



**SPP**

*Southwest  
Power Pool*

*System Facilities Study*

*Firm Point-To-Point Transmission Service  
Request 619539-619544*

*InterGen Services, Inc*

*From OKGE To OKGE*

*In The Requested Amount Of 1200 MW  
with 1200 MW allocated*

*From 5/1/2004*

*To 5/1/2007*

*With 1200MW Deferral For The Period  
From*

*3/1/2007 to 3/1/2010*

*SPP Tariff Studies*

*#SPP-2003-271*

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## **Executive Summary**

At the request of InterGen Services, Inc. (Transmission Customer), the Southwest Power Pool (Transmission Provider) developed this Facilities Study to summarize the operating limits and to determine the financial characteristics associated with Transmission Service Request 619539-619544. The requested term of this Transmission Service is 3 years from May 1, 2004 to May 1, 2007. This request is for a reserved amount of 1200 MW of Firm Point-To-Point Transmission Service from OKGE to OKGE.

To complete the request for 1200 MW of Transmission Service, the Transmission Provider 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, in the amount of \$24,550,000 associated with the engineering and construction of assigned Network Upgrades excluding pre-payment requirements. The Transmission Customer must also confirm this request on the Transmission Provider's OASIS pursuant to the results of this Facilities Study.

Annual available transfer capability (ATC) allocated to the Transmission Customer is determined by the least amount of seasonal ATC within each year of a reservation period. For the development of this study, a contract date of September 1, 2004 was assumed. Allocated ATC and associated revenue requirements are based on this request being complete by this date. In the event that the Transmission Provider does not receive an executed Service Agreement and letter of credit by this date, 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. The minimum ATC for the requested term of service is during the period of September 1, 2004 to January 1, 2005 at 483 MW. However, OKGE redispatch will be implemented to allow 600 MW of service until OKGE completes planned upgrades on the Draper 345/138kv transformer, Memorial to Skyline 138kv line, and Morgan to Mustang 138kv line with an estimated in-service date of 6/1/2005. The ATC is 1200 MW during the term of service starting March 1, 2007 through March 1, 2010 as

summarized in Table 8. The exception being the ATC being limited to 1195 MW for the period of June 1 to October 1, 2009 due to overload of the Northwest 345/138kV Transformer. To relieve this overload would increase the engineering and construction costs for this reservation by \$7,500,000 and the levelized cost of upgrades throughout the reservation period from \$31,218,408 to \$39,322,728. This facility also limits renewal rights to 1165 MW.

The ATC listed in Table 8 is insufficient to provide the Transmission Customer with reliable service for a 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 the Transmission Provider's Open Access Transmission Tariff (OATT) was deemed applicable to this request for Transmission Service. The period in which a three year term of requested Transmission Service of 1200MW may be provided is from March 1, 2007 to March 1, 2010. 600 MW of transmission service may be provided from September 1, 2004 to September 1, 2005 and 620 MW of transmission service from September 1, 2005 to May 1, 2007.

In summary, ATC allocation for the requested term of service through the deferred term of service would be as follows:

9/1/04 through 9/1/05 600 MW  
9/1/05 through 5/1/07 620 MW  
5/1/07 through 3/1/09 1200 MW  
3/1/09 through 3/1/10 1195 MW

Network Upgrades will be required on the Oklahoma Gas and Electric Company (OKGE) transmission system. The engineering and construction cost estimates for assignable Network Upgrades total \$24,550,000 excluding expedited upgrades. The sum of engineering and construction cost estimates for expedited (non-assignable) Network Upgrades is \$0. Interest and other indirect expenses associated with expedited Network Upgrades are assigned and included in the total estimated cost.

The least cost mitigation of the overloads and voltage violations identified for the additional 600 MW was determined to be the addition of a new 345 kV line from Redbud to Horseshoe Lake with a reroute of the existing Arcadia to Seminole 345 kV line into a new 345 kV substation bay at Horseshoe Lake and the addition of two 345/138 kV transformers at Horseshoe Lake. The estimated cost is \$24 million. The estimated in-service date of the solution is 3/1/2007.

Beyond the initial reservation period within the current planning horizon, there is one overloaded transmission facility identified in the corresponding impact study. The impact on the Northwest 345/138kV transformer limits renewal rights of the initial 600MW of transmission service to 588 MW from 5/1/07 to 5/1/08, 586 MW from 5/1/08 to 5/1/09, 584 MW from 5/1/09 to 5/1/10 and 582 MW thereafter.

A Transmission Owner may require that a Transmission Customer pre-pay for all assignable Network Upgrades which it designs and constructs. These pre-payments are in the amount of the Transmission Owner's estimated engineering and construction costs. Pre-payments will be required prior to the scheduled in-service dates. However, levelized amortization and interest credits associated with these pre-payments are included in the monthly revenue requirements of the Transmission Customer. The Southwestern Power Administration is the only Transmission Owner that requires these pre-payments.

The estimated levelized revenue requirements for providing the necessary Network Upgrades to accommodate the 1200MW Transmission Service request are \$31,218,408 excluding pre-payments. Pre-payment costs are \$0 for estimated engineering and construction expenses. Therefore, the total estimate for assignable Network Upgrades is \$31,218,408. The average rate based on this total estimated cost of Network Upgrades, including the expediting of pre-planned Network Upgrades, is \$723.65/MW-Month over the entire term. Excluding the engineering and construction costs of upgrades being expedited and by accounting for only interest and other indirect costs over the term of Transmission Service, the average indirect cost multiplier is 1.2716 over the entire term.

The revenue requirements for generation re-dispatching total \$0 and are listed in [Table 11](#). These requirements are only to accommodate the construction of Network Upgrades. Therefore, the total estimated cost for Network Upgrades with generation re-dispatch is \$0. The average rate based on this total estimated cost of Network Upgrades with generation re-dispatch, including the expediting of pre-planned Network Upgrades, is \$0/MW-Month over the entire term.

The projected base rate transmission service charges (excluding charges for ancillary services) are \$68,247,768 during the term of 9/1/04 through 3/1/10 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 total estimated revenue requirements for providing the necessary Network Upgrades to accommodate the Transmission Service request are \$31,218,408. As the estimated base rate transmission service charges are more than the total estimated revenue requirements for Network Upgrades, the Transmission Customer shall pay the estimated base rate transmission service charge.

The total estimated revenue requirements of the Transmission Customer on a monthly basis are listed in [Table 12](#). A list of the average annual Transmission Service costs is in [Table 13](#). A summary of all costs is included in [Table 16](#). The total estimated cost is \$68,247,768. The average rate based on this total estimated cost is \$1109.72/MW-Month over the entire term.

