SPP Southwest Power Pool

System Facilities Study For Transmission Service Request 150680

Requested By Reliant Energy Services, Inc.

From ERCOT East To Entergy

For The Reserved Amount Of 465MW

From 1/1/01 To 1/1/06

With Delay To The Period From October 1, 2001 To January 1, 2006

SPP Transmission Planning
(#SPP-2000-086-3)
Revised October 22, 2001

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Southwest Power Pool
Transmission Service Request #150680
SPP System Facilities Study SPP-2000-086-3

Executive Summary

At the request of Reliant Energy Services, Inc. (RES), the Southwest Power Pool developed this Facilities Study for the purpose of evaluating the financial characteristics of Transmission Service Request 150680. The request is for 600MW of Firm Point-To-Point Transmission Service from ERCOT East (ERCOTE) to Entergy (EES). The requested term of this Transmission Service is from January 1, 2001 to January 1, 2006. Reservation 150680 was a competing request for the Entergy Power Marketing Corporation's Right of First Refusal of the ERCOT East DC Tie Capacity to Entergy. Entergy Power Marketing Corporation has matched RES's competing transmission request with reservation 221099 and has confirmed 135MW of the 600MW which is the amount that could be accommodated for the entire reservation period due to ATC Constraints. The remaining 465MW of Transmission Service from ERCOTE to Entergy requires Network Facility Upgrades to be in place. The first month that Transmission Service can be provided in excess of the already confirmed 135MW is October 1, 2001. This Facilities Study documents the ATC and financial characteristics of the required Network Facility Upgrades to accommodate the remaining 465MW of Transmission Service from ERCOTE to Entergy during the period from October 1, 2001 to January 1, 2006.

The projected base rate transmission service charges (excluding charges for ancillary services) are $16,015,590 during the applicable portion of the reservation period based on the available transfer capability (ATC) of the existing transmission system with Network Upgrades. The Transmission Customer is required to pay the higher of either the base rate transmission service charges or the revenue requirements associated with the Network Upgrades. The estimated levelized revenue requirements for providing the necessary Network Upgrades to accommodate the Transmission Service request are $7,098,384. As the estimated base rate transmission service charges are greater than the estimated

revenue requirements for Network Upgrades, RES shall pay the base rate transmission service charges.

Annual ATC allocated to the Transmission Customer is determined by the least amount of seasonal ATC on an annual basis. Allocated ATC and associated revenue requirements are based on items received by November 15, 2001 including 1) an executed Service Agreement and letter of credit received by SPP, and 2) authorization to proceed with engineering and construction received by Transmission Owners from SPP. In the event that the Transmission Customer does not provide SPP with an executed Service Agreement and letter of credit by November 15, 2001, then the ATC of the existing transmission system with Network Upgrades will have to be reevaluated due to subsequent delays in scheduling engineering and construction for the required Network Upgrades.

SPP as the Transmission Provider must receive an unconditional and irrevocable letter of credit, in the amount of $5,841,000, before the Transmission Owners incur initial engineering and construction costs. Also, this study provides no assurance of the availability of transmission capacity or the adequacy of existing or planned transmission facilities for Transmission Service in excess of the requested 465MW.

The Transmission Customer is responsible for the cost of upgrading all identified third-party facilities that are overloaded due to the requested service. In this case, third-party facilities were identified. Not all third-party facilities were monitored during the development of the corresponding Impact Study. Therefore, additional third-party facilities upgrades may be required to accommodate the requested Transmission Service.

Introduction

The principal objective of this Facilities Study is to identify the costs of Network Upgrades that must be added or modified to provide the requested Transmission Service while maintaining a reliable transmission system. This study includes a good faith

estimate of the Transmission Customer's assigned cost for the required Network Upgrades and the time required to complete such construction and to initiate the requested service. No Direct Assignment facilities are included in this study as none were identified to provide the requested Transmission Service.

Another objective is to estimate the levelized revenue requirement for all identified Network Upgrades by Transmission Owner. The levelized revenue requirement is based on cost components of each upgrade including depreciation, weighted cost of capital, composite income tax, other tax, and deferred income tax credit. This information will be used to allocate revenue to Transmission Owners even if it is not the basis for billing the Transmission Customer pursuant to "or" pricing.

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 ATC within each annual period will be offered to the Transmission Customer on an applicable annual basis within the reservation period.

The staff of SPP completed System Impact Study SPP-2000-086 that identified system limitations and required modifications to the SPP system necessary to provide the requested Transmission Service. The Network Upgrades that were not assigned to a previous request and are required to provide the requested Transmission Service are listed

in Table 1. Network Upgrades will be required on the American Electric Power West (Central and South West Services) (CSWS) and Empire District Electric (EDE) transmission systems. Due to the in-service dates of these Network Upgrades, some may limit and delay the requested Transmission Service. The ATC values associated with only transfer-limiting upgrades are listed in Table 7.

All Network Upgrades assigned to previous Transmission Service requests that have not yet been constructed were monitored to determine whether the previously assigned upgrades are adequate to support this additional request. To accommodate a new request for Transmission Service, a previously assigned Network Upgrade may require capacity in addition to that previously specified. A previously assigned Network Upgrade may be required to be in service at an earlier date than previously indicated to accommodate a new request. With regard to the capacity and in-service date of a previously assigned Network Upgrade, an upgrade may require both additional capacity and an earlier in-service date to accommodate this request for Transmission Service.

Network Upgrades that were previously assigned and will require only additional capacity to accommodate this request for Transmission Service are listed in Table 2. To accommodate this request, no previously assigned Network Upgrades will require capacity in addition to that previously specified. Due to the in-service dates of these Network Upgrades, some may limit and delay the requested Transmission Service. The ATC values associated with only transfer-limiting upgrades are listed in Table 6.

