017
SPS	CUNNINGHAM STATION - MADDOX STATION 115KV CKT 1	Rebuild 3.1-mile 115 kV line to at least 167 MVA Rate B	6/1/2021	6/1/2021
SPS	EAST PLANT INTERCHANGE - MANHATTAN SUB 115KV CKT 1	Rebuild 2.236 miles to at least 192 MVA Rate B	1/1/2018	6/1/2018
		Replace 1st 230/115 kV transformer at Tuco with 230/115 kV 288 MVA		
SPS	TUCO INTERCHANGE (GE M102345) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	transformer.	6/1/2017	6/1/2018

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)
GRDA	CLAREMORE (CLRAUTO1) 161/69/13.8KV TRANSFORMER CKT 1	Upgrade the 161/69/13.8KV TRANSFORMER.	6/1/2021	6/1/2021
GRDA	CLAREMORE (CLRAUTO1) 161/69/13.8KV TRANSFORMER CKT 2	Upgrade the 161/69/13.8KV TRANSFORMER.	6/1/2021	6/1/2021
GRDA	CPP TRANSF #2 - WILGRO 69KV CKT 1	Upgrade break and relay at CPPX 69 kV station.	6/1/2016	7/25/2016
GRDA	STILLWATER KINZIE (KINAUTO1) 138/69/13.8KV TRANSFORMER CKT 1	Replace Stillwater Kinzie Transformer with 112/140 unit	6/1/2017	6/1/2019
KCPL	South Waverly 161/69 kV Ckt 1 Transformer	Replace Existing 161/69 kV transformer at South Waverly to increase ratings from 22 MVA to 50 MVA.	6/1/2016	1/21/2017
	Mingo 345/115 kV Ckt 2 Transformer	Install a second 345/115 kV transformer at Mingo. Install any necessary 115 kV terminal equipment.	6/1/2017	6/1/2017
MIPU	HARRIONSVILLE NORTH - RALPH GREEN 69KV CKT 1	Rebuild of Harrisonville North and Ralph Green 69kV line.	6/1/2016	1/21/2017
MKEC	Anthony - Harper 138 kV Ckt 1	Construct new 21-mile 138 kV line from Anthony to Harper.	6/1/2016	12/31/2017
NPPD	Ainsworth - Ainsworth Wind 115 kV Ckt 1	Rebuild 7.1-mile 115 kV line from Ainsworth to Ainsworth Wind to achieve a new emergency rating of 140 MVA.	1/1/2018	6/1/2019
		Upgrade CT and wavetrap at both Cimarron and Draper 345 kV substations to 2000 A to achieve a new rating of 1195 MVA on the Cimarron - Draper 345 kV		
OKGE	CIMARRON - DRAPER LAKE 345KV CKT 1	line.	10/1/2021	10/1/2021
OPPD	Sub 3459 345/161 kV Transformer	Install new 345/161 kV transformer at Sub 3459. Install any necessary 161 kV terminal equipment.	6/1/2021	6/1/2021

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

WERE	Multi - Viola 345/138kV Transformer and 138 kV Lines to Clearwater and Gill	line from Viola to Clearwater substation. Build 138 kV line from Viola to Gill	6/1/2016	6/1/2017
WERE	Multi - Geary County 345/115 kV and Geary - Chapman 115 kV	Geary County - Chapman 115 kV line.	6/1/2016	6/1/2018
		JEC-Summit and McDowell Creek-Junction City #2 ckt separate. Construct new		
WERE	CRAWFORD - NEOSHO 69KV CKT 1	Rebuild 6.7 Miles of line Build new Geary County 345/115 kV substation south of Junction City where	6/1/2021	6/1/2021
WERE	BPU - CITY OF MCPHERSON PLANT - WEST MCPHERSON 115KV CKT 1	Replace Terminal Equipment	6/1/2021	6/1/2021
WERE	BENTON 138kV Terminal Equipment	Replace Terminal Equipment	6/1/2016	6/1/2017
SUNC	Caldwell 138 kV cap bank	New 9 Mvar cap bank	6/1/2017	6/1/2018
SUNC	BUCKNER - SPEARVILLE 345 KV CKT 1 Terminal Upgrades	Spearville.	6/1/2016	7/25/2016
SPS	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	Increase Sundown 230/115 kV transformer to 250 MVA  Replace breaker, switches, CTs, and relays at the Buckner and Spearville 345 kV substations to increase the rating of the 345 kV line from Buckner to	6/1/2021	6/1/2021
SPS	SAND DUNES SUB - WIPP SUB 115KV CKT 1	Rebuild 5.63 miles of line	6/1/2021	6/1/2021
		2 1 11 1 2 2 11 11 11	5/4/9094	5/4/0004
SPS	POTASH JUNCTION INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 1	Replace Transformer to at least 327 MVA	6/1/2021	6/1/2021
SPS	PECOS INTERCHANGE (WH BCS15041) 230/115/13.2KV TRANSFORMER CKT 1	Replace Transformer to at least 186 MVA	6/1/2021	6/1/2021
SPS	PCA Interchange - Quahada 115 kV Ckt 1	Rebuild of the PCA Interchange and Quahada 115kV line.	6/1/2017	6/1/2017
SPS	LIVSTNRIDGE3115.00 - WIPP SUB 115KV CKT 1	Rebuild 2.75 miles of transmission line.	6/1/2021	6/1/2021
SPS	Deaf Smith - Panda 115 kV Ckt 1	Rebuild 2.4-mile 4/0 segment of 115 kV line from Deaf Smith to Panda HFD with 795 ACSR conductor.	1/1/2018	4/1/2018
SPS	Dawn - Panda 115 kV Ckt 1	Rebuild 8.4-mile 115 kV line from Dawn to Panda achieve a new emergency rating of 273 MVA.	1/1/2018	4/1/2018
SPS	CUNNINGHAM STATION - POTASH JUNCTION INTERCHANGE 230KV CKT 1	Replace WaveTrap at Chaves	6/1/2021	6/1/2021
SPS	Canyon West - Dawn 115 kV Ckt 1	Rebuild 13.7-mile 115 kV line from Canyon West to Dawn to achieve a new emergency rating of 273 MVA.	1/1/2018	4/1/2018
SPS	Amoco - Sundown 230 kV Terminal Upgrades	Upgrade wave traps at Sundown and Amoco to 1200 A to achieve a new emergency rating of 437 MVA on the 230 kV line from Amoco to Sundown.	10/1/2017	10/1/2017

