



**SPP**

*Southwest  
Power Pool*

*System Facilities Study  
For Transmission Service Requests  
194656 & 194657*

*By Constellation Power Source, Inc.*

*From Central And South West Services  
To Entergy*

*For The Reserved Amount Of 250MW*

*From 12/1/02 To 12/1/04*

*With Deferral To The Period  
From February 1, 2004 To February 1, 2006*

*SPP Transmission Planning  
(#SPP-2000-043-2)*

**Revised July 23, 2001**

## Table of Contents

Executive Summary	3
Introduction	4
Base Case, The Requested Service	5
Deferral Case Per SPP OATT 15.5	7
Third-Party Facilities	9
Financial Analysis	9
Conclusion	13
<u>Deferral Case Per SPP OATT 15.5</u>	
Table 1: Estimated Network Upgrade Costs, Lead Times & In-Service Dates	16
Table 2: Estimated Network Upgrade Costs, Lead Times & In-Service Dates For Previously Assigned Facilities Requiring Only Additional Upgrades	17
Table 3: Estimated Network Upgrade Costs, Lead Times & In-Service Dates For Previously Assigned Facilities Requiring Only Accelerated In-Service Dates	18
Table 4: Estimated Network Upgrade Costs, Lead Times & In-Service Dates For Previously Assigned Facilities Requiring Both Additional Upgrades And Accelerated In-Service Dates	19
Table 5: Network Elements Assigned To Previous Reservations That Limit The ATC To Less Than That Requested Due To Engineering And Construction Schedules	20
Table 6: Network Elements Assigned To This Reservation That Limit The ATC To Less Than That Requested Due To Engineering And Construction Schedules	21
Table 7: Transfer Limits Given Engineering And Construction Lead Times	22
Table 8: Summary Of Available Transfer Capability With All Network Upgrades	26
Table 9: Summary Of Available Transfer Capability & Estimates Of Base Rate Transmission Service Charges Only	27
Table 10: Summary Of Available Transfer Capability & Estimates Of Revenue Requirements For Network Upgrades Only	28
Table 11: Identified Third-Party Facilities	29

**Southwest Power Pool**  
**Transmission Service Requests #194656 & 194657**  
**SPP System Facilities Study SPP-2000-043-2**

**Executive Summary**

At the request of Constellation Power Source, Inc. (CPS), the Southwest Power Pool developed this Facilities Study for the purpose of evaluating the financial characteristics of Transmission Service Requests 194656 and 194657. These requests is for 100MW and 150MW respectively of Firm Transmission Service from American Electric Power West (Central and South West Services) (CSWS) to Entergy (EES). The requested term of this Point-To-Point Service is from December 1, 2002 to December 1, 2004.

Given the results of SPP's base case analysis pursuant to the request for Transmission Service, the available transfer capability (ATC) is insufficient to provide the Transmission Customer with reliable service for a significant portion of the requested reservation period without impairing or degrading reliability to existing firm services. Therefore, the Deferral of Service as provided for in section 15.5 of SPP's Open Access Transmission Tariff (OATT) was deemed applicable by SPP to these requests for Transmission Service. As a result, an analysis documented as the deferral case was conducted regarding the deferral of the reservation period until such time as 2 years of Transmission Service may be provided at the capacity level requested. Given the results of this deferral case analysis, the start of Transmission Service may be deferred until February 1, 2004.

The time frame in which 2 years of annual ATC, in the requested amounts totaling 250MW, is available is from February 1, 2004 to February 1, 2006. The projected base rate transmission service charges (excluding charges for ancillary services) are \$4,140,000 for the deferred reservation period based on the 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 deferred Transmission Service request are \$7,080,168. As the

estimated base rate transmission service charges are less than the estimated revenue requirements for Network Upgrades, CPS shall pay for the revenue requirements associated with the Network Upgrades.

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 in the deferred case are based on items received by September 1, 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 September 1, 2001, then the ATC of the existing transmission system with Network Upgrades will have to be reevaluated. This reevaluation is required due to subsequent delays in scheduling engineering and construction for the required Network Upgrades.

In the deferred case analysis, an unconditional and irrevocable letter of credit, in the amount of \$5,721,467, must be provided to the Transmission Provider 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 250MW.

The Transmission Customer is responsible for the cost of upgrading all third-party facilities that are overloaded due to the requested service. In this deferred case, a list of identified third-party facilities is in Table 11. 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, administrative & general, operation & maintenance, allocation of general plant, 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.