Network Upgrades that were previously assigned and will require only accelerated in-service dates to accommodate this request for Transmission Service are listed in Table 3. To accommodate this request, 2 previously assigned Network Upgrades will require an earlier in-service date than previously indicated. Due to the in-service dates of these Network Upgrades, some may limit and delay the requested Transmission Service. The ATC values associated with only transfer-limiting upgrades are listed in Table 6.

Network Upgrades that were previously assigned and will require both additional capacity and accelerated in-service dates to accommodate this request for Transmission Service are listed in Table 4. To accommodate this request, no previously assigned Network Upgrades will require both capacity in addition to that previously specified and an earlier in-service date than previously indicated. Due to the in-service dates of these Network Upgrades, some may limit and delay the requested Transmission Service. The ATC values associated with only transfer-limiting upgrades are listed in Table 6.

Some constraints identified in the Impact Study are not addressed in this Facilities Study as the Transmission Owners determined that upgrades are not required due to various reasons. The CSWS Wilkes to Jefferson Switching 138kV line was already scheduled to have jumpers and a wavetrap replaced by 10/2000. The CSWS Jefferson Switching to IPC Jefferson 138kV line is scheduled to be rebuilt before the 2001 Summer. The Grand River Dam Authority's Maid to Tahlequah 161kV line and Zena Tap to Jay 69kV line were excused due an Operating Guide and Mitigation Plan. The EDE Monett to Aurora 161kV line was excused due to a Mitigation Plan. The Southwestern Power Administration (SWPA) and EES Bull Shoals to Midway 161kV line is considered as an Entergy Limit and would be reviewed when the customer obtains service on the Entergy System to complete the transmission path. As CSWS has reevaluated its transmission line conductor ratings resulting in higher capacity levels, line upgrades are not required of the IPC Jefferson to Lieberman 138kV, Cherokee REC to Knox Lee 138kV, Cherokee REC to Tatum 138kV and Rock Hill to Tatum 138kV lines.

Given the estimated dates when Network Upgrades will be required for the requested Transmission Service to be provided, there are facility limits that will either delay the start date of the service or limit the ATC to less than that requested. Transfer-limiting facilities are listed in Tables 6 and 7. Seasonal and annual transfer limits given engineering and construction lead times are listed in Table 5. A summary of ATC throughout the reservation period is included in Table 8. The estimated time required to complete the engineering and construction of the first transfer-limiting facility in the

summer peak period of 2001 is 18 months after EDE's receipt of authorization to proceed from SPP. EDE's Tipton Ford to Monett 161kV transmission line has an 18 month construction lead time and this upgrade is scheduled to be completed May 1, 2003. The constraint is due to the outage of the Larussel to Monett 161kV line during the 2001 and 2002 summer peak periods. The minimum ATC during the 2001 and 2002 summer peaks, from June 1 to October 1, is 423MW.

Firm Point-To-Point Transmission Service may be provided to RES during a summer peaking period in the amount requested after the Tipton Ford to Monett facility upgrade is in service. If a completed Service Agreement is received by SPP on or before November 15, 2001, then the requested Transmission Service may be provided on approximately October 1, 2002 given no unexpected delays in design, permitting, and construction. The upgrade of several other constraints identified in the corresponding Impact Study cannot be completed until after the start-date of the requested Transmission Service due to lead times for engineering & construction.

SPP does not accept requests for firm Transmission Service without restrictions if the design criteria specified in the corresponding Impact Study are not met. However, SPP may accept a request with a reduction of provided capacity to designated levels within the specified time frames as listed in Table 8. SPP accepts this request for Transmission Service given this allocation of capacity of which is less than that requested through September 2002. Thereafter, the requested capacity throughout the remainder of the reservation period through December 2005 is available to accommodate this request for Transmission Service.

Tables 5, 8, 9 and 10 include lists of capacity of which is less than that requested through the reservation period. Table 9 includes the ATC and the estimate of base rate transmission service charges. The ATC and the estimate of levelized revenue requirements for Network Upgrade are provided in Table 10. The Transmission Customer

shall pay the higher of the base rate transmission service charges or the levelized revenue requirements for the Network Upgrades.

Third-Party Facilities

For third-party facilities listed in Table 11, the Transmission Customer is responsible for obtaining arrangements for the necessary upgrades of the facilities per Section 21.1 of the SPP OATT. If requested, SPP is willing to undertake reasonable efforts to assist the Transmission Customer in making arrangements for necessary engineering, permitting, and construction of the third-party facilities.

All facilities within SPP, of which are currently modeled, were monitored during the development of the corresponding Impact Study. Third-party facilities must be upgraded when it is determined that they are overloaded while accommodating the requested Transmission Service. Third-party facilities include those owned by members of SPP who have not placed their facilities under SPP's OATT.

Financial Analysis

The revenue requirements associated with each assigned Network Upgrade is calculated using the estimated installed cost for each Network Upgrade reflected herein and the annual fixed charge rate of the constructing Transmission Owner. A present worth analysis is conducted, based on each Transmission Owner's annual fixed charge rates including weighted cost of capital, to determine the levelized revenue requirement of each Network Upgrade. The levelized revenue requirements of all applicable Network Upgrades are summed to determine the total revenue requirements for Network Upgrades associated with the Transmission Service request.