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

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

Transmission Owner	ission Owner Upgrade Solution Up			
		Osage Substation:Replace Shidler 138kV line terminal primary and redundant		
		relaying with SEL uProcessor based relays, install 3-138kV PTs, Install 1-138kV		
AEPW	Osage - Shidler 138kV	CB, Install metering, Install 2000A line Trap	1/15/2014	1/15/2014
		138kV four (4) Breaker ring-bus including 138kV transmission line terminal to		
		KAMO's Remington 138kV Substation, replace grounding switch with circuit		
		switcher , move OGE's Osage 138kV line terminal, replace relay panels on		
		OGE's Osage and Mound Road 138kV line terminals, metering, and associated		
AEPW	Shidler 138 kV	equipment.	2/8/2014	2/8/2014
		Expand Southwestern Station for termination of WFEC 2.75 mile 138kV		
AEPW	Southwestern Station - Washita 138kV Ckt 1 (AEP)	Transmission Line from Washita Switch Station	10/1/2005	10/1/2005
AEPW	Valliant 345 kV (AEP)	Vallient 345 KV line terminal	7/1/2012	7/1/2012
		Construct Approx. 15 miles of 138kV transmission line from Fairfax to a new		
		substation on the Cleveland-Stillwater 138kV line near Pawnee. & Fairfax		
		Substation: Install 138kV line terminal and any additional modifications that		
GRDA	Fairfax - Pawnee 138kV Ckt 1	are necessary to connect to	6/30/2014	6/1/2014
		· ·		
		New three breaker ring bus on the Cleveland-Stillwater 138kV line near		
GRDA	Pawnee 138 kV	Pawnee. Station will have terminals to Cleveland, Stillwater, and Fairfax.	6/30/2014	6/1/2014
KACP	EASTOWN7 345.00 (EASTOWN 345) 345/161/13.8KV TRANSFORMER CKT 1	Replace 715 MVA transformer.	5/1/2014	5/1/2014
KACP	IATAN - ST JOE 345KV CKT 1	Relocate latan St. Joseph 345kV line	12/15/2009	12/15/2009
KACF	IMAN - 51 JOE 545KV CKT 1	latan 161kV substation work including the installation of a ring bus, three (3)	12/13/2003	12/13/2009
KACD	Johan 101 IAV		12/15/2000	12/15/2000
KACP	latan 161 kV	161kV circuit breakers, and associated equipment	12/15/2009	12/15/2009
KACP	latan 345/161 kV transformer	latan 345/161 kV XFMR and latan 161 kV substation work	12/15/2009	12/15/2009
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
MIPU	Longview - KC South 161kV Ckt 1	Install new 161kV wavetrap in place of existing wavetrap	1/31/2011	1/31/2011
MKEC	BARBER - MEDICINE LODGE 115KV CKT 1	Rebuild line	12/1/2009	6/1/2013
MKEC	BARBER - SAWYER 115KV CKT 1	Rebuild line	12/1/2009	6/1/2013
MKEC	BARBER (BARBER 4) 138/115/2.72KV TRANSFORMER CKT 1	Upgrade transformer	12/1/2009	6/1/2013
MKEC	CLIFTON - GREENLEAF 115KV CKT 1	Rebuild 14.4 miles	6/1/2011	6/1/2013
MKEC	FLATRDG3 - HARPER 138KV CKT 1	Rebuild 24.15 mile line	12/1/2009	6/1/2013
MKEC	FLATRDG3 - MEDICINE LODGE 138KV CKT 1	Rebuild 8.05 mile line	12/1/2009	6/1/2013
MKEC	GREENLEAF - KNOB HILL 115KV CKT 1 (MKEC)	Rebuild 43.5% Ownership of 20.9 miles	6/1/2013	6/1/2013
MKEC	Lancer - North Judson Large 115KV CKT 1	Build appoximately 20 mile 115 kV line	10/1/2013	6/1/2016
MKEC	Lancer - North Judson Lange 115kV CKT 1  Lancer - Spearville 345kV CKT 1	· · · · · · · · · · · · · · · · · · ·	10/1/2013	6/1/2016
		Build appoximately 0.5 mile 345 kV line		
MKEC	Lancer 345/115/13.8kV Transformer CKT 1	Build new Lancer Substation with 345/115 kV transformer	10/1/2013	6/1/2016
MKEC	RIVER ROAD - SAWYER 115KV CKT 1	Rebuild line	12/1/2009	6/1/2013
		Deede - Deede - Cultural AAOC D & January - Deede - Detection - AAFINA		
		Replace Breaker Switch 1106-D & jumpers; Replace Petersburg 115kV		
		Substation main bus; Upgrade and replace transmission structures on 115kV		
NPPD	Albion - Petersburg 115kV Ckt 1 GEN-2006-044N Upgrade	lines TL1168 A & B to facilitate 100 degrees Centigrade line operation	12/31/2012	12/31/2012
		Raise structures and line clearances as necessary to re-rate the transmission		
NPPD	Fort Randall - Madison County 230kV Ckt 1	line to 320 MVA	10/1/2014	10/1/2014
		Increase clearances to accommodate 320MVA facility rating to address		
NPPD	Hoskins - Dixon County 230kV Line Upgrade	loading issues	10/24/2015	10/24/2015
		Raise structures and line clearances as necessary to re-rate the transmission		
NPPD	Kelly - Madison County 230kV Ckt 1	line to 320 MVA	10/1/2014	10/1/2014
		Replace Breaker 1106, jumpers, & 115kV Switch 1106-D2; Replace Petersburg		
		115kV Substation main bus; Upgrade and replace transmission structures on		
NPPD	Neligh - Petersburg North 115kV Ckt 1	115kV lines TL1168 A & B to facilitate 100 degrees Centigrade line operation	12/31/2012	12/31/2012
NPPD	Twin Church - Dixon County 230kV Line Upgrade	Increase clearances to accommodate 320MVA facility rating	10/24/2015	10/24/2015