If a completed Service Agreement is received by the Transmission Provider on or before September 1, 2004, Firm Point-To-Point Transmission Service may be provided September 1, 2004 through May 1, 2007 for the initial 600MW of requested Transmission Service. The specified capacity of 1200 MW is available beginning March 1, 2007. Thereafter, the specified capacity of 1200 MW is available through February

2009 to accommodate the Transmission Service. The remainder of the reservation period through February 2010 will be limited to 1195 MW. This is contingent on no unexpected delays in design, permitting, and construction. The upgrade of constraints identified in the corresponding Impact Study may not be completed until after the start-date of the requested Transmission Service due to lead times for engineering & construction.

For 1200 MW of transmission service, the Transmission Provider must receive an unconditional and irrevocable letter of credit, in the amount of \$24,550,000, before the Transmission Owners incur initial engineering and construction costs. This amount is for all assignable Network Upgrades less pre-payment requirements. The amount of the letter of credit will be adjusted on an annual basis to reflect amortization of these costs. Table 14 includes the required annual amounts. 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 this allocated capacity.

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, no third-party facilities were identified as listed in Table 15. Not all third-party facilities were monitored during the development of the corresponding Impact Study. Therefore, additional third-party facility 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.

A corresponding Impact Study was completed that identified limitations and required modifications of the Transmission Provider system necessary to provide the specified Transmission Service. The Network Upgrades that were not assigned to a previous request and are required to provide the specified Transmission Service are listed in [Table 1](#). 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 accelerated in-service dates to accommodate the specified Transmission Service are listed in [Table 2](#). Network Upgrades that were previously assigned and will require only additional capacity to accommodate the specified Transmission Service are listed in [Table 3](#). Network Upgrades that were previously assigned and will require both additional capacity and accelerated in-service dates to accommodate the specified Transmission Service are listed in [Table 4](#). 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. These facilities are listed in [Table 5](#). This table also includes overloaded facilities in the current planning horizon that limit the rollover rights of the Transmission Customer.

Given the estimated dates when Network Upgrades will be required for the specified Transmission Service to be provided, there are facility limits that may either delay the start date of the service or limit the ATC to less than that requested. Any transfer-limiting facilities are listed in [Tables 6](#) and [7](#). Seasonal and annual transfer limits given

engineering and construction lead times are also listed in these tables. A summary of ATC throughout the reservation period is included in [Table 8](#).

The Transmission Provider does not accept requests for firm Transmission Service without restrictions if the design criteria specified in the corresponding Impact Study are not met. However, the Transmission Provider may accept a request with either or both of the following: 1) a reduction of provided capacity to designated levels within the specified time frames, and 2) a deferral of service, as listed in [Table 8](#). Based on the results of the Impact Study, the Transmission Provider accepts the initial 600MW of requested Transmission Service effective September 1, 2004 through May 1, 2007. The specified capacity of 1200 MW is available beginning March 1, 2007. Thereafter, the specified capacity of 1200 MW is available through [February 2009] to accommodate the Transmission Service. The remainder of the reservation period through February 2010 will be limited to 1195 MW.

[Tables 6](#) through [10](#), [12](#) and [13](#) include lists of capacity of which may be 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 plus any pre-payments for Network Upgrade are provided in [Table 10](#). The Transmission Customer shall pay the higher of the base rate transmission service charges or the revenue requirements for the Network Upgrades.

### **Third-Party Facilities**

For third-party facilities listed in [Table 15](#), the Transmission Customer is responsible for obtaining arrangements for the necessary upgrades of the facilities per Section 21.1 of the Transmission Provider's OATT. If requested, the Transmission Provider 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 the Transmission Provider system 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 the Transmission Provider who have not placed their facilities under the Transmission Provider's OATT.

### **Financial Methodology**

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 facilities are upgraded throughout the reservation period, the Transmission Customer shall 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 usable 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 1) amortized engineering and construction costs associated with the new facilities, 2) annual carrying charges, excluding depreciation, based on the product of a) applicable gross and net engineering and construction costs associated with the new facilities, and b) 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 a) applicable gross and net book values associated with all replaced usable facilities, and salvage value of non-usable, and b) annual fixed charge rate (per-unit). 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.

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.

A Transmission Owner may require that a Transmission Customer pre-pay for all assignable Network Upgrades which it designs and constructs. These pre-payments are the Transmission Owner's estimated engineering and construction costs. Pre-payments will be required prior to the scheduled in-service dates. However, amortization and

associated interest reductions are made to the total monthly revenue requirements of the Transmission Customer due to all pre-payment requirements. Pre-payment dates and costs are listed in Tables 1 through 4.

The Southwestern Power Administration is the only Transmission Owner that requires these pre-payments. In the event that a previously assigned Network Upgrade is expedited, then the Transmission Customer requiring the expediting will make the pre-payment prior to the new in-service date. When the Transmission Customer with the earlier reservation, which the Network Upgrade was previously assigned to, submits its pre-payment, the Transmission Provider will immediately reimburse the Transmission Customer requiring the expediting in the amount of the pre-payment. Refund dates are listed in Tables 2 and 4.

### **Financial Analysis**

The zonal rate for Firm Point-To-Point Transmission Service is Oklahoma Gas and Electric Company (OKGE). The current zonal rate of OKGE is \$1109.72/MW-Month. Table 10 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 for the Transmission Service are estimated to be \$68,247,768.

The estimate of total revenue requirements for the required Network Upgrades throughout the reservation period is determined on a levelized basis. A Transmission Owner may require that a Transmission Customer pre-pay for all assignable Network Upgrades which it designs and constructs in the amount of estimated engineering and construction costs. When a pre-payment is required, the estimate of total monthly revenue requirements is reduced by a credit including amortization and associated interest. Pre-payment dates and costs are listed in Tables 1 through 4 with a total cost of \$0.

The sum of the estimated monthly revenue requirements listed in [Table 10](#) for the required Network Upgrades throughout the reservation period is \$31,218,408. These monthly revenue requirements include pre-payment requirements for a Transmission Owner's engineering and construction costs. The estimated revenue requirements for the required Network Upgrades are less than the projected base rate transmission service charges over the specified reservation period. Therefore, the Transmission Customer will be responsible for the projected base rate transmission service which is estimated to be \$68,247,768 throughout the requested and deferred reservation period of 9/1/2004 through 3/1/2010.

The revenue requirements for generation re-dispatching are listed in [Table 11](#). These requirements are only to accommodate the construction of Network Upgrades. The total estimated revenue requirements of the Transmission Customer on a monthly basis are listed in [Table 12](#). A list of the average annual Transmission Service costs is in [Table 13](#). A summary of all costs is included in [Table 16](#).