Each request for Transmission Service is evaluated independently as the cost associated with each Network Upgrade is assigned to a request. For new facilities, the Transmission Customer shall pay the total cost through the reservation period including engineering and

construction costs and other annual operating costs. When upgrading facilities, the Transmission Customer shall, throughout the reservation period, 1) pay the total engineering and construction 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 facilities based on their respective book values.

The amortization period for Network Upgrades and Direct Assignment facilities shall be the lesser of 1) the reservation period, or 2) the period between the completion of construction within the reservation period and the end of the reservation period. The annual fixed charge rate for each Transmission Owner shall be based on the sum of expenses for a previous calendar year, including weighted cost of capital, composite income tax, other tax, and deferred income tax credit, divided by the plant investment for the same year.

Categories of costs and credits associated with Network Upgrades and Direct Assignment facilities shall include those specified below. The costs allocated to the Transmission Customer throughout the entire reservation period shall be the sum of the levelized present worth of each of the identified cost and credit components based on each Transmission Owner's weighted cost of capital.

1. Amortized engineering and construction costs associated with the new facilities.
2. Annual carrying charges, excluding depreciation, based on the product of 1) total engineering and construction costs associated with the new facilities, and 2) annual fixed charge rate (per-unit).
3. Amortized existing facility credit associated with the replaced facilities including the sum of the depreciated book values of only the reusable facilities within the respective remaining depreciation periods.
4. The salvage value credit of non-usable facilities.

5. Annual carrying charge credits, excluding depreciation, based on the product of 1) book values associated with all replaced facilities, and 2) annual fixed charge rate (per-unit).

In the event that the engineering and construction of a previously assigned Network Upgrade may be expedited, with no additional upgrades, to accommodate a new request for Transmission Service, then the levelized present worth of only the incremental expenses though the reservation period of the new request, excluding depreciation, shall be assigned to the new request. These incremental expenses, excluding depreciation, include 1) the levelized difference in present worth of the engineering and construction expenses given the change in date to complete construction to account for additional interest expense and reduced engineering and construction expense due to inflation, 2) the levelized present worth of all expediting fees, and 3) the levelized present worth of the incremental annual carrying charges, excluding depreciation and interest, during the new reservation period taking into account both a) the reservation in which the project was originally assigned, and b) a reservation, if any, in which the project was previously expedited.

If the capacity of a previously assigned Network Upgrade is insufficient to accommodate a new request for Transmission Service, expediting the upgrade may be needed, and sufficient time is available for the Transmission Owner to accomplish necessary re-design and construction of the upgrade with additional capacity while accommodating previous requests, then the levelized present worth of only the incremental expenses though the reservation period of the new request, including depreciation, shall be assigned to the new request. These incremental expenses include 1) if expediting, the levelized difference in present worth of the previously assigned 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) if expediting, the levelized present worth of all expediting fees, 3) the levelized present worth of the incremental annual carrying charges associated with the previously assigned upgrade,

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 expedited, and 4) the levelized present worth of the incremental annual carrying charges, including depreciation, associated with the additional capacity though the reservation period of the new request.

The zone interfaced to the sink with the lowest zonal rate for Firm Point-To-Point Transmission Service is Southwestern Power Administration (SWPA). The current zonal rate of SWPA is $690/MW-Month. Table 8 includes a summary of ATC values with all assigned Network Upgrades energized by the Date In Service specified in Tables 6 and 7. Given the lesser of these values of ATC and the requested capacity, corresponding base rate transmission service charges are listed on a monthly basis in Table 9. The base rate transmission service charges from the requested Transmission Service are estimated to be $16,015,590.

The estimate of total revenue requirements listed in Table 10 for the required Network Upgrades throughout the requested transaction period is $7,098,384. The estimated revenue requirements for the required Network Upgrades are less than the projected base rate transmission service charges over the requested transaction period. Therefore, the Transmission Customer will be responsible for the base rate transmission service charges of which are estimated to be $16,015,590 throughout the transaction period.

The Southwest Power Pool and the affected Transmission Owners including CSWS and EDE shall use due diligence to add necessary facilities or upgrade the Transmission System to provide the requested Transmission Service, provided RES agrees to compensate SPP for such costs pursuant to the terms of Section 27 of the SPP Open Access Transmission Tariff. Partial Interim Service is available to RES per Section 19.7 of the SPP Open Access Transmission Service Tariff.

Engineering and construction of all new facilities and modifications will not start until after an executed Service Agreement has been received by SPP and the affected Transmission Owners receive the appropriate authorization to proceed from SPP. In accordance with section 19.4 of the SPP Open Access Transmission Service Tariff, the Transmission Customer shall provide and maintain in effect, during the term of the Transmission Service Agreement, an unconditional and irrevocable letter of credit to the SPP in the amount of no less than $5,841,000 for the initial engineering and construction costs to be incurred by the Transmission Owners. This amount does not include or offset other letters of credit or deposits as may be required under the tariff.

Conclusion

Given the constraints identified in the System Impact Study SPP-2000-086, estimated engineering and construction costs in addition to lead times for construction of Network Upgrades are provided. These estimated costs are for facilities required to provide the requested Transmission Service. The lead times do not include any allowances for possible delays due to outage conflicts during construction, conflicts with construction during the summer peak, engineering and construction manpower constraints, etc. The lead times are based on engineering starting when SPP provides the Transmission Owners approval to start on the projects.

Based on the results of the Impact Study SPP-2000-086, Network Upgrades that were identified as required to provide the requested Transmission Service are listed in Tables 1 through 4. Table 1 includes the Network Upgrades and costs assigned to the RES to accommodate Transmission Service Request 150680 ERCOTE to Entergy. Table 2 includes previously assigned Network Upgrades requiring only additional capacity to accommodate this request. Table 3 includes previously assigned Network Upgrades requiring only accelerated in-service dates. Table 4 includes previously assigned Network Upgrades requiring both additional capacity and accelerated in-service dates to accommodate this request.