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

		-		
OKGE	MATHEWSON - NORTHWEST 345KV CKT 1	Build 345 kV line	1/1/2010	1/1/2010
OKGE	MATHEWSON - TATONGA 345KV CKT 1	Build 345 kV line	1/1/2010	1/1/2010
OKGE	TATONGA - WOODWARD 345KV CKT 1	Build 345 kV line	1/1/2010	1/1/2010
OKGE	WOODWARD - IODINE 138KV CKT 1	Tap Iodine to Woodward 138 kV line	1/1/2010	1/1/2010
OKGE	WOODWARD - WOODWARD EHV 138KV CKT 1	Build .5 miles of 138 kV and install terminal equipment	1/1/2010	1/1/2010
OKGE	WOODWARD - WOODWARD EHV 138KV CKT 2	Build .5 miles of 138 kV and install terminal equipment	1/1/2010	1/1/2010
OKGE	WOODWARD 345/138KV TRANSFORMER CKT 1	Install 345/138 kV XF	1/1/2010	1/1/2010
		Reconductor Harrington Mid - Nichols 230kV. Replace switches and breakers		
SPS	Harrington Mid - Nichols 230 kV Ckt 2	to get circuit to 727/727 MVA rating. New limit should be bus rating.	12/1/2012	12/1/2012
		Reconductor Harrington West - Nichols 230kV. Replace switches and breakers		
SPS	Harrington West - Nichols 230kV Ckt 1	to get circuit to 727/727 MVA rating. New limit should be bus rating.	12/1/2012	12/1/2012
WFEC	BLUCAN5 4 138.00 - PARADISE 138KV CKT 1	Upgrade Paradise to G03-05T to 1113	6/1/2010	6/1/2013
WFEC	HUGO - VALLIANT 345KV CKT 1	New 19 miles 345 KV	7/1/2012	7/1/2012
WFEC	HUGO 345/138KV TRANSFORMER CKT 1	New 345/138 kv Auto	7/1/2012	7/1/2012
		Expand Washita Switch Station from a 4-breaker to a 5-breaker 138kV ring		
		bus & Construct 2.75 mile 138kV Transmission Line to the AEP/PSO		
WFEC	Southwestern Station - Washita 138kV Ckt 1	Southwestern Station	10/1/2005	10/1/2005