### **Base Case, The Requested Service**

The staff of SPP completed System Impact Study SPP-2000-043 that identified system limitations and required modifications to the SPP system necessary to provide the requested Transmission Service. Network Upgrades will be required on the CSWS and Southwestern Power Administration (SPA) transmission systems. Due to the in-service dates of these

Network Upgrades, some limit and delay the requested Transmission Service. 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.

One constraint identified in the Impact Study is not assigned to the Transmission Customer in this Facilities Study as the Transmission Owner will upgrade the facility. Kansas City Power & Light (KACP) will upgrade the Stilwell to Lacygne 345kV line by approximately February 1, 2004. The SWPA's and EES's Bull Shoals to Midway 161kV line is considered to be an Entergy Limit and must be reviewed when the customer obtains service on the Entergy System to complete the transmission path. Additional Network Upgrades may result.

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. The estimated time to complete the engineering and construction of the first transfer-limiting facility in the winter peak period of 2003 is 24 months after KACP begins designing its upgrade. KACP's Stilwell to Lacygne 345kV transmission line has a 24 month construction lead-time. The constraint is due to the outage of the West Gardner to Lacygne 345kV line during the 2004 summer and winter peak periods.

The estimated time to complete the engineering and construction of the second transfer-limiting facility in the summer peak period of 2003 is 30 months after CSWS's receipt of authorization to proceed from SPP. CSWS's IPC Jefferson to Lieberman 138kV transmission line has a 30 month construction lead-time. The constraint is due to the outage of the Longwood to Wilkes 345kV line during the 2001 and 2004 summer peak periods.

The minimum ATC during the 2001, 2002 and 2003 summer peak, from June 1 to October 1, is 0MW. 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. No capacity is available on a continuous annual basis

through January 2004. Thereafter, the requested capacity throughout the remainder of the reservation period through January 2006 is available to accommodate this request for Transmission Service.

### **Deferral Case Per SPP OATT 15.5**

The ATC is insufficient to provide the Transmission Customer with reliable Transmission Service for a significant portion of the requested reservation period. Therefore, construction of Network Upgrades is required in order that reliable Transmission Service is maintained for existing firm services. As a result, the Deferral of Service as provided for in section 15.5 of SPP's OATT was deemed applicable by SPP. Given the lack of ATC, an analysis was conducted regarding the deferral of the reservation period until such time as 2 years of annual Transmission Service may be provided at the capacity levels requested. Given the results of this deferral case analysis, the start of Transmission Service may be deferred to February 1, 2004.

The staff of SPP created the System Impact Study SPP-2000-043 that identified system limitations and required modifications to the SPP system necessary to provide the deferred Transmission Service from February 1, 2004 through January 31, 2006. The Network Upgrades that were not assigned to a previous request and are required to provide the deferred Transmission Service are listed in Table 1. Network Upgrades will be required on the CSWS and SPA transmission systems. Due to the in-service dates of these Network Upgrades, none will limit and delay the deferred 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 additional capacity to accommodate this deferral of Transmission Service are listed in Table 2. To accommodate this deferral, no previously assigned Network Upgrades will require capacity in addition to that previously specified. Due to the in-service dates of these Network Upgrades, none will limit and delay the deferred Transmission Service. The ATC values associated with only transfer-limiting upgrades are listed in Table 5.



Network Upgrades that were previously assigned and will require only accelerated in-service dates to accommodate this deferral of Transmission Service are listed in Table 3. To accommodate this deferral, no previously assigned Network Upgrades will require an earlier in-service date than previously indicated. Due to the in-service dates of these Network Upgrades, none will limit and delay the deferred Transmission Service.

Network Upgrades that were previously assigned and will require both additional capacity and accelerated in-service dates to accommodate this deferral of Transmission Service are listed in Table 4. To accommodate this deferral, 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, none will limit and delay the deferred Transmission Service.

Given the estimated dates in which Network Upgrades are required for the deferred Transmission Service to be provided, there are no facility limits after the start date of the deferred service. Transfer-limiting facilities are listed in Tables 5 and 6. Seasonal and annual transfer limits given engineering and construction lead times are listed in Table 7. A summary of ATC throughout the deferred reservation period is included in Table 8.