Throughout the transaction period of the requested Transmission Service, the estimate of the levelized revenue requirements for the required Network Upgrades is $7,098,384 for Transmission Service Request 150680. ATC allocated to the Transmission Customer is determined by the least amount of seasonal ATC on an annual basis. A listing of ATC values and monthly revenue requirements for the required Network Upgrades is in Table 10. The base rate transmission service charges are estimated to be $16,015,590 and the monthly revenue requirements are listed in Table 9. As the base rate transmission service charges are greater than the revenue requirements for the required Network Upgrades, the revenue requirements from the Transmission Customer are the base rate transmission service charges.

To complete the request for Transmission Service, SPP must receive the following items from the Transmission Customer within 15 days of receipt of this study: 1) an executed Service Agreement, and 2) an unconditional and irrevocable letter of credit regarding the engineering and construction of Network Upgrades. The Transmission Customer must also confirm this request on Southwest Power Pool's OASIS pursuant to the results of this Facilities Study. Upon receipt of these items by SPP and confirmation by the Transmission Customer, SPP will authorize the applicable Transmission Owners to proceed with the engineering and construction of the Network Upgrades assigned to this request.

In the event that Transmission Customers do not confirm other requests for Transmission Service that have previously assigned Network Upgrades, the assignment of applicable Network Upgrades will need to be reevaluated.

Table 1

Estimated Network Upgrade Costs, Lead Times & In-Service Dates
For Facilities Assigned To Only This Request For Transmission Service
For 465MW Of 600MW Request 150680 From ERCOTE To Entergy
During The Period From October 1, 2001 To January 1, 2006

NETWORK UPGRADE	COSTS TO ENGINEER & CONSTRUCT ($2001)	ENG. & CONST. LEAD TIME (MONTHS)	DATE NEEDED (M/D/Y)	POSSIBLE DATE IN SERVICE (M/D/Y) **(1)**	SCHEDULED DATE IN SERVICE (M/D/Y) **(2)**
Jacksonville - Pine Grove 138kV: Reset CTs By CSWS	1,000	4	4/1/01	9/1/01	2/1/02
IPC Jefferson - Lieberman 138kV: Replace Jumpers To Switches & To Wavetrap At Lieberman by CSWS	10,000	6	6/1/01	2/1/01	2/1/02
Waterworks - Arsenal Hill 69kV: Replace Three Sets of Switches by CSWS	60,000	6	6/1/01	2/1/01	2/1/02
Rock Hill - Tatum 138kV: Replace Wavetrap At Rock Hill By CSWS	30,000	6	6/1/01	2/1/01	4/1/02
Tipton Ford - Monett 161kV: Reconductor To 795MCM by EDE	5,700,000	18	6/1/01	3/1/03	5/1/03
Flournoy - Longwood 138kV: Replace Jumpers by CSWS	10,000	6	6/1/04	2/1/01	6/1/04
Alumax Tap - NW Texarkana 138kV: Replace Switches by CSWS	30,000	9	12/1/04	2/1/01	12/1/04
SUBTOTAL	$5,841,000				

Note: (1) When the projected completion of Network Upgrades is 1) between June 1 and September 15, or 2) between September 15 and 4.5 months thereafter, then 4.5 months are added as these facilities will not be taken out of service during the summer peaking period. Therefore, the possible end of construction is February 1 or later of the next year.

(2) The scheduled date is based on when continuous annual service may be started after the possible in-service date. If N/A, then the facility upgrade/addition is not required, due to its lead time for engineering and construction, as 1) continuous annual service above the ATC limit may be provided only after the requested reservation period, or 2) the facility is not required at a later time within the reservation period due to reduced loading of the facility below its emergency rating.

Table 2

Estimated Network Upgrade Costs, Lead Times & In-Service Dates
For Previously Assigned Facilities Requiring Only Additional Capacity
For 465MW Of 600MW Request 150680 From ERCOTE To Entergy
During The Period From October 1, 2001 To January 1, 2006

PREVIOUSLY ASSIGNED NETWORK UPGRADE	NEW ADDED UPGRADE	PREVIOUS REQUEST (NO.)	PREVIOUS ENG. & CONST. COSTS ($)	CURRENT TOTAL ENG. & CONST. COST ($2001)	ENG. & CONST. LEAD TIME (MONTHS)	DATE NEEDED (M/D/Y)	PREVIOUSLY SCHEDULED DATE IN SERVICE (M/D/Y)
None							
SUBTOTAL			$0	$0			

Table 3

Estimated Network Upgrade Costs, Lead Times & In-Service Dates
For Previously Assigned Facilities Requiring Only Accelerated In-Service Dates
For 465MW Of 600MW Request 150680 From ERCOTE To Entergy
During The Period From October 1, 2001 To January 1, 2006

PREVIOUSLY ASSIGNED NETWORK UPGRADE	PREVIOUS REQUEST (NO.)	ENGINEERING & CONSTRUCTION COSTS ($)	ENG. & CONST. LEAD TIME (MONTHS)	DATE NEEDED (M/D/Y)	PREVIOUS DATE IN SERVICE (M/D/Y)	POSSIBLE DATE IN SERVICE (M/D/Y) **(1)**	SCHEDULED DATE IN SERVICE (M/D/Y) **(2)**
East Centerton - Gentry REC 161kV: Replace Breaker & Switches At East Centerton By CSWS	119194, 119196, 119197, 119198	167,960	12	6/1/01	6/1/08	4/1/02	4/1/02
East Centerton - Gentry REC 161kV: Replace Line Switches At Gentry By CSWS	119194, 119196, 119197, 119198	37,845	8	6/1/01	6/1/08	4/1/02	4/1/02
SUBTOTAL		$205,805					

Note: (1) When the projected completion of Network Upgrades is 1) between June 1 and September 15, or 2) between September 15 and 4.5 months thereafter, then 4.5 months are added as these facilities will not be taken out of service during the summer peaking period. Therefore, the possible end of construction is February 1 or later of the next year.