## 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
		Upgrade 1272 AAC bus at Farmington REC. Replace bus at Farmington REC			
AECC		and rebuild 400 feet of the 161 kV line going to Chamber Springs.	6/1/2017	6/1/2019	Note 1
AECI	FAIRFAX 138/69KV TRANSFORMER CKT 1	Replace with 84 MVA unit	6/1/2017	6/1/2017	Note 2
GRIS	SUB C - SUB E 115KV CKT 1	Rebuild 4.57 miles of transmission line	6/1/2021	6/1/2021	\$3,000,000.00
LCEC	LEA COUNTY REC -MHOON - LEA COUNTY REC-LOVINGTON INTERCHANGE 69KV CKT 1	Rebuild 8.5 Miles of line	6/1/2021	6/1/2021	\$6,245,157.00
WAPA	FT RANDAL - SPENCER 115KV CKT 1	Reconductor 20 Miles of line	6/1/2016	6/1/2016	\$10,662,520.00

Provided: 2 after Nation 12 and 2 an

**Table 7- Service Upgrade Cost Allocation per Request** 

Un and de Name	Contains	Charles Name have	B	Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
ARKANSAS CITY - PARIS 69KV CKT 1	KCPS	AG1-2015-025	80878929	42.04%	\$61,282
ARKANSAS CITY - PARIS 69KV CKT 1	KPP	AG1-2015-030	80716628	25.49%	\$37,161
ARKANSAS CITY - PARIS 69KV CKT 1	KPP	AG1-2015-031	80716676	28.96%	\$42,217
ARKANSAS CITY - PARIS 69KV CKT 1	KPP	AG1-2015-032	80888916	3.51%	\$5,113
				Total:	\$145,773

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
Andrews - Hobbs 345 kV Ckt 1 Voltage Conversion & Andrews 345/115kV Ckt 1 Accelerate	FPLP	AG1-2015-012	80838291	8.69%	\$264,909
Andrews - Hobbs 345 kV Ckt 1 Voltage Conversion & Andrews 345/115kV Ckt 1 Accelerate	FPLP	AG1-2015-013	80838292	13.03%	\$397,364
Andrews - Hobbs 345 kV Ckt 1 Voltage Conversion & Andrews 345/115kV Ckt 1 Accelerate	SPSM	AG1-2015-045	80871942	11.08%	\$337,905
Andrews - Hobbs 345 kV Ckt 1 Voltage Conversion & Andrews 345/115kV Ckt 1 Accelerate	SPSM	AG1-2015-046	80871945	11.08%	\$337,905
Andrews - Hobbs 345 kV Ckt 1 Voltage Conversion & Andrews 345/115kV Ckt 1 Accelerate	SPSM	AG1-2015-047	80872689	56.12%	\$1,711,058
				Total:	\$3,049,140

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
CARLISLE INTERCHANGE (WH XHS70711) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	FPLP	AG1-2015-012	80838291	36.32%	\$277,789
CARLISLE INTERCHANGE (WH XHS70711) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	FPLP	AG1-2015-013	80838292	54.48%	\$416,684
CARLISLE INTERCHANGE (WH XHS70711) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	SPSM	AG1-2015-044	80868905	0.14%	\$1,070
CARLISLE INTERCHANGE (WH XHS70711) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	SPSM	AG1-2015-045	80871942	0.73%	\$5,579
CARLISLE INTERCHANGE (WH XHS70711) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	SPSM	AG1-2015-046	80871945	0.73%	\$5,579
CARLISLE INTERCHANGE (WH XHS70711) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	SPSM	AG1-2015-047	80872689	7.60%	\$58,133
				Total:	\$764.834

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1 Accelerate	SPSM	AG1-2015-045	80871942	35.04%	\$23,357
CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1 Accelerate	SPSM	AG1-2015-046	80871945	35.04%	\$23,357
CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1 Accelerate	SPSM	AG1-2015-047	80872689	29.93%	\$19,953
				Total:	\$66,667