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

Engineering and construction of all new facilities and modifications will not start until after an executed Service Agreement has been received by the Transmission Provider and the affected Transmission Owners receive the appropriate authorization to proceed from the Transmission Provider. In accordance with section 19.4 of the Open Access Transmission Tariff, the Transmission Customer shall provide an unconditional and irrevocable letter of credit to the Transmission Provider in the amount of no less than \$24,550,000 for the initial engineering and construction costs to be incurred by the

Transmission Owners. This amount is for all assignable Network Upgrades less pre-payment requirements. The Transmission Customer shall also maintain a letter of credit in effect during the term of the Transmission Service Agreement. The amount of the letter of credit will be adjusted on an annual basis to reflect amortization of these costs. [Table 14](#) includes the required annual amounts. 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 corresponding Impact Study, 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 when the Transmission Provider notifies the Transmission Owners to proceed with the necessary projects.

Based on the results of the corresponding Impact Study, 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 Transmission Customer to accommodate its Transmission Service Request. [Table 2](#) includes previously assigned Network Upgrades requiring only accelerated in-service dates. [Table 3](#) includes previously assigned Network Upgrades requiring only additional capacity to accommodate this request. [Table 4](#) includes previously assigned Network Upgrades requiring both additional capacity and accelerated in-service dates to accommodate this request.

Throughout the reservation period of the specified Transmission Service, the estimate of the levelized revenue requirements for the required Network Upgrades is \$31,218,408 for Transmission Service Request characteristics associated with Transmission Service



Request 619539-619544. 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 revenue requirements for generation re-dispatching to accommodate construction total \$0 and are listed in [Table 11](#). Therefore, the total estimated cost for Network Upgrades with generation re-dispatch is \$0. The base rate transmission service charges are estimated to be \$68,247,768 and the monthly revenue requirements are listed in [Table 9](#). As the base rate transmission service charges are more than the revenue requirements for the required Network Upgrades with necessary re-dispatching, the revenue requirements from the Transmission Customer are those associated with the base rate transmission service charges. The total estimated revenue requirement is listed in [Table 12](#) in the amount of \$68,247,768.

To complete the request for Transmission Service, the Transmission Provider 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 associated with the engineering and construction of assigned Network Upgrades. The Transmission Customer must also confirm this request on the Transmission Provider's OASIS pursuant to the results of this Facilities Study. Upon receipt of these items and confirmation by the Transmission Customer, the Transmission Provider 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 3**

**Previously Assigned Network Upgrades  
Requiring Only Additional Capacity**

Facility, Previously Assigned Network Upgrade, & Transmission Owner	New Network Upgrade	Previous Request (No.)	Previous Eng. & Const. Costs (\$)	New Eng. & Const. Costs (\$)	Assigned Eng. & Const. Costs (\$)	Eng. & Const. Lead Time (Months)	Const. Only Lead Time (Months)	New Date Needed (M/D/Y)	Previously Scheduled Date In Service (M/D/Y)	Pre- Payment Date (M/D/Y)
None.										
<b>Total</b>			\$0	\$0	\$0					

Note: Pre-payment dates are only specified when applicable.

Assignable and pre-payment amounts are only the difference of the previous and new cost estimates for engineering and construction.

**Table 4**

**Previously Assigned Network Upgrades  
Requiring Both Accelerated In-Service Dates And Additional Capacity**

Facility, Previously Assigned Network Upgrade, & Trans. Owner	New Network Upgrade	Previous Request (No.)	Previous Eng. & Const. Cost (\$)	New Eng. & Const. Cost (\$)	Assigned Eng. & Const. Cost (\$)	Eng. & Const. Lead Time (Month)	Const. Only Lead Time (Month)	New Date Needed (M/D/Y)	Previous Date In Service (M/D/Y)	New Scheduled Date In Service (M/D/Y)	Pre- Payment Date (M/D/Y)	Refund Date (M/D/Y)
None												
<b>Total</b>			\$0	\$0	\$0							

Note: Pre-payment and refund dates are only specified when applicable.

Pre-payment amounts, if applicable at the pre-payment date, are the new cost estimates for engineering and construction.

Assignable amounts are only the difference of the previous and new cost estimates for engineering and construction.

Refundable amounts, if applicable at the refund date, are the previous engineering and construction costs.

**Table 5  
Facilities Requiring No Upgrades Or Limiting Rollover Rights**

Facility	Transmission Owner	Reason For No Upgrade	Reservation Rollover Limit In Planning Horizon Where Applicable (M/D/Y)
ETOWAH 69KV	OKGE	Close normally open switch between Etowah Bus #54996 & Tribbey Bus #55052 by scada for mitigation.	
LITTLE AXE 69KV	OKGE	Close normally open switch between Etowah Bus #54996 & Tribbey Bus #55052 by scada for mitigation.	
LITTLE RIVER LAKE 69KV	OKGE	Close normally open switch between Etowah Bus #54996 & Tribbey Bus #55052 by scada for mitigation.	
MACOMB OC PUMP 69KV	OKGE	Close normally open switch between Etowah Bus #54996 & Tribbey Bus #55052 by scada for mitigation.	
OMPA-LEXINGTON 67KV	OKGE	Close normally open switch between Etowah Bus #54996 & Tribbey Bus #55052 by scada for mitigation.	
ROSEDALE 69KV	OKGE	Close normally open switch between Etowah Bus #54996 & Tribbey Bus #55052 by scada for mitigation.	
SPRINGHILL TAP 69KV	OKGE	Close normally open switch between Etowah Bus #54996 & Tribbey Bus #55052 by scada for mitigation.	
SPRNGHILL 69KV	OKGE	Close normally open switch between Etowah Bus #54996 & Tribbey Bus #55052 by scada for mitigation.	
TEXAS STELLA 69KV	OKGE	Close normally open switch between Etowah Bus #54996 & Tribbey Bus #55052 by scada for mitigation.	
TINKER #2 - TINKER #4 138KV	OKGE	Not a valid Overload; Relays trip to open UG transmission line when loading reaches 100%, No problem exist with line open.	
ARCADIA - KAMO MEMORIAL 138KV	OKGE	OKGE Terminal Equipment Project underway to increase line rating. Estimated In-Service Date 9/30/2004.	
ARCADIA - REDBUD 345KV CKT 1	OKGE	Relieved or Impact Removed by solution for Horseshoe Lake-Redbud 345, Reroute the existing 345kV Arcadia-Seminole line to new 345kV sub bay at Horseshoe Lake sub and install two 345-138kV bus tie transformers at HSL. Build 14miles of 345kV line from Redbud to HSL. Will require 6-345kV breakers, 2-xfrmr, 4-138kV breakers, transmission line reroute, 14miles of new 345kV line. Estimated In-Service Date 3/1/2007.	
ARCADIA - REDBUD 345KV CKT 2	OKGE	Impact relieved by 345kv Horseshoe-Redbud facility upgrades.	