(2) The scheduled date is based on when continuous annual service may be started after the possible in-service date. If N/A, then the facility upgrade/addition is not required, due to its lead time for engineering and construction, as 1) continuous annual service above the ATC limit may be provided only after the requested reservation period, or 2) the facility is not required at a later time within the reservation period due to reduced loading of the facility below its emergency rating.

Table 4

Estimated Network Upgrade Costs, Lead Times & In-Service Dates
For Previously Assigned Facilities Requiring Both Additional Capacity And Accelerated In-Service Dates
For 465MW Of 600MW Request 150680 From ERCOTE To Entergy
During The Period From October 1, 2001 To January 1, 2006

PREVIOUSLY ASSIGNED NETWORK UPGRADE	NEW ADDED UPGRADE	PREVIOUS REQUEST (NO.)	PREVIOUS ENG. & CONST. COSTS ($)	CURRENT TOTAL ENG.& CONST. COST ($2001)	ENG. & CONST. LEAD TIME (MONTHS)	DATE NEEDED (M/D/Y)	PREVIOUS DATE IN SERVICE (M/D/Y)	POSSIBLE DATE IN SERVICE (M/D/Y) **(1)**	SCHEDULED DATE IN SERVICE (M/D/Y) **(2)**
None									
SUBTOTAL			$0	$0					

Note: (1) When the projected completion of Network Upgrades is 1) between June 1 and September 15, or 2) between September 15 and 4.5 months thereafter, then 4.5 months are added as these facilities will not be taken out of service during the summer peaking period. Therefore, the possible end of construction is February 1 or later of the next year.

(2) The scheduled date is based on when continuous annual service may be started after the possible in-service date. If N/A, then the facility upgrade/addition is not required, due to its lead time for engineering and construction, as 1) continuous annual service above the ATC limit may be provided only after the requested reservation period, or 2) the facility is not required at a later time within the reservation period due to reduced loading of the facility below its emergency rating.

Table 5
Transfer Limits Given Engineering And Construction Lead Times
Of Previously Assigned Facilities And Facilities Assigned To This Request
For 465MW Of 600MW Request 150680 From ERCOTE To Entergy
During The Period From October 1, 2001 To January 1, 2006

PREVIOUS OR THIS RESERVATION		THIS RESERVATION		PREVIOUS OR THIS RESERVATION		CALCULATED		POSSIBLE (1)		SCHEDULED (2)
NETWORK ELEMENT	TRANS. OWNER	ATC (MW)	ATC (MODEL)	DATE UPGRADE NEEDED (M/D/Y)	ENG. & CONST. LEAD TIME (MONTH)	DATE AVAIL-ABLE (M/D/Y)	DELAY (MONTH)	DATE AVAIL-ABLE (M/D/Y)	DELAY (MONTH)	DATE AVAILABLE (M/D/Y)
Request 119194, 119196, 119197, 119198, SPP-1999-010, with a contract date of 12/1/1999.										
East Centerton - Gentry REC 161kV: Replace Breaker & Sw. At East Centerton & Sw. At Gentry.	CSWS	113 (3)	01SP	6/1/01	12					4/1/02 (4)
Request 121839, SPP-1999-014, with a contract date of 12/1/1999.										
Patterson – Ashdown 115kV: Replace 600A Switch #1143 At Patterson.	CSWS	459 (3)	01SR	4/1/01	6					6/1/01 (5)

Note: (1) When the projected completion of Network Upgrades is 1) between June 1 and September 15, or 2) between September 15 and 4.5 months thereafter, then 4.5 months are added as these facilities will not be taken out of service during the summer peaking period. Therefore, the possible end of construction is February 1 or later of the next year.

(2) The scheduled date is based on when continuous annual service may be started after the possible in-service date. If N/A, then the facility upgrade/addition is not required, due to its lead time for engineering and construction, as 1) continuous annual service above the ATC limit may be provided only after the requested reservation period, or 2) the facility is not required at a later time within the reservation period due to reduced loading of the facility below its emergency rating.

(3) Not limiting as the scheduled completion of the upgrade is before it is required to accommodate this request for Transmission Service.

(4) Based on Facilities Study SPP-2000-086 dated 3/1/01.

(5) Based on Facilities Study dated 11/8/99.