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
CUNNINGHAM STATION - HOBBS INTERCHANGE 115KV CKT 1	FPLP	AG1-2015-012	80838291	14.99%	\$48,654
CUNNINGHAM STATION - HOBBS INTERCHANGE 115KV CKT 1	FPLP	AG1-2015-013	80838292	22.48%	\$72,981
CUNNINGHAM STATION - HOBBS INTERCHANGE 115KV CKT 1	SPSM	AG1-2015-044	80868905	4.48%	\$14,531
CUNNINGHAM STATION - HOBBS INTERCHANGE 115KV CKT 1	SPSM	AG1-2015-045	80871942	7.52%	\$24,397
CUNNINGHAM STATION - HOBBS INTERCHANGE 115KV CKT 1	SPSM	AG1-2015-046	80871945	7.52%	\$24,397
CUNNINGHAM STATION - HOBBS INTERCHANGE 115KV CKT 1	SPSM	AG1-2015-047	80872689	43.02%	\$139,627
	_	_		Total:	\$324.585

**Table 7- Service Upgrade Cost Allocation per Request** 

Upgrade Name	Customer	Study Number	Reservation	Allocation Percentage	Allocated E & C
EARLSBORO 4138.00 - MAUD 138KV CKT 1	AEPM	AG1-2015-001	80780823	17.14%	\$61,442
EARLSBORO 4138.00 - MAUD 138KV CKT 1	AEPM	AG1-2015-002	80780827	8.57%	\$30,721
EARLSBORO 4138.00 - MAUD 138KV CKT 1	FPLP	AG1-2015-014	80838298	74.29%	\$266,271
				Total:	\$358,434

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
EDCO 230 kV Double Bus Double Breaker Accelerate	FPLP	AG1-2015-012	80838291	2.72%	\$13,171
EDCO 230 kV Double Bus Double Breaker Accelerate	FPLP	AG1-2015-013	80838292	4.09%	\$19,756
EDCO 230 kV Double Bus Double Breaker Accelerate	SPSM	AG1-2015-047	80872689	92.96%	\$449,382
EDCO 230 kV Double Bus Double Breaker Accelerate	WFEC	AG1-2015-049	80271483	0.23%	\$1,096
				Total:	\$483,405

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
GREENSBURG - SSTARTP3 115.00 115KV CKT 1	UCU	AG1-2015-048	80499812	100.00%	\$5,577,343
				Total:	\$5,577,343

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
HAYS PLANT - VINE STREET 115KV CKT 1	FPLP	AG1-2015-009	80838259	48.86%	\$82,470
HAYS PLANT - VINE STREET 115KV CKT 1	LESM	AG1-2015-034	80792734	0.99%	\$1,670
HAYS PLANT - VINE STREET 115KV CKT 1	UCU	AG1-2015-048	80499812	0.70%	\$1,180
HAYS PLANT - VINE STREET 115KV CKT 1	WRGS	AG1-2015-052	80812246	49.45%	\$83,468
				Total:	\$168,788

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	BRPS	AG1-2015-004	80882173	0.17%	\$59,037
HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	ETEC	AG1-2015-007	80515981	4.08%	\$1,396,481
HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	FPLP	AG1-2015-011	80838283	46.50%	\$15,929,037
HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	HZN	AG1-2015-019	80566529	1.77%	\$606,125
HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	HZN	AG1-2015-020	80566532	1.79%	\$614,346
HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	HZN	AG1-2015-021	80566535	1.44%	\$494,430
HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	HZN	AG1-2015-022	80707447	3.56%	\$1,218,103
HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	HZN	AG1-2015-023	80889467	3.60%	\$1,232,607
HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	HZN	AG1-2015-024	80889471	2.98%	\$1,019,421
HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	KCPS	AG1-2015-025	80878929	14.39%	\$4,930,268
HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	KMEA	AG1-2015-029	80850246	0.05%	\$17,221
HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	KPP	AG1-2015-032	80888916	0.61%	\$208,653
HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	LESM	AG1-2015-034	80792734	9.41%	\$3,223,218
HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	MOWR	AG1-2015-035	80848073	0.07%	\$24,380
HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	MOWR	AG1-2015-037	80868666	0.10%	\$33,440
HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	UCU	AG1-2015-048	80499812	5.26%	\$1,801,268
HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	WRGS	AG1-2015-052	80812246	4.04%	\$1,383,056
HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	APM	AG1-2015-056	80853948	0.20%	\$68,382
			<u> </u>	Total:	\$34,259,472

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
Heizer 115kV 24Mvar cap bank	FPLP	AG1-2015-009	80838259	49.67%	\$441,063
Heizer 115kV 24Mvar cap bank	WRGS	AG1-2015-052	80812246	50.33%	\$446,937
				Total:	\$888,000