<b>Table 5 Continued</b>			
<b>Facilities Requiring No Upgrades Or Limiting Rollover Rights</b>			
Facility	Transmission Owner	Reason For No Upgrade	Reservation Rollover Limit In Planning Horizon Where Applicable (M/D/Y)
ARCADIA 345/138KV TRANSFORMER CKT 1 and ARCADIA 345/138KV TRANSFORMER CKT 2	OKGE	Impact relieved by 345kv Horseshoe-Redbud facility upgrades.	
CZECH HALL - XEROX 138KV	OKGE	Impact relieved by 345kv Horseshoe-Redbud Facility upgrades.	
DEEP FORK 69KV	OKGE	Impact relieved by 345kv Horseshoe-Redbud Facility upgrades	
DIVISION AVE - HAYMAKER 138KV	OKGE	Impact relieved by 345kv Horseshoe-Redbud Facility upgrades	
DIVISION AVE - LAKESIDE 138KV	OKGE	OKGE Terminal Equipment Project underway to increase line rating. Estimated In-Service Date 12/30/2004.	
DIVISION AVE - SILVER LAKE 138KV	OKGE	OKGE Terminal Equipment Project underway to increase line rating. Estimated In-Service Date 12/30/2004.	
DRAPER 345/138KV TRANSFORMER CKT 1 AND CKT 2	OKGE	Add 3rd Draper xfrmr per OGE project. Estimated In-Service Date 6/1/2005. Use OKGE Redispatch as Interim Mitigation.	
EASTERN AVE - MEMORIAL 138KV	OKGE	OKGE Terminal Equipment Project underway to increase line rating. Estimated In-Service Date 12/30/2004.	
EASTERN AVE - OMPA-EDMOND HAFER 138KV	OKGE	Impact relieved by 345kv Horseshoe-Redbud Facility upgrades	
GREEN PASTURES 69KV	OKGE	Impact relieved by 345kv Horseshoe-Redbud Facility upgrades	
HORSESHOE LAKE - KAMO MEMORIAL 138KV	OKGE	Impact relieved by 345kv Horseshoe-Redbud Facility upgrades	
LONEOAK - QUAIL CREEK 138KV	OKGE	Impact relieved by 345kv Horseshoe-Redbud Facility upgrades	

<b>Table 5</b>			
<b>Facilities Requiring No Upgrades Or Limiting Rollover Rights</b>			
Facility	Transmission Owner	Reason For No Upgrade	Reservation Rollover Limit In Planning Horizon Where Applicable (M/D/Y)
MAUD - SEMINOLE 138KV CKT 2	OKGE	Impact relieved by 345kv Horseshoe-Redbud Facility upgrades	
MEMORIAL - SKYLINE 138KV	OKGE	Replace breakers and switches at Memorial, Replace switch at Skyline, and Reconductor the line to at least 1800+ Amps per OGE project. Estimated In-Service Date 6/1/2005. Use OKGE Redispatch as Interim Mitigation	
MORGAN - MUSTANG 138KV	OKGE	Increase CTR at Mustang sub per OGE project. Estimated In-Service Date 6/1/2005. Use OKGE Redispatch as Interim Mitigation.	
NE 30TH 69KV	OKGE	Impact relieved by 345kv Horseshoe-Redbud Facility upgrades	
NORTHWEST 345/138KV TRANSFORMER CKT 1 AND CKT 2	OKGE	Facility Limits Service to 1195 MW 6/1/2009-10/1/2009 and Limits Renewal Rights to 1165 MW 6/1/2010	6/1/2009
PLEASANT VALLEY - SOUTHGATE 138KV	OKGE	Impact relieved by 345kv Horseshoe-Redbud Facility upgrades	
POST ROAD - SE15TH 138KV	OKGE	Impact relieved by 345kv Horseshoe-Redbud Facility upgrades	
CLYDE 69KV	OKGE	Impact relieved by capacitor bank addition at Koch 69kv.	







**Table 7  
Facilities That Limit Transmission Service  
And Have Network Upgrades Assigned To This Reservation**

Facility & Network Upgrade, Plus Summary Of Restricted Operating Period	Trans. Owner	Min ATC (MW)	Impact Study (Model)	Upgrade Needed (M/D/Y)	Eng. & Const. Lead (Month)	Const. Lead Only (Month)	Possible (1)		Scheduled
							Date Available (M/D/Y)	Delay (Month)	In Service (2) (M/D/Y)
Horseshoe Lake - Redbud 345KV Reroute the existing 345kV Arcadia- Seminole line to new 345kV sub bay at Horseshoe Lake sub and install two 345- 138kV bus tie transformers at HSL. Build 14miles of 345kV line from Redbud to HSL. Will require 6-345kV breakers, 2- xfmr, 4-138kV breaker, transmission line reroute, 14miles of new 345kV line. Option with the least cost, Main reason proposed Relieves Redbud to Arcadia 345 kV Circuit 1 and 2 overloads, Northwest and Arcadia 345/138 kV Transformer overloads, Arcadia to KAMO Memorial to Horseshoe Lake 138 kV overload, and removes impacts from others originally impacted by transfer.	OKGE			9/1/04	30	12	3/1/07	30	3/1/07
DRAPER 345/138KV TRANSFORMER CKT 1 Add 3rd Draper xfrm per OGE project. Estimated In-Service Date 6/1/2005. Use OKGE Redispatch as Interim Mitigation.	OKGE	483	04SP	9/1/2004					6/1/2005
DRAPER 345/138KV TRANSFORMER CKT 2. Impact relieved by solution for CKT 1 above.	OKGE	547	04SP	9/1/2004					6/12005

Table 7 Continued							Possible (1)		Scheduled
Facility & Network Upgrade, Plus Summary Of Restricted Operating Period	Trans. Owner	ATC (MW)	Impact Study (Model)	Upgrade Needed (M/D/Y)	Eng. & Const. Lead (Month)	Const. Lead Only (Month)	Date Available (M/D/Y)	Delay (Month)	In Service (2) (M/D/Y)
MEMORIAL - SKYLINE 138KV Replace breakers and switches at Memorial. Replace switch at Skyline per OGE project. Estimated In-Service Date 6/1/2005. Use OKGE Redispatch as Interim Mitigation.	OKGE	574	04SP	9/1/2004					6/12005
MORGAN - MUSTANG 138KV Increase CTR at Mustang sub per OGE project. Estimated In-Service Date 6/1/2005. Use OKGE Redispatch as Interim Mitigation.	OKGE	688	04SP	9/1/2004					6/12005
NORTHWEST 345/138KV TRANSFORMER CKT 1- Impact relieved by 345kv Horseshoe-Redbud facility upgrades. This eliminates need for 3 <sup>rd</sup> xfmr at Northwest at cost of \$7,500,000.	OKGE	707	04SP	9/1/04	18	12	3/1/06	18	
LONEOAK - QUAIL CREEK 138KV- Impact relieved by 345kv Horseshoe-Redbud facility upgrades. This eliminates Reconductor/rebuild 3.81 miles of line to 1590AS52 conductor & replace relays at cost of \$1,724,000.	OKGE	757	04SP	9/1/04	18	12	3/1/06	18	
ARCADIA-KAMO MEMORIAL 138KV Terminal Equipment Project underway to increase line rating. Estimated In-Service Date 9/30/2004.	OKGE	782	04SP	9/1/04					9/30/04
REMINGTON PARK - STONEWALL 138KV Upgrade trap @ Stonewall	OKGE	864	04SP	9/1/04	12	6	3/16/06	18	6/1/07
DIVISION AVE - SILVER LAKE 138KV OKGE Terminal Equipment Project underway to increase line rating. Estimated In-Service Date 12/30/2004.	OKGE	869	04SP	9/1/04					12/30/04