Firm Point-To-Point Transmission Service may be provided to CPS in the amount requested after the Stilwell to Lacygne and IPC Jefferson to Lieberman facility upgrades are in service. If a completed Service Agreement is received by SPP on or before September 1, 2001, then the deferred Transmission Service may be provided on approximately February 1, 2004 given no unexpected delays in design, permitting, and 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 for the deferred reservation period given that the ATC with Network Upgrades is at least equal to the requested capacity. SPP accepts this deferral of Transmission Service given this allocation of capacity of which is equal to that requested starting February 1, 2004. Thereafter, the requested capacity throughout the remainder of the deferred reservation period

through January 2006 is available to accommodate this request for Transmission Service. SPP accepts this request, with the deferred reservation period, per SPP OATT 15.5 for Transmission Service given this allocation of capacity of which is equal to that requested and only available from February 1, 2004 to February 1, 2006.

Tables 7, 8, 9 and 10 include lists of capacity values of which are equal to that requested through the deferred 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 modeled facilities within SPP 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, administrative & general, operation & maintenance, allocation of general plant, 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 lesser of either 1) the respective remaining depreciation periods, or 2) the reservation period.
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 through 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, for only the period of time from the end-of-construction date of the new and earlier reservation to the end-of-construction date of the earlier of a) the reservation in which the project was originally assigned, or b) a reservation in which the project was previously expedited which has the earliest end-of-construction date.

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 through 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, for only the period of time from the end-of-construction date of the new and earlier reservation to the end-of-construction date of the earlier of a) the reservation in which the project was originally assigned, or b) a reservation in which the project was previously expedited which has the earliest end-of-construction date, and 4) the levelized present worth of the incremental annual carrying charges, including depreciation, associated with the additional capacity through 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 (SPA). The current zonal rate of SPA is \$690/MW-Month. In the deferral case, Table 8 includes a summary of ATC values with all assigned Network Upgrades energized by the Date In Service specified in Tables 5 and 6. 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 deferred Transmission Service are estimated to be \$4,140,000 throughout the transaction period.

The estimate of total revenue requirements listed in Table 10 for the required Network Upgrades throughout the deferred transaction period is \$7,080,168. The estimated revenue requirements for the required Network Upgrades are greater than the projected base rate transmission service charges over the deferred transaction period. Therefore, the Transmission Customer will be responsible for the revenue requirements for the required Network Upgrades of which are estimated to be \$7,080,168 throughout the deferred transaction period.

The Southwest Power Pool and the affected transmission owners including CSWS and SPA shall use due diligence to add necessary facilities or upgrade the Transmission System to provide the deferred Transmission Service, provided CPS 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 CPS 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 \$5,721,467 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-2000-043, 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. As the ATC is insufficient to provide reliable Transmission Service to the Transmission Customer and to maintain reliability for existing firm services, SPP deemed the Deferral of Service applicable to this request for Transmission Service.

In the deferral case per SPP OATT 15.5 given the results of the Impact Study SPP-2000-043, Network Upgrades that were identified as required to provide the deferred Transmission Service are listed in Tables 1 through 4. Table 1 includes the Network Upgrades and Costs assigned to the CPS to accommodate Transmission Service Requests 194656 and 194657

from CSWS 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 deferred transaction period of the requested Transmission Service, the estimate of the levelized revenue requirements for the required Network Upgrades is \$7,080,168 for Transmission Service Requests 194656 and 194657. 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 \$4,140,000 and the monthly revenue requirements are listed in Table 9. As the base rate transmission service charges are less than the revenue requirements for the required Network Upgrades, the revenue requirements from the Transmission Customer are for the required Network Upgrades.

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, and its deferral with a reservation period from February 1, 2004 to February 1, 2006, 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 – Deferral Case  
 Estimated Network Upgrade Costs, Lead Times & In-Service Dates  
 For Facilities Assigned To Only This Request For Transmission Service  
 For Requests 194656 & 194657 From CSWS To Entergy  
 During The Period From February 1, 2004 To February 1, 2006**