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
Holt - Neligh 345 kV	BRPS	AG1-2015-003	80873830	4.45%	\$1,363,825
Holt - Neligh 345 kV	BRPS	AG1-2015-004	80882173	0.63%	\$193,137
Holt - Neligh 345 kV	ETEC	AG1-2015-007	80515981	0.57%	\$176,083
Holt - Neligh 345 kV	FPLP	AG1-2015-008	80838247	2.26%	\$692,061
Holt - Neligh 345 kV	FPLP	AG1-2015-009	80838259	2.96%	\$905,971
Holt - Neligh 345 kV	HZN	AG1-2015-019	80566529	0.42%	\$127,831
Holt - Neligh 345 kV	HZN	AG1-2015-020	80566532	0.42%	\$128,119
Holt - Neligh 345 kV	HZN	AG1-2015-021	80566535	0.33%	\$100,655
Holt - Neligh 345 kV	HZN	AG1-2015-022	80707447	0.96%	\$294,934
Holt - Neligh 345 kV	HZN	AG1-2015-023	80889467	0.96%	\$295,509
Holt - Neligh 345 kV	HZN	AG1-2015-024	80889471	0.80%	\$246,620
Holt - Neligh 345 kV	KCPS	AG1-2015-025	80878929	1.07%	\$328,326
Holt - Neligh 345 kV	KMEA	AG1-2015-029	80850246	0.04%	\$11,334
Holt - Neligh 345 kV	LESM	AG1-2015-034	80792734	2.88%	\$882,838
Holt - Neligh 345 kV	ОРРМ	AG1-2015-040	80008188	73.53%	\$22,540,232
Holt - Neligh 345 kV	RESN	AG1-2015-043	80888988	1.46%	\$448,306
Holt - Neligh 345 kV	UCU	AG1-2015-048	80499812	0.97%	\$296,052
Holt - Neligh 345 kV	WFEC	AG1-2015-049	80271483	0.13%	\$39,703
Holt - Neligh 345 kV	WFEC	AG1-2015-051	80912733	0.72%	\$221,600
Holt - Neligh 345 kV	WRGS	AG1-2015-052	80812246	3.16%	\$969,319
Holt - Neligh 345 kV	WRGS	AG1-2015-053	80812328	1.28%	\$392,553
Holt - Neligh 345 kV	APM	AG1-2015-056	80853948	0.00%	\$994
				Total:	\$30,656,000

**Table 7- Service Upgrade Cost Allocation per Request** 

					Allocation	Allocated E & C
	Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
KNOLL - N HAYS3	115.00 115KV CKT 1	FPLP	AG1-2015-009	80838259	48.86%	\$717,131
KNOLL - N HAYS3	115.00 115KV CKT 1	LESM	AG1-2015-034	80792734	0.99%	\$14,520
KNOLL - N HAYS3	115.00 115KV CKT 1	UCU	AG1-2015-048	80499812	0.70%	\$10,260
KNOLL - N HAYS3	115.00 115KV CKT 1	WRGS	AG1-2015-052	80812246	49.45%	\$725,812
					Total:	\$1,467,722

**Table 7- Service Upgrade Cost Allocation per Request** 

					Allocation	Allocated E & C
	Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
N HAYS3	115.00 - VINE STREET 115KV CKT 1	FPLP	AG1-2015-009	80838259	48.86%	\$1,337,449
N HAYS3	115.00 - VINE STREET 115KV CKT 1	LESM	AG1-2015-034	80792734	0.99%	\$27,079
N HAYS3	115.00 - VINE STREET 115KV CKT 1	UCU	AG1-2015-048	80499812	0.70%	\$19,135
N HAYS3	115.00 - VINE STREET 115KV CKT 1	WRGS	AG1-2015-052	80812246	49.45%	\$1,353,638
					Total:	\$2,737,301

**Table 7- Service Upgrade Cost Allocation per Request** 

Upgrade Name	Customer	Study Number	Reservation	Allocation Percentage	Allocated E & C
NORTH STREET - NORTHVIEW 115KV CKT 1	KPP	AG1-2015-030	80716628	38.04%	\$893,385
NORTH STREET - NORTHVIEW 115KV CKT 1	KPP	AG1-2015-031	80716676	43.36%	\$1,018,237
NORTH STREET - NORTHVIEW 115KV CKT 1	KPP	AG1-2015-032	80888916	18.60%	\$436,733
				Total:	\$2,348,355

**Table 7- Service Upgrade Cost Allocation per Request** 

Upgrade Name	Customer	Study Number	Reservation	Allocation Percentage	Allocated E & C
NORTH STREET - NORTHVIEW 115KV CKT 2	KPP	AG1-2015-030	80716628	38.04%	\$893,385
NORTH STREET - NORTHVIEW 115KV CKT 2	KPP	AG1-2015-031	80716676	43.36%	\$1,018,237
NORTH STREET - NORTHVIEW 115KV CKT 2	KPP	AG1-2015-032	80888916	18.60%	\$436,733
				Total:	\$2,348,355

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
NORTHWEST INTERCHANGE - ROLLHILLS 3115.00 115KV CKT 1	SPSM	AG1-2015-047	80872689	100.00%	\$6,120,400
				Total:	\$6.120.400