Table 7 Continued							Possible (1)		Scheduled
Facility & Network Upgrade, Plus Summary Of Restricted Operating Period	Trans. Owner	ATC (MW)	Impact Study (Model)	Upgrade Needed (M/D/Y)	Eng. & Const. Lead (Month)	Const. Lead Only (Month)	Date Available (M/D/Y)	Delay (Month)	In Service (2) (M/D/Y)
ARCADIA 345/138KV TRANSFORMER CKT 1. Impact relieved by 345kv Horseshoe-Redbud facility upgrades Eliminates need for 3rd transformer, 1 - 345kv breaker, 5-138kv breakers, relaying, & possible transmission rearrangement at cost of \$7,500,000.	OKGE	891	04SP	9/1/04	18	12	3/1/06	18	
CIMARRON - CZECH HALL 138KV Change sw. to 2000A at czech hall. Increase trap an CTR to 2000A at cimarron sub. May require changing relays.	OKGE	893	04SP	9/1/04	12	6	3/1/06	18	6/1/07
ARCADIA - REDBUD 345KV CKT 2. Impact relieved by 345kv Horseshoe- Redbud facility upgrades. Eliminates need to replace 2000A breakers at Arcadia to 3000A, plus line switch, & relaying at cost of \$750,000.	OKGE	912	04SP	9/1/04	18	8	3/1/06	18	
ARCADIA - REDBUD 345KV CKT 1. Impact relieved by 345kv Horseshoe- Redbud facility upgrades. . Eliminates need to replace 2000A breakers at Arcadia to 3000A, plus line switch, & relaying at cost of \$750,000.	OKGE	915	04SP	9/1/04	18	8	3/1/06	18	

Table 7 Continued							Possible (1)		Scheduled
Facility & Network Upgrade, Plus Summary Of Restricted Operating Period	Trans. Owner	ATC (MW)	Impact Study (Model)	Upgrade Needed (M/D/Y)	Eng. & Const. Lead (Month)	Const. Lead Only (Month)	Date Available (M/D/Y)	Delay (Month)	In Service (2) (M/D/Y)
HORSESHOE LAKE - KAMO MEMORIAL 138KV Impact relieved by 345kv Horseshoe-Redbud facility upgrades. Eliminates need to replace breaker disconnect switches, trap, & CTR at Horseshoe at cost of \$375,000.	OKGE	927	04SP	9/1/04	12	6	3/1/06	18	
EASTERN AVE - OMPA-EDMOND HAFER 138KV. Impact relieved by 345kv Horseshoe-Redbud facility upgrades. Eliminates need to Replace 1200A switches at Eastern Ave. Sub at cost of \$375,000.	OKGE	1094	04SP	9/1/04	18	12	3/1/06	18	
NORTHWEST 345/138KV TRANSFORMER CKT 2 . Impact relieved by 345kv Horseshoe-Redbud facility upgrades. This eliminates need for 3 <sup>rd</sup> xfmr at Northwest at cost of \$7,500,000.	OKGE	1134	04SP	9/1/04	18	12	3/1/06	18	
NORTHWEST 345/138KV TRANSFORMER CKT 1. Impact relieved by 345kv Horseshoe-Redbud facility upgrades. This eliminates need for 3 <sup>rd</sup> xfmr at Northwest at cost of \$7,500,000.	OKGE	652	05SP	9/1/04	18	12	3/1/06	18	
POST ROAD - SE15TH 138KV. Impact relieved by 345kv Horseshoe-Redbud facility upgrades. Eliminates need to upgrade wavetrap @ SE 15th Sub at cost of \$50,000.	OKGE	723	05SP	6/1/05	12	6	3/1/06	9	

ARCADIA - KAMO MEMORIAL 138KV. Terminal Equipment Project underway to increase line rating. Estimated In-Service Date 9/30/2004.	OKGE	845	05SP	9/1/04					9/30/04
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Table 7 Continued							Possible (1)		Scheduled
Facility & Network Upgrade, Plus Summary Of Restricted Operating Period	Trans. Owner	ATC (MW)	Impact Study (Model)	Upgrade Needed (M/D/Y)	Eng. & Const. Lead (Month)	Const. Lead Only (Month)	Date Available (M/D/Y)	Delay (Month)	In Service (2) (M/D/Y)
CIMARRON - CZECH HALL 138KV Change sw. to 2000A at czech hall. Increase trap an CTR to 2000A at cimarron sub. May require changing relays.	OKGE	858	05SP	9/1/04	12	6	3/16/2006	18	6/1/07
DIVISION AVE - HAYMAKER 138KV Impact relieved by 345kv Horseshoe- Redbud facility upgrades. Eliminates need to Increase trap & CT @ Division Ave to conductor rating at cost of \$75,000	OKGE	871	05SP	6/1/2005	12	6	3/1/06	9	
ARCADIA 345/138KV TRANSFORMER CKT 1. Impact relieved by 345kv Horseshoe-Redbud facility upgrades Eliminates need for 3rd transformer, 1 - 345kV breaker, 5-138kV breakers, relaying, & possible transmission rearrangement at cost of \$7,500,000.	OKGE	892	05SP	9/1/2004	18	12	3/1/06	18	
ARCADIA - REDBUD 345KV CKT 2 Impact relieved by 345kv Horseshoe- Redbud facility upgrades. . Eliminates need to replace 2000A breakers at Arcadia to 3000A, plus line switch, & relaying at cost of \$750,000.	OKGE	935	05SP	9/1/2004	18	8	3/1/06	18	
ARCADIA - REDBUD 345KV CKT 1 Impact relieved by 345kv Horseshoe- Redbud facility upgrades. . Eliminates need to replace 2000A breakers at Arcadia to 3000A, plus line switch, & relaying at cost of \$750,000.	OKGE	938	05SP	9/1/2004	18	8	3/1/06	18	
REMINGTON PARK - STONEWALL 138KV Upgrade trap @ Stonewall	OKGE	940	05SP	9/1/04	12	6	3/16/06	18	6/1/07