Table 5 (Continued)
Transfer Limits Given Engineering And Construction Lead Times
Of Previously Assigned Facilities And Facilities Assigned To This Request
For 465MW Of 600MW Request 150680 From ERCOTE To Entergy
During The Period From October 1, 2001 To January 1, 2006

PREVIOUS OR THIS RESERVATION		THIS RESERVATION		PREVIOUS OR THIS RESERVATION		CALCULATED		POSSIBLE (1)		SCHEDULED (2)
NETWORK ELEMENT	TRANS. OWNER	ATC (MW)	ATC (MODEL)	DATE UPGRADE NEEDED (M/D/Y)	ENG. & CONST. LEAD TIME (MONTH)	DATE AVAIL-ABLE (M/D/Y)	DELAY (MONTH)	DATE AVAIL-ABLE (M/D/Y)	DELAY (MONTH)	DATE AVAILABLE (M/D/Y)
This Request 150680, SPP-2000-086, with a contract date of 4/15/2001.										
Jacksonville - Pine Grove 138kV: Reset CTs	CSWS	283 (3)	01AP	4/1/01	4	8/15/01	4.5	1/1/01	9	2/1/02 (4)
"	"	411 (3)	01SR	4/1/01	"	"	"	"	"	"
Minimum 4/1 – 6/1:		465								
Rock Hill - Tatum 138kV Replace Wavetrap At Rock Hill.	CSWS	358 (3)	O1SP	6/1/01	6	3/1/02	9	3/1/02	9	4/1/02 (4)
Tipton Ford - Monett 161kV Reconductor 30 miles.	EDE	423	O1SP	6/1/01	18	10/14/02	16.5	3/1/03	22.5	5/1/03 (4)
Flourney - Longwood 138kV: Replace Jumpers At Longwood.	CSWS	395 (3)	O4SP	6/1/04	6	10/14/01		2/1/02		6/1/04 (4)

Note: (1) When the projected completion of Network Upgrades is 1) between June 1 and September 15, or 2) between September 15 and 4.5 months thereafter, then 4.5 months are added as these facilities will not be taken out of service during the summer peaking period. Therefore, the possible end of construction is February 1 or later of the next year.

(2) The scheduled date is based on when continuous annual service may be started after the possible in-service date. If N/A, then the facility upgrade/addition is not required, due to its lead time for engineering and construction, as 1) continuous annual service above the ATC limit may be provided only after the requested reservation period, or 2) the facility is not required at a later time within the reservation period due to reduced loading of the facility below its emergency rating.

(3) Not limiting as the scheduled completion of the upgrade is before it is required to accommodate this request for Transmission Service.

(4) Based on Facilities Study SPP-2000-086 dated 3/1/01.

Table 5 (Continued)
Transfer Limits Given Engineering And Construction Lead Times
Of Previously Assigned Facilities And Facilities Assigned To This Request
For 465MW Of 600MW Request 150680 From ERCOTE To Entergy
During The Period From October 1, 2001 To January 1, 2006

PREVIOUS OR THIS RESERVATION		THIS RESERVATION		PREVIOUS OR THIS RESERVATION		CALCULATED		POSSIBLE (1)		SCHEDULED (2)
NETWORK ELEMENT	TRANS. OWNER	ATC (MW)	ATC (MODEL)	DATE UPGRADE NEEDED (M/D/Y)	ENG. & CONST. LEAD TIME (MONTH)	DATE AVAIL-ABLE (M/D/Y)	DELAY (MONTH)	DATE AVAIL-ABLE (M/D/Y)	DELAY (MONTH)	DATE AVAILABLE (M/D/Y)
This Request 150680, SPP-2000-086, with a contract date of 4/15/2001 (Continued).										
IPC Jefferson - Lieberman 138kV: Replace Jumpers To Switches & To Wavetrap At Lieberman.	CSWS	0 (3)	01SP	6/1/01	6	10/15/01	4.5	10/15/01	4.5	2/1/02 (4)
Waterworks - Arsenal Hill 69kV: Replace Three Sets of Switches.	CSWS	180 (3)	01SP	6/1/01	6	10/15/01	4.5	10/15/01	4.5	2/1/02 (4)
Minimum 6/1 – 10/1:		423								
Alumax Tap - NW Texarkana 138kV: Replace Switches	CSWS	205 (3)	04WP	12/1/04	9	1/15/02		1/15/02		12/1/04 (4)
Minimum 12/1 – 4/1:		465								

Note: (1) When the projected completion of Network Upgrades is 1) between June 1 and September 15, or 2) between September 15 and 4.5 months thereafter, then 4.5 months are added as these facilities will not be taken out of service during the summer peaking period. Therefore, the possible end of construction is February 1 or later of the next year.

(2) The scheduled date is based on when continuous annual service may be started after the possible in-service date. If N/A, then the facility upgrade/addition is not required, due to its lead time for engineering and construction, as 1) continuous annual service above the ATC limit may be provided only after the requested reservation period, or 2) the facility is not required at a later time within the reservation period due to reduced loading of the facility below its emergency rating.

(3) Not limiting as the scheduled completion of the upgrade is before it is required to accommodate this request for Transmission Service.

(4) Based on Facilities Study SPP-2000-086 dated 3/1/01.

Table 6
Network Elements Assigned To Previous Requests For Transmission Service
That Limit The ATC To Less Than That Requested
Due To Engineering And Construction Schedules
For 465MW Of 600MW Request 150680 From ERCOTE To Entergy
During The Period From October 1, 2001 To January 1, 2006

PREVIOUSLY ASSIGNED NETWORK UPGRADE	PREVIOUS REQUEST (NO.)	DATE IN SERVICE (M/D/Y)	ATC (MW)	ATC MODEL	RESTRICTED OPERATING PERIOD (M/D - M/D) (YEAR)
East Centerton - Gentry REC 161kV: Replace Breaker & Switches At East Centerton By CSWS.	119194, 119196, 119197, 119198	4/1/02	113	01SP	6/1 – 10/1 2001 (1)
East Centerton - Gentry REC 161kV: Replace Line Switches At Gentry By CSWS.	119194, 119196, 119197, 119198	4/1/02	113	01SP	6/1 – 10/1 2001 (1)
Patterson – Ashdown 115kV: Replace 600A Switch With 1200A By CSWS.	121839	6/1/01	459	01SR	4/1 – 6/1 2001 (1)

Note: (1) Not limiting as upgrade to be completed before required.