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
Pawnee 115 kV Add 2.7Mvar cap bank	FPLP	AG1-2015-009	80838259	49.87%	\$49,825
Pawnee 115 kV Add 2.7Mvar cap bank	WRGS	AG1-2015-052	80812246	50.13%	\$50,075
				Total:	\$99,900

**Table 7- Service Upgrade Cost Allocation per Request** 

Upgrade Name	Customer	Study Number	Reservation	Allocation Percentage	Allocated E & C
Potter to Tolk 345 kV	RESN	AG1-2015-043	80888988	12.79%	\$21,588,545
Potter to Tolk 345 kV	SPSM	AG1-2015-047	80872689	79.30%	\$133,903,904
Potter to Tolk 345 kV	WFEC	AG1-2015-051	80912733	7.91%	\$13,360,316
	-	•		Total:	\$168,852,765

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
ROMAN NOSE - SOUTHARD 138KV CKT 1	RESN	AG1-2015-043	80888988	77.01%	\$276,023
ROMAN NOSE - SOUTHARD 138KV CKT 1	WFEC	AG1-2015-051	80912733	22.99%	\$82,411
				Total:	\$358,434

**Table 7- Service Upgrade Cost Allocation per Request** 

Upgrade Name	Customer	Study Number	Reservation	Allocation Percentage	Allocated E & C
SHELDON - SW7&BENNET7 115.00 115KV CKT 1		AG1-2015-031	80716676	Ū	
SHELDON - SW7&BENNET7 115.00 115KV CKT 1	LESM	AG1-2015-034	80792734	93.86%	\$304,668
				Total:	\$324,585

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	FPLP	AG1-2015-008	80838247	5.22%	\$1,940,870
SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	FPLP	AG1-2015-009	80838259	33.81%	\$12,578,475
SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	KMEA	AG1-2015-029	80850246	0.08%	\$28,039
SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	LESM	AG1-2015-034	80792734	15.32%	\$5,699,600
SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	UCU	AG1-2015-048	80499812	3.11%	\$1,156,135
SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	WRGS	AG1-2015-052	80812246	34.17%	\$12,711,313
SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	WRGS	AG1-2015-053	80812328	8.30%	\$3,086,096
		_		Total:	\$37,200,528

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
SUB 1201 - SUB 1206 161KV CKT 1	OPPM	AG1-2015-040	80008188	100.00%	\$7,491,961
				Total:	\$7,491,961

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	BRPS	AG1-2015-004	80882173	0.13%	\$497
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	ETEC	AG1-2015-007	80515981	4.28%	\$16,903
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	FPLP	AG1-2015-010	80838270	2.94%	\$11,620
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	FPLP	AG1-2015-011	80838283	7.38%	\$29,157
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	FPLP	AG1-2015-014	80838298	5.53%	\$21,859
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	HZN	AG1-2015-019	80566529	1.43%	\$5,629
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	HZN	AG1-2015-020	80566532	1.46%	\$5,751
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	HZN	AG1-2015-021	80566535	1.24%	\$4,881
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	HZN	AG1-2015-022	80707447	3.14%	\$12,409
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	HZN	AG1-2015-023	80889467	3.20%	\$12,627
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	HZN	AG1-2015-024	80889471	2.80%	\$11,079
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	KCPS	AG1-2015-025	80878929	18.21%	\$71,915
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	KCPS	AG1-2015-026	80887601	17.26%	\$68,195
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	KCPS	AG1-2015-027	80888058	8.26%	\$32,643
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	KMEA	AG1-2015-028	80715468	0.61%	\$2,406
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	KPP	AG1-2015-031	80716676	0.38%	\$1,489
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	KPP	AG1-2015-032	80888916	0.41%	\$1,629
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	LESM	AG1-2015-034	80792734	6.16%	\$24,321
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	MOWR	AG1-2015-035	80848073	0.05%	\$195
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	MOWR	AG1-2015-037	80868666	0.69%	\$2,723
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	RESN	AG1-2015-043	80888988	4.59%	\$18,127
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	UCU	AG1-2015-048	80499812	6.84%	\$27,012
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	WFEC	AG1-2015-050	80647634	1.12%	\$4,424
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	WFEC	AG1-2015-051	80912733	1.88%	\$7,443
SWISSVALE - WEST GARDNER 345KV CKT 1 WERE	APM	AG1-2015-056	80853948	0.02%	\$67
				Total:	\$395,000

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1	FPLP	AG1-2015-008	80838247	9.85%	\$891,667
WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1	FPLP	AG1-2015-009	80838259	22.56%	\$2,043,276
WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1	FPLP	AG1-2015-011	80838283	19.54%	\$1,770,070
WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1	KPP	AG1-2015-030	80716628	0.58%	\$52,370
WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1	KPP	AG1-2015-031	80716676	0.73%	\$65,838
WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1	KPP	AG1-2015-032	80888916	0.15%	\$13,990
WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1	WRGS	AG1-2015-052	80812246	22.67%	\$2,053,544
WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1	WRGS	AG1-2015-053	80812328	23.92%	\$2,165,946
				Total:	\$9,056,700