Table 7 Continued							Possible (1)		Scheduled
Facility & Network Upgrade, Plus Summary Of Restricted Operating Period	Trans. Owner	ATC (MW)	Impact Study (Model)	Upgrade Needed (M/D/Y)	Eng. & Const. Lead (Month)	Const. Lead Only (Month)	Date Available (M/D/Y)	Delay (Month)	In Service (2) (M/D/Y)
NORTHWEST 345/138KV TRANSFORMER CKT 2. Impact relieved by 345kv Horseshoe-Redbud facility upgrades. This eliminates need for 3 <sup>rd</sup> xfmr at Northwest at cost of \$7,500,000.	OKGE	941	05SP	9/1/04	18	12	3/1/06	18	
ARCADIA 345/138KV TRANSFORMER CKT 2. Impact relieved by 345kv Horseshoe-Redbud facility upgrades Eliminates need for 3rd transformer, 1 - 345kv breaker, 5-138kV breakers, relaying, & possible transmission rearrangement at cost of \$7,500,000.	OKGE	952	05SP	9/1/2004	18	12	3/1/06	18	
HORSESHOE LAKE - KAMO MEMORIAL 138KV Impact relieved by 345kv Horseshoe-Redbud facility upgrades. Eliminates need to replace breaker disconnect switches, trap, & CTR at Horseshoe at cost of \$375,000.	OKGE	1018	05SP	9/1/04	12	6	3/1/06	18	
LONEOAK - QUAIL CREEK 138KV- Impact relieved by 345kv Horseshoe- Redbud facility upgrades. This eliminates Reconductor/rebuild 3.81 miles of line to 1590AS52 conductor & replace relays at cost of \$1,724,000.	OKGE	1141	05SP	9/1/04	18	12	3/1/06	18	
NORTHWEST 345/138KV TRANSFORMER CKT 1. Impact relieved by 345kv Horseshoe-Redbud facility upgrades. This eliminates need for 3 <sup>rd</sup> xfmr at Northwest at cost of \$7,500,000.	OKGE	588	07SP	9/1/04	18	12	3/1/06	18	
ARCADIA - KAMO MEMORIAL 138KV. Terminal Equipment Project underway to increase line rating. Estimated In-Service Date 9/30/2004.	OKGE	837	07SP	9/1/04					9/30/04




Table 7 Continued							Possible (1)		Scheduled
Facility & Network Upgrade, Plus Summary Of Restricted Operating Period	Trans. Owner	ATC (MW)	Impact Study (Model)	Upgrade Needed (M/D/Y)	Eng. & Const. Lead (Month)	Const. Lead Only (Month)	Date Available (M/D/Y)	Delay (Month)	In Service (2) (M/D/Y)
ARCADIA 345/138KV TRANSFORMER CKT 1. Impact relieved by 345kv Horseshoe-Redbud facility upgrades Eliminates need for 3rd transformer, 1 - 345kv breaker, 5-138kv breakers, relaying, & possible transmission rearrangement at cost of \$7,500,000.	OKGE	855	07SP	9/1/2004	18	12	3/1/06	18	
DIVISION AVE - HAYMAKER 138KV Impact relieved by 345kv Horseshoe- Redbud facility upgrades. Eliminates need to increase trap & CT @ Division Ave to conductor rating at cost of \$75,000	OKGE	860	07SP	6/1/2005	12	6	3/1/06	9	
NORTHWEST 345/138KV TRANSFORMER CKT 2. Impact relieved by 345kv Horseshoe-Redbud facility upgrades. This eliminates need for 3 <sup>rd</sup> xfmr at Northwest at cost of \$7,500,000.	OKGE	879	07SP	9/1/04	18	12	3/1/06	18	
CIMARRON - CZECH HALL 138KV Change sw. to 2000A at czech hall. Increase trap an CTR to 2000A at cimarron sub. May require changing relays.	OKGE	882	07SP	9/1/04	12	6	3/16/2006	18	6/1/07
REMINGTON PARK - STONEWALL 138KV Upgrade trap @ Stonewall	OKGE	898	07SP	9/1/04	12	6	3/16/06	18	6/1/07
ARCADIA 345/138KV TRANSFORMER CKT 2. Impact relieved by 345kv Horseshoe-Redbud facility upgrades Eliminates need for 3rd transformer, 1 - 345kv breaker, 5-138kv breakers, relaying, & possible transmission rearrangement at cost of \$7,500,000.	OKGE	908	07SP	9/1/2004	18	12	3/1/06	18	

Table 7 Continued							Possible (1)		Scheduled
Facility & Network Upgrade, Plus Summary Of Restricted Operating Period	Trans. Owner	ATC (MW)	Impact Study (Model)	Upgrade Needed (M/D/Y)	Eng. & Const. Lead (Month)	Const. Lead Only (Month)	Date Available (M/D/Y)	Delay (Month)	In Service (2) (M/D/Y)
ARCADIA - REDBUD 345KV CKT 2 Impact relieved by 345kv Horseshoe- Redbud facility upgrades. . Eliminates need to replace 2000A breakers at Arcadia to 3000A, plus line switch, & relaying at cost of \$750,000.	OKGE	966	07SP	9/1/2004	18	8	3/1/06	18	
ARCADIA - REDBUD 345KV CKT 1 Impact relieved by 345kv Horseshoe- Redbud facility upgrades. . Eliminates need to replace 2000A breakers at Arcadia to 3000A, plus line switch, & relaying at cost of \$750,000.	OKGE	968	07SP	9/1/2004	18	8	3/1/06	18	
HORSESHOE LAKE - KAMO MEMORIAL 138KV Impact relieved by 345kv Horseshoe-Redbud facility upgrades. Eliminates need to replace breaker disconnect switches, trap, & CTR at Horseshoe at cost of \$375,000.	OKGE	991	07SP	9/1/04	12	6	3/1/06	18	
LONEOAK - QUAIL CREEK 138KV- Impact relieved by 345kv Horseshoe- Redbud facility upgrades. This eliminates Reconductor/rebuild 3.81 miles of line to 1590AS52 conductor & replace relays at cost of \$1,724,000.	OKGE	997	07SP	9/1/04	18	12	3/1/06	18	
CZECH HALL - XEROX 138KV Impact relieved by 345kv Horseshoe-Redbud facility upgrades. Eliminated need to replace 1600A switch at Czech Hall at cost of \$40,000.	OKGE	1072	07SP	6/1/06	12	6	3/1/06		