ATC Models
Example Season Designation: From Date – To Date (M/D/Y), Season Description
02AP: 4/1/02 – 6/1/02, Spring Minimum
02G: 4/1/02 – 6/1/02, Spring Peak
02SP: 6/1/02 – 10/1/02, Summer Peak
02FA: 10/1/02 – 12/1/02, Fall Peak
02WP: 12/1/02 – 4/1/03, Winter Peak

Table 7
Network Elements Assigned To This Transmission Service Request
That Limit The ATC To Less Than That Requested
Due To Engineering And Construction Schedules
For 465MW Of 600MW Request 150680 From ERCOTE To Entergy
During The Period From October 1, 2001 To January 1, 2006

NETWORK UPGRADE	DATE IN SERVICE (M/D/Y)	ATC (MW)	ATC MODEL	RESTRICTED OPERATING PERIOD (M/D - M/D) (YEAR)
Jacksonville – Pine Grove 138kV: Reset CTs by CSWS.	2/1/02	283	01AP	4/1 – 6/1 2001 (1)
"	"	411	01SR	4/1 – 6/1 2001 (1)
Waterworks - Arsenal Hill 69kV: Replace Three Sets Of Switches By CSWS.	2/1/02	180	01SP	6/1 – 10/1 2001 (1)
Rock Hill - Tatum 138kV: Replace Wavetrap By CSWS.	4/1/02	358	01SP	6/1 – 10/1 2001 (1)
Tipton Ford - Monett 161kV: Reconductor 30 Miles By EDE.	5/1/03	423	01SP	6/1 – 10/1 2001 & 2002

Note: Date In Service is based on items received by November 15, 2001 including 1) a signed Service Agreement and Letter of Credit received by SPP, and 2) authorization to proceed with engineering and construction received by Transmission Owners from SPP.

(1) Not limiting as upgrade to be completed before required.

ATC Models

Example Season Designation: From Date – To Date (M/D/Y), Season Description

02AP: 4/1/02 – 6/1/02, Spring Minimum
02FA: 10/1/02 – 12/1/02, Fall Peak
02G: 4/1/02 – 6/1/02, Spring Peak
02WP: 12/1/02 – 4/1/03, Winter Peak
02SP: 6/1/02 – 10/1/02, Summer Peak

Table 8

Summary Of Available Transfer Capability

With All Network Upgrades Assigned To This And Previous Reservations

For 465MW Of 600MW Request 150680 From ERCOTE To Entergy

During The Period From October 1, 2001 To January 1, 2006

OPERATING PERIOD (YEAR)	OPERATING PERIOD (M/D - M/D)	ATC (MW)
2001	1/1 – 10/1	0
2001	10/1 – 12/31	423
2002	1/1 – 10/1	423
2002	10/1 – 12/31	465
2003	1/1 – 12/31	465
2004	1/1 – 12/31	465
2005	1/1 – 12/31	465

Note: Values of ATC are based on items received by November 15, 2001 including 1) a signed Service Agreement and letter of credit received by SPP, and 2) authorization to proceed with engineering and construction received by Transmission Owners from SPP. Annual ATC allocated to the Transmission Customer is determined by the least amount of seasonal ATC on an annual basis.

Table 9

Summary Of Available Transfer Capability With All Network Upgrades

And The Estimate Of Base Rate Transmission Service Charges Only,

Excluding The Cost Of Network Upgrades,

For 465MW Of 600MW Request 150680 From ERCOTE To Entergy

During The Period From October 1, 2001 To January 1, 2006

OPERATING PERIOD (MONTH)	2001 ATC (MW)	2001 BASE RATE REVENUES ($)	2002 ATC (MW)	2002 BASE RATE REVENUES ($)	2003 ATC (MW)	2003 BASE RATE REVENUES ($)	2004 ATC (MW)	2004 BASE RATE REVENUES ($)
January	N/A	0	423	291,870	465	320,850	465	320,850
February	N/A	0	423	291,870	465	320,850	465	320,850
March	N/A	0	423	291,870	465	320,850	465	320,850
April	N/A	0	423	291,870	465	320,850	465	320,850
May	N/A	0	423	291,870	465	320,850	465	320,850
June	N/A	0	423	291,870	465	320,850	465	320,850
July	N/A	0	423	291,870	465	320,850	465	320,850
August	N/A	0	423	291,870	465	320,850	465	320,850
September	N/A	0	423	291,870	465	320,850	465	320,850
October	423	291,870	465	320,850	465	320,850	465	320,850
November	423	291,870	465	320,850	465	320,850	465	320,850
December	423	291,870	465	320,850	465	320,850	465	320,850
SUBTOTAL BY YEAR		$875,610		$3,589,380		$3,850,200		$3,850,200
TOTAL FOR ALL YEARS								See Next Page

Note: Values of ATC are based on items received by November 15, 2001 including 1) a signed Service Agreement and letter of credit received by SPP, and 2) authorization to proceed with engineering and construction received by Transmission Owners from SPP. Annual ATC allocated to the Transmission Customer is determined by the least amount of seasonal ATC on an annual basis.