NETWORK UPGRADE	ENGINEERING & CONSTRUCTION COSTS (\$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)
Lieberman-IPC Jefferson 138 KV: Replace switches @ Lieberman. Reconductor 0.65 miles of 397MCM ACSR with 795 ACSR By CSWS.	153,967	30	6/1/04	3/2/04	3/2/04
Longwood - Noram 138KV: Reconductor 4.66 miles of bundled 266MCM ACSR with 1590 ACSR By CSWS.	1,333,000	15	6/1/04	3/15/03	6/1/04
Fulton – Patmos 115kV: Reconductor 7.1 miles of 666MCM ACSR with 1272 ACSR By CSWS.	2,100,000	18	12/1/03	3/2/03	2/1/04
Raines – Noram 138KV: Rebuild 5.58 miles of 2-266MCM ACSR with 1590 ACSR By CSWS.	1,596,000	18	6/1/04	3/2/03	6/1/04
Broken Bow - Bethel 138KV: Reset 400/5 CTs @ Broken Bow By SPA.	1,000	6	6/1/04	3/2/02	6/1/04
Beaver – Eureka Springs 161KV: Reconnect CT's to 1000:5 Tap on Breakers 42, 32, & half on 22. Replace metering & reset relays for Line 2 & Line 3 By SPA.	22,500	8	6/1/04	5/2/02	6/1/04
Beaver – Eureka Springs 161KV: Reconductor 1.25 miles of 795MCM ACSR with 1590 ACSR By CSWS.	515,000	12	6/1/04	2/1/03	6/1/04
<b>SUBTOTAL</b>	\$5,721,467				

- 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 – Deferral Case**

**Estimated Network Upgrade Costs, Lead Times & In-Service Dates  
For Previously Assigned Facilities Requiring Only Additional Capacity  
For Requests 194656 & 194657 From CSWS To Entergy  
During The Period From February 1, 2004 To February 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 – Deferral Case**

**Estimated Network Upgrade Costs, Lead Times & In-Service Dates  
For Previously Assigned Facilities Requiring Only Accelerated In-Service Dates  
For Requests 194656 & 194657 From CSWS To Entergy  
During The Period From February 1, 2004 To February 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)
NONE							
SUBTOTAL		\$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 4 – Deferral Case**

**Estimated Network Upgrade Costs, Lead Times & In-Service Dates  
For Previously Assigned Facilities Requiring Both Additional Capacity And Accelerated In-Service Dates  
For Requests 194656 & 194657 From CSWS To Entergy  
During The Period From February 1, 2004 To February 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 – Deferral Case  
 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 Requests 194656 & 194657 From CSWS To Entergy  
 During The Period From February 1, 2004 To February 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)
NONE					

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

02SR: 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 6 – Deferral Case  
 Network Elements Assigned To This Transmission Service Request  
 That Limit The ATC To Less Than That Requested  
 Due To Engineering And Construction Schedules  
 For Requests 194656 & 194657 From CSWS To Entergy  
 During The Period From February 1, 2004 To February 1, 2006**

NETWORK UPGRADE	DATE IN SERVICE (M/D/Y)	ATC (MW)	ATC MODEL	RESTRICTED OPERATING PERIOD (M/D - M/D) (YEAR)
NONE				

Note: Date In Service is based on items received by September 1, 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.

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

02SR: 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 7 – Deferral Case  
Transfer Limits Given Engineering And Construction Lead Times  
Of Previously Assigned Facilities And Facilities Assigned To This Request  
For Requests 194656 & 194657 From CSWS To Entergy  
During The Period From February 1, 2004 To February 1, 2006**

PREVIOUS OR THIS RESERVATION		THIS RESERVATION		PREVIOUS OR THIS RESERVATION		CALCULATED		POSSIBLE		SCHEDULED
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 AVAILABLE (1) (M/D/Y)	DELAY (1) (MONTH)	DATE AVAILABLE (2) (M/D/Y)
Request 150680, SPP-2000-086, with a contract date of 4/15/2001.										
IPC Jefferson - Lieberman 138kV: Lieberman Jumpers	CSWS	0 (3)	O4SP	4/1/01	6	10/14/01	6.5	2/1/02	10.1	2/1/02
IPC Jefferson - Lieberman 138kV: Reconductor 26.35 miles.	CSWS	0 (3)	O4SP	6/1/01	30	10/15/03	28.5	2/1/04	32	2/1/04
Minimum 6/1 – 10/1 2004:		250								
This Reservation, 194656 + 194657, For 250MW Transfer, SPP-2000-043-2, With A Contract Date Of 9/1/01.										
IPC Jefferson - Lieberman 138kV: Reconductor 0.65Mi of 397MCM ACSR with 795 ACSR & Replace Lieberman Switches.	CSWS	186 (3)	O4SP	6/1/04	30	3/2/04		3/2/04		3/2/04
Longwood - Noram 138kV: Reconductor 4.66 Miles Of Bundled 266MCM ACSR With 1590 ACSR.	CSWS	0 (3)	O4SP	6/1/04	15	12/1/02		3/15/03		6/1/04

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.