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	FPLP	AG1-2015-008	80838247	9.78%	\$886,159
WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	FPLP	AG1-2015-009	80838259	22.42%	\$2,030,636
WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	FPLP	AG1-2015-011	80838283	19.42%	\$1,759,128
WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	KPP	AG1-2015-030	80716628	0.57%	\$52,049
WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	KPP	AG1-2015-031	80716676	0.72%	\$65,435
WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	KPP	AG1-2015-032	80888916	0.15%	\$13,902
WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	WFEC	AG1-2015-051	80912733	0.62%	\$56,035
WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	WRGS	AG1-2015-052	80812246	22.53%	\$2,040,840
WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	WRGS	AG1-2015-053	80812328	23.77%	\$2,152,515
	•			Total:	\$9,056,700

**Table 7- Service Upgrade Cost Allocation per Request** 

Upgrade Name	Customer	Study Number	Reservation	Allocation Percentage	Allocated E & C
WOLFFORTH INTERCHANGE (WH 7001668) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	FPLP	AG1-2015-012	80838291	24.96%	\$218,405
WOLFFORTH INTERCHANGE (WH 7001668) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	FPLP	AG1-2015-013	80838292	37.44%	\$327,607
WOLFFORTH INTERCHANGE (WH 7001668) 230/115/13.2KV TRANSFORMER CKT 1 Accelerate	SPSM	AG1-2015-047	80872689	37.60%	\$329,058
				Total:	\$875,070

**Table 7- Service Upgrade Cost Allocation per Request** 

Upgrade Name	Customer	Study Number	Reservation	Allocation Percentage	Allocated E & C
WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1		AG1-2015-042	80910503	ŭ	
WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1	RESN	AG1-2015-043	80888988	23.12%	
WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1	WFEC	AG1-2015-049	80271483	8.15%	\$276,374
WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1	WFEC	AG1-2015-050	80647634	12.61%	\$427,446
WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1	WFEC	AG1-2015-051	80912733	36.35%	\$1,232,551
	•	•		Total:	\$3,390,798

**Table 7- Service Upgrade Cost Allocation per Request** 

Upgrade Name	Customer	Study Number	Reservation	Allocation Percentage	Allocated E & C
Wellington 69kV Cap Bank	KCPS	AG1-2015-025	80878929	82.35%	\$1,333,406
Wellington 69kV Cap Bank	KPP	AG1-2015-030	80716628	8.30%	\$134,443
Wellington 69kV Cap Bank	KPP	AG1-2015-031	80716676	9.35%	\$151,431
				Total:	\$1,619,280

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated F.O.C
Upgrade Name	Customer	Study Number	Reservation	Allocation	Allocated E & C  Cost
		AG1-2015-042	80910503	19.00%	
		AG1-2015-043	80888988		
		AG1-2015-043 AG1-2015-047	80872689		
		AG1-2015-047 AG1-2015-048	80499812	1.29%	
		AG1-2015-048 AG1-2015-049	80271483	7.36%	
		AG1-2015-049 AG1-2015-050	80647634	12.19%	
		AG1-2015-050 AG1-2015-051	80912733	32.05%	
		AG1-2015-051 AG1-2015-053	80812328		
wind raini Switching Moorciana	WINGS	701 2013-033	00012320	Total:	\$950,000

**Table 7- Service Upgrade Cost Allocation per Request** 

				Allocation	Allocated E & C
Upgrade Name	Customer	Study Number	Reservation	Percentage	Cost
Woodward District - Wind Farm Switching Reconductor	PEC	AG1-2015-042	80910503	19.00%	\$1,425,120
Woodward District - Wind Farm Switching Reconductor	RESN	AG1-2015-043	80888988	15.35%	\$1,150,907
Woodward District - Wind Farm Switching Reconductor	SPSM	AG1-2015-047	80872689	6.75%	\$506,223
Woodward District - Wind Farm Switching Reconductor	UCU	AG1-2015-048	80499812	1.29%	\$97,045
Woodward District - Wind Farm Switching Reconductor	WFEC	AG1-2015-049	80271483	7.36%	\$552,357
Woodward District - Wind Farm Switching Reconductor	WFEC	AG1-2015-050	80647634	12.19%	\$914,454
Woodward District - Wind Farm Switching Reconductor	WFEC	AG1-2015-051	80912733	32.05%	\$2,404,063
Woodward District - Wind Farm Switching Reconductor	WRGS	AG1-2015-053	80812328	6.00%	\$449,831
		-	-	Total:	\$7,500,000