STONEWALL - WESTERN 138KV. Upgrade wavetrap	OKGE	1079	07SP	6/1/07	12	6			6/1/07
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Table 7 Continued							Possible (1)		Scheduled
Facility & Network Upgrade, Plus Summary Of Restricted Operating Period	Trans. Owner	ATC (MW)	Impact Study (Model)	Upgrade Needed (M/D/Y)	Eng. & Const. Lead (Month)	Const. Lead Only (Month)	Date Available (M/D/Y)	Delay (Month)	In Service (2) (M/D/Y)
EASTERN AVE - OMPA-EDMOND HA FER 138KV. Impact relieved by 345kv Horseshoe-Redbud facility upgrades. Eliminates need to Replace 1200A switches at Eastern Ave. Sub at cost of \$375,000.	OKGE	1149	07SP	9/1/04	18	12	3/1/06	18	
PLEASANT VALLEY - SOUTHGATE 138KV Impact relieved by 345kv Horseshoe-Redbud facility upgrades. Eliminates need to Replace four 1200A switches with 2000A switches at cost of \$200,000.	OKGE	1188	07SP	6/1/07	18	12	3/1/06		
NORTHWEST 345/138KV TRANSFORMER CKT 1. Impact relieved by 345kv Horseshoe-Redbud facility upgrades. This eliminates need for 3 <sup>rd</sup> xfmr at Northwest at cost of \$7,500,000.	OKGE	582	10SP	9/1/04	18	12	3/1/06	18	
POST ROAD - SE15TH 138KV. Impact relieved by 345kv Horseshoe-Redbud facility upgrades. Eliminates need to upgrade wavetrap @ SE 15th Sub at cost of \$50,000.	OKGE	758	10SP	6/1/05	12	6	3/1/06	9	
ARCADIA 345/138KV TRANSFORMER CKT 1. Impact relieved by 345kv Horseshoe-Redbud facility upgrades Eliminates need for 3rd transformer, 1 - 345kv breaker, 5-138kv breakers, relaying, & possible transmission rearrangement at cost of \$7,500,000.	OKGE	867	10SP	9/1/2004	18	12	3/1/06	18	
KOCH 69KV- INSTALL CAPACITOR BANK	OKGE	866	10SP	6/1/07	12	6	3/1/06		6/1/07

Table 7 Continued							Possible (1)		Scheduled
Facility & Network Upgrade, Plus Summary Of Restricted Operating Period	Trans. Owner	ATC (MW)	Impact Study (Model)	Upgrade Needed (M/D/Y)	Eng. & Const. Lead (Month)	Const. Lead Only (Month)	Date Available (M/D/Y)	Delay (Month)	In Service (2) (M/D/Y)
NORTHWEST 345/138KV TRANSFORMER CKT 2. Impact relieved by 345kv Horseshoe-Redbud facility upgrades. This eliminates need for 3 <sup>rd</sup> xfmr at Northwest at cost of \$7,500,000.	OKGE	868	10SP	9/1/04	18	12	3/1/06	18	
ARCADIA - KAMO MEMORIAL 138KV. Terminal Equipment Project underway to increase line rating. Estimated In-Service Date 9/30/2004.	OKGE	901	10SP	9/1/04					9/30/04
ARCADIA 345/138KV TRANSFORMER CKT 2. Impact relieved by 345kv Horseshoe-Redbud facility upgrades Eliminates need for 3rd transformer, 1 - 345kv breaker, 5-138kv breakers, relaying, & possible transmission rearrangement at cost of \$7,500,000.	OKGE	911	10SP	9/1/2004	18	12	3/1/06	18	
ARCADIA - REDBUD 345KV CKT 2 Impact relieved by 345kv Horseshoe-Redbud facility upgrades. . Eliminates need to replace 2000A breakers at Arcadia to 3000A, plus line switch, & relaying at cost of \$750,000.	OKGE	1010	10SP	9/1/2004	18	8	3/1/06	18	
ARCADIA - REDBUD 345KV CKT 1 Impact relieved by 345kv Horseshoe-Redbud facility upgrades. . Eliminates need to replace 2000A breakers at Arcadia to 3000A, plus line switch, & relaying at cost of \$750,000.	OKGE	1013	10SP	9/1/2004	18	8	3/1/06	18	
DIVISION AVE - HAYMAKER 138KV Impact relieved by 345kv Horseshoe-Redbud facility upgrades. Eliminates need to Increase trap & CT @ Division Ave to conductor rating at cost of \$75,000	OKGE	1019	10SP	6/1/2005	12	6	3/1/06	9	


Table 7 Continued							Possible (1)		Scheduled
Facility & Network Upgrade, Plus Summary Of Restricted Operating Period	Trans. Owner	ATC (MW)	Impact Study (Model)	Upgrade Needed (M/D/Y)	Eng. & Const. Lead (Month)	Const. Lead Only (Month)	Date Available (M/D/Y)	Delay (Month)	In Service (2) (M/D/Y)
HORSESHOE LAKE - KAMO MEMORIAL 138KV Impact relieved by 345kv Horseshoe-Redbud facility upgrades. Eliminates need to replace breaker disconnect switches, trap, & CTR at Horseshoe at cost of \$375,000.	OKGE	1039	10SP	9/1/04	12	6	3/1/06	18	
CIMARRON - CZECH HALL 138KV Change sw. to 2000A at czech hall. Increase trap an CTR to 2000A at cimarron sub. May require changing relays.	OKGE	1040	10SP	9/1/04	12	6	3/16/2006	18	6/1/07
LONEOAK - QUAIL CREEK 138KV- Impact relieved by 345kv Horseshoe- Redbud facility upgrades. This eliminates Reconductor/rebuild 3.81 miles of line to 1590AS52 conductor & replace relays at cost of \$1,724,000.	OKGE	1095	10SP	9/1/04	18	12	3/1/06	18	
REMINGTON PARK - STONEWALL 138KV Upgrade trap @ Stonewall	OKGE	1185	10SP	9/1/04	12	6	3/16/06	18	6/1/07
CZECH HALL - XEROX 138KV Impact relieved by 345kv Horseshoe-Redbud facility upgrades. Eliminated need to replace 1600A switch at Czech Hall at cost of \$40,000.	OKGE	1193	10SP	6/1/06	12	6	3/1/06		
MAUD - SEMINOLE 138KV CKT 2 Impact relieved by 345kv Horseshoe-Redbud facility upgrades. Eliminate need to Replace trap & CT at Maud at cost of \$75,000.	OKGE	1198	10SP	6/1/10	12	6	3/1/06		
Summer Peak ATC Summary									
6/1/-10/1, 2004		483							
6/1/-10/1, 2005		652							
6/1/-10/1, 2007-2010		582							