Table 9 (Continued)

Summary Of Available Transfer Capability With All Network Upgrades

And The Estimate Of Base Rate Transmission Service Charges Only,

Excluding The Cost Of Network Upgrades,

For 465MW Of 600MW Request 150680 From ERCOTE To Entergy

During The Period From October 1, 2001 To January 1, 2006

OPERATING PERIOD (MONTH)	2005 ATC (MW)	2005 BASE RATE REVENUES ($)	2006 ATC (MW)	2006 BASE RATE REVENUES ($)	2007 ATC (MW)	2007 BASE RATE REVENUES ($)	2008 ATC (MW)	2008 BASE RATE REVENUES ($)
January	465	320,850	N/A	0	N/A	0	N/A	0
February	465	320,850	N/A	0	N/A	0	N/A	0
March	465	320,850	N/A	0	N/A	0	N/A	0
April	465	320,850	N/A	0	N/A	0	N/A	0
May	465	320,850	N/A	0	N/A	0	N/A	0
June	465	320,850	N/A	0	N/A	0	N/A	0
July	465	320,850	N/A	0	N/A	0	N/A	0
August	465	320,850	N/A	0	N/A	0	N/A	0
September	465	320,850	N/A	0	N/A	0	N/A	0
October	465	320,850	N/A	0	N/A	0	N/A	0
November	465	320,850	N/A	0	N/A	0	N/A	0
December	465	320,850	N/A	0	N/A	0	N/A	0
SUBTOTAL BY YEAR		$3,850,200		$0		$0		$0
TOTAL FOR ALL YEARS								$16,015,590

Note: Values of ATC are based on items received by November 15, 2001 including 1) a signed Service Agreement and letter of credit received by SPP, and 2) authorization to proceed with engineering and construction received by Transmission Owners from SPP. Annual ATC allocated to the Transmission Customer is determined by the least amount of seasonal ATC on an annual basis.

Table 10

Summary Of Available Transfer Capability With All Network Upgrades

And The Estimate Of Network Upgrade Revenue Requirements Only

For 465MW Of 600MW Request 150680 From ERCOTE To Entergy

During The Period From October 1, 2001 To January 1, 2006

OPERATING PERIOD (Month)	2001 ATC (MW)	2001 NETWORK UPGRADE REVENUES ($)	2002 ATC (MW)	2002 NETWORK UPGRADE REVENUES ($)	2003 ATC (MW)	2003 NETWORK UPGRADE REVENUES ($)	2004 ATC (MW)	2004 NETWORK UPGRADE REVENUES ($)
January	N/A	0	423	139,184	465	139,184	465	139,184
February	N/A	0	423	139,184	465	139,184	465	139,184
March	N/A	0	423	139,184	465	139,184	465	139,184
April	N/A	0	423	139,184	465	139,184	465	139,184
May	N/A	0	423	139,184	465	139,184	465	139,184
June	N/A	0	423	139,184	465	139,184	465	139,184
July	N/A	0	423	139,184	465	139,184	465	139,184
August	N/A	0	423	139,184	465	139,184	465	139,184
September	N/A	0	423	139,184	465	139,184	465	139,184
October	423	139,184	465	139,184	465	139,184	465	139,184
November	423	139,184	465	139,184	465	139,184	465	139,184
December	423	139,184	465	139,184	465	139,184	465	139,184
SUBTOTAL BY YEAR		$417,552		$1,670,208		$1,670,208		$1,670,208
TOTAL FOR ALL YEARS								See Next Page

Note: Values of ATC are based on items received by November 15, 2001 including 1) a signed Service Agreement and letter of credit received by SPP, and 2) authorization to proceed with engineering and construction received by Transmission Owners from SPP. Annual ATC allocated to the Transmission Customer is determined by the least amount of seasonal ATC on an annual basis.

Table 10 (Continued)

Summary Of Available Transfer Capability With All Network Upgrades

And The Estimate Of Network Upgrade Revenue Requirements Only

For 465MW Of 600MW Request 150680 From ERCOTE To Entergy

During The Period From October 1, 2001 To January 1, 2006

OPERATING PERIOD (Month)	2005 ATC (MW)	2005 NETWORK UPGRADE REVENUES ($)	2006 ATC (MW)	2006 NETWORK UPGRADE REVENUES ($)	2007 ATC (MW)	2007 NETWORK UPGRADE REVENUES ($)	2008 ATC (MW)	2008 NETWORK UPGRADE REVENUES ($)
January	465	139,184	N/A	0	N/A	0	N/A	0
February	465	139,184	N/A	0	N/A	0	N/A	0
March	465	139,184	N/A	0	N/A	0	N/A	0
April	465	139,184	N/A	0	N/A	0	N/A	0
May	465	139,184	N/A	0	N/A	0	N/A	0
June	465	139,184	N/A	0	N/A	0	N/A	0
July	465	139,184	N/A	0	N/A	0	N/A	0
August	465	139,184	N/A	0	N/A	0	N/A	0
September	465	139,184	N/A	0	N/A	0	N/A	0
October	465	139,184	N/A	0	N/A	0	N/A	0
November	465	139,184	N/A	0	N/A	0	N/A	0
December	465	139,184	N/A	0	N/A	0	N/A	0
SUBTOTAL BY YEAR		$1,670,208		$0		$0		$0
TOTAL FOR ALL YEARS								$7,098,384

Note: Values of ATC are based on items received by November 15, 2001 including 1) a signed Service Agreement and letter of credit received by SPP, and 2) authorization to proceed with engineering and construction received by Transmission Owners from SPP. Annual ATC allocated to the Transmission Customer is determined by the least amount of seasonal ATC on an annual basis.

Table 11

Identified Third-Party Network Upgrades & Required In-Service Dates

To Accommodate This Request For Transmission Service

For 465MW Of 600MW Request 150680 From ERCOTE To Entergy

During The Period From October 1, 2001 To January 1, 2006

IDENTIFIED THIRD-PARTY NETWORK UPGRADE	DATE NEEDED (M/D/Y)
EES-CELE Ringgold To Carroll 115/138kV	12/1/01