**Table 7 – Deferral Case (Continued)**  
**Transfer Limits Given Engineering And Construction Lead Times**  
**Of Previously Assigned Facilities And Facilities Assigned To This Request**  
**For Requests 194656 & 194657 From CSWS To Entergy**  
**During The Period From February 1, 2004 To February 1, 2006**

PREVIOUS OR THIS RESERVATION		THIS RESERVATION		PREVIOUS OR THIS RESERVATION		CALCULATED		POSSIBLE		SCHEDULED
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 AVAILABLE (1) (M/D/Y)	DELAY (1) (MONTH)	DATE AVAILABLE (2) (M/D/Y)
This Reservation, 194656 + 194657, For 250MW Transfer, SPP-2000-043-2, With A Contract Date Of 9/1/01 (Continued).										
Fulton - Patmos 115kV: Reconductor 7.1 Miles Of 666MCM ACSR With 1272 ACSR.	CSWS	11 (3)	04SP	12/1/03	18	3/2/03		3/2/03		2/1/04
Raines - Noram 138kV: Rebuild 5.58 Miles Of 2-266MCM ACSR With 1590 ACSR.	CSWS	73 (3)	04SP	6/1/04	18	3/2/03		3/2/03		6/1/04
Broken Bow - Bethel 138kV: Reset 400/5 CTs @ Broken Bow.	SPA	130 (3)	04SP	6/1/04	6	3/2/02		3/2/02		6/1/04
Eureka Springs - Beaver 161kV: Reset Relays & CTs, Replace Metering.	SPA	131 (3)	04SP	6/1/04	8	5/2/02		5/2/02		6/1/04
Eureka Springs - Beaver 161kV: Reconductor 1.25 Of 7.22 Miles, 795MCM To 1590.	CSWS	131 (3)	04SP	6/1/04	12	9/1/02		2/1/03		6/1/04

- 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.

**Table 7 – Deferral Case (Continued)**  
**Transfer Limits Given Engineering And Construction Lead Times**  
**Of Previously Assigned Facilities And Facilities Assigned To This Request**  
**For Requests 194656 & 194657 From CSWS To Entergy**  
**During The Period From February 1, 2004 To February 1, 2006**

PREVIOUS OR THIS RESERVATION		THIS RESERVATION		PREVIOUS OR THIS RESERVATION		CALCULATED		POSSIBLE		SCHEDULED
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 AVAILABLE (1) (M/D/Y)	DELAY (1) (MONTH)	DATE AVAILABLE (2) (M/D/Y)
This Reservation, 194656 + 194657, For 250MW Transfer, SPP-2000-043-2, With A Contract Date Of 9/1/01 (Continued).										
S. Shreveport - Wallace Lake 138kV: Upgrade not required as Dolet Hills operating guide eliminates constraint.	CSWS	250	04SP							
Stilwell - Lacygne 345kV: Upgrade to be completed by KACP & not assigned to CPS.	KACP	0 (3)	04SP	12/1/03	24	9/1/03		2/1/04		2/1/04
Minimum 6/1 – 10/1 2004:		250								

- 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.



**Table 7 – Deferral Case (Continued)**  
**Transfer Limits Given Engineering And Construction Lead Times**  
**Of Previously Assigned Facilities And Facilities Assigned To This Request**  
**For Requests 194656 & 194657 From CSWS To Entergy**  
**During The Period From February 1, 2004 To February 1, 2006**

PREVIOUS OR THIS RESERVATION		THIS RESERVATION		PREVIOUS OR THIS RESERVATION		CALCULATED		POSSIBLE		SCHEDULED
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 AVAILABLE (1) (M/D/Y)	DELAY (1) (MONTH)	DATE AVAILABLE (2) (M/D/Y)
This Reservation, 194656 + 194657, For 250MW Transfer, SPP-2000-043-2, With A Contract Date Of 9/1/01 (Continued).										
Stilwell - Lacygne 345kV: Upgrade to be completed by KACP no later than 2/1/04.	KACP	238 (3)	04WP	12/1/03	24	9/1/03		2/1/04	2	2/1/04
Fulton - Patmos 115kV: Reconductor 7.1 Miles Of 666MCM ACSR With 1272 ACSR.	CSWS	29 (3)	04WP	12/1/03	18	3/2/03		3/2/03		2/1/04
Minimum 2/1 – 4/1 2004 & 12/1/04 – 4/1/05 & 12/1/05 – 2/1/06		250								
Minimum 2002 & 1/1/03 – 10/1/03		0								
Minimum 10/1/03 – 12/31/03 & 1/1/04 – 2/1/04		238								
Minimum 2/1/04 – 12/31/04 & 1/1/05 – 12/31/05 & 1/1/06 – 2/1/06		250								

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.

**Table 8 – Deferral Case**  
**Summary Of Available Transfer Capability**  
**With All Network Upgrades Assigned To This And Previous Reservations**  
**For Requests 194656 & 194657 From CSWS To Entergy**  
**During The Period From February 1, 2004 To February 1, 2006**

OPERATING PERIOD (YEAR)	OPERATING PERIOD (M/D - M/D)	ATC (MW)
2004	2/1 – 12/31	250
2005	1/1 – 12/31	250
2006	1/1 – 2/1	250

Note: Values of ATC are based on items received by September 1, 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 – Deferral Case**  
**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 Requests 194656 & 194657 From CSWS To Entergy**  
**During The Period From February 1, 2004 To February 1, 2006**

OPERATING PERIOD (MONTH)	2004 ATC (MW)	2004 BASE RATE REVENUES (\$)	2005 ATC (MW)	2005 BASE RATE REVENUES (\$)	2006 ATC (MW)	2006 BASE RATE REVENUES (\$)
January	N/A	N/A	250	172,500	250	172,500
February	250	172,500	250	172,500	N/A	N/A
March	250	172,500	250	172,500	N/A	N/A
April	250	172,500	250	172,500	N/A	N/A
May	250	172,500	250	172,500	N/A	N/A
June	250	172,500	250	172,500	N/A	N/A
July	250	172,500	250	172,500	N/A	N/A
August	250	172,500	250	172,500	N/A	N/A
September	250	172,500	250	172,500	N/A	N/A
October	250	172,500	250	172,500	N/A	N/A
November	250	172,500	250	172,500	N/A	N/A
December	250	172,500	250	172,500	N/A	N/A
<b>SUBTOTAL BY YEAR</b>		<b>\$1,897,500</b>		<b>\$2,070,000</b>		<b>\$172,500</b>
<b>TOTAL FOR ALL YEARS</b>						<b>\$4,140,000</b>

Note: Values of ATC are based on items received by September 1, 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 – Deferral Case**  
**Summary Of Available Transfer Capability With All Network Upgrades**  
**And The Estimate Of Network Upgrade Revenue Requirements Only**  
**For Requests 194656 & 194657 From CSWS To Entergy**  
**During The Period From February 1, 2004 To February 1, 2006**

OPERATING PERIOD (Month)	2004 ATC (MW)	2004 NETWORK UPGRADE REVENUES (\$)	2005 ATC (MW)	2005 NETWORK UPGRADE REVENUES (\$)	2006 ATC (MW)	2006 NETWORK UPGRADE REVENUES (\$)
January	N/A	N/A	250	295,007	250	295,007
February	250	295,007	250	295,007	N/A	N/A
March	250	295,007	250	295,007	N/A	N/A
April	250	295,007	250	295,007	N/A	N/A
May	250	295,007	250	295,007	N/A	N/A
June	250	295,007	250	295,007	N/A	N/A
July	250	295,007	250	295,007	N/A	N/A
August	250	295,007	250	295,007	N/A	N/A
September	250	295,007	250	295,007	N/A	N/A
October	250	295,007	250	295,007	N/A	N/A
November	250	295,007	250	295,007	N/A	N/A
December	250	295,007	250	295,007	N/A	N/A
<b>SUBTOTAL BY YEAR</b>		<b>\$3,245,077</b>		<b>\$3,540,084</b>		<b>\$295,007</b>
<b>TOTAL FOR ALL YEARS</b>						<b>\$7,080,168</b>

Note: Values of ATC are based on items received by September 1, 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 – Deferral Case  
 Identified Third-Party Network Upgrades & Required In-Service Dates  
 To Accommodate This Request For Transmission Service  
 For Requests 194656 & 194657 From CSWS To Entergy  
 During The Period From February 1, 2004 To February 1, 2006**

IDENTIFIED THIRD-PARTY NETWORK UPGRADE	DATE NEEDED (M/D/Y)
None	