Table 7 Continued							Possible (1)		Scheduled
Facility & Network Upgrade, Plus Summary Of Restricted Operating Period	Trans. Owner	ATC (MW)	Impact Study (Model)	Upgrade Needed (M/D/Y)	Eng. & Const. Lead (Month)	Const. Lead Only (Month)	Date Available (M/D/Y)	Delay (Month)	In Service (2) (M/D/Y)
EASTERN AVE - MEMORIAL 138KV. OKGE Terminal Equipment Project underway to increase line rating. Estimated In-Service Date 12/30/2004.	OKGE	819	04WP	10/1/2004					12/30/04
ARCADIA - REDBUD 345KV CKT 2 Impact relieved by 345kv Horseshoe- Redbud facility upgrades. . Eliminates need to replace 2000A breakers at Arcadia to 3000A, plus line switch, & relaying at cost of \$750,000.	OKGE	963	04WP	9/1/2004	18	8	3/1/06	18	
ARCADIA - REDBUD 345KV CKT 1 Impact relieved by 345kv Horseshoe- Redbud facility upgrades. . Eliminates need to replace 2000A breakers at Arcadia to 3000A, plus line switch, & relaying at cost of \$750,000.	OKGE	966	04WP	9/1/2004	18	8	3/1/06	18	
ARCADIA - KAMO MEMORIAL 138KV. Terminal Equipment Project underway to increase line rating. Estimated In-Service Date 9/30/2004.	OKGE	1099	04WP	9/1/04					9/30/04
HORSESHOE LAKE - KAMO MEMORIAL 138KV Impact relieved by 345kv Horseshoe-Redbud facility upgrades. Eliminates need to replace breaker disconnect switches, trap, & CTR at Horseshoe at cost of \$375,000.	OKGE	1178	04WP	9/1/04	12	6	3/1/06	18	
ARCADIA - REDBUD 345KV CKT 2 Impact relieved by 345kv Horseshoe- Redbud facility upgrades. . Eliminates need to replace 2000A breakers at Arcadia to 3000A, plus line switch, & relaying at cost of \$750,000.	OKGE	897	05WP	9/1/2004	18	8	3/1/06	18	


Table 7 Continued							Possible (1)		Scheduled
Facility & Network Upgrade, Plus Summary Of Restricted Operating Period	Trans. Owner	ATC (MW)	Impact Study (Model)	Upgrade Needed (M/D/Y)	Eng. & Const. Lead (Month)	Const. Lead Only (Month)	Date Available (M/D/Y)	Delay (Month)	In Service (2) (M/D/Y)
ARCADIA - REDBUD 345KV CKT 1 Impact relieved by 345kv Horseshoe- Redbud facility upgrades. . Eliminates need to replace 2000A breakers at Arcadia to 3000A, plus line switch, & relaying at cost of \$750,000.	OKGE	900	05WP	9/1/2004	18	8	3/1/06	18	
ARCADIA - KAMO MEMORIAL 138KV. Terminal Equipment Project underway to increase line rating. Estimated In-Service Date 9/30/2004.	OKGE	1113	05WP	9/1/04					9/30/04
ARCADIA - REDBUD 345KV CKT 2 Impact relieved by 345kv Horseshoe- Redbud facility upgrades. . Eliminates need to replace 2000A breakers at Arcadia to 3000A, plus line switch, & relaying at cost of \$750,000.	OKGE	919	07WP	9/1/2004	18	8	3/1/06	18	
ARCADIA - REDBUD 345KV CKT 1 Impact relieved by 345kv Horseshoe- Redbud facility upgrades. . Eliminates need to replace 2000A breakers at Arcadia to 3000A, plus line switch, & relaying at cost of \$750,000.	OKGE	922	07WP	9/1/2004	18	8	3/1/06	18	
ARCADIA - KAMO MEMORIAL 138KV. Terminal Equipment Project underway to increase line rating. Estimated In-Service Date 9/30/2004.	OKGE	1109	07WP	9/1/04					9/30/04
ARCADIA - REDBUD 345KV CKT 2 Impact relieved by 345kv Horseshoe- Redbud facility upgrades. . Eliminates need to replace 2000A breakers at Arcadia to 3000A, plus line switch, & relaying at cost of \$750,000.	OKGE	954	10WP	9/1/2004	18	8	3/1/06	18	





**Table 7 (Continued)  
Facilities That Limit Transmission Service  
And Have Network Upgrades Assigned To This Reservation**

Facility & Network Upgrade, Plus Summary Of Restricted Operating Period	Trans. Owner	ATC (MW)	Impact Study (Model )	Upgrade Needed (M/D/Y)	Eng. & Const. Lead (Month)	Const. Lead Only (Month)	Possible (1)		Scheduled
							Date Available (M/D/Y)	Delay (Month)	In Service (2) (M/D/Y)
Winter Peak Minimum ATC Summary without upgrades									
12/1/04-04/1/05		819							
12/1/05-04/1/06		897							
12/1/07-04/1/08		919							
12/1/10-04/1/11		954							
Annual Limits without upgrades									
9/1/04-1/1/05		600(1)							
2005		652							
2006		620(2)							
1/1/07-5/1/07		620(2)							
5/1/07-12/31/07		588							
2008		586(2)							
2009		584(2)							
2010		582							
(1) OKGE redispatch for interim mitigation for overloads on Draper 345/138kv transformer, Memorial-Skyline 138kv line, and Morgan- Mustang 138kv line.									
(2) Interpolated value									

**Table 8  
Summary Of Available Transfer Capability With Network Upgrades**

Insufficient ATC (1)			Sufficient ATC		
Operating Period (Year)	Operating Period (M/D - M/D)	ATC (MW)	Operating Period (Year)	Operating Period (M/D - M/D)	ATC (MW)
2004	5/1-10/1	483(3)	2007	1/1-3/1	908
2004	10/1-12/1	958	2007	3/1-6/1	1200
2004	12/1-12/31	819	2007	6/1-10/1	1200
2004	All	483(3)	2007	10/1-12/1	1200
			2007	12/1-12/31	1200
2005	1/1-4/1	819	2007	All	908
2005	4/1-6/1	842			
2005	6/1-10/1	652	2008	1/1-4/1	1200
2005	10/1-12/1	1017	2008	4/1-6/1	1200
2005	12/1-12/31	897	2008	6/1-10/1	1200
2005	All	652	2008	10/1-12/1	1200
			2008	12/1-12/31	1200
2006	1/1-4/1	897	2008	All	1200
2006	4/1-6/1	842			
2006	6/1-10/1	620	2009	1/1-4/1	1200
2006	10/1-12/1	1017	2009	4/1-6/1	1200
2006	12/1-12/31	908	2009	6/1-10/1	1195(4)
2006	All	620	2009	10/1-12/1	1200
			2009	12/1-12/31	1200
			2009	All	1195
			2010	1/1-3/1	1200
			2010	3/1-6/1	1200
			2010	6/1-10/1	1165(4)
			2010	10-1-12/1	1200
			2010	12/1-12/31	1200
			2010	All	1165

Note: Values of ATC are based on items received by September 1, 2004 including 1) a signed Service Agreement and letter of credit received by the Transmission Provider, and 2) authorization to proceed with engineering and construction received by Transmission Owners from the Transmission Provider. Annual ATC allocated to the Transmission Customer is determined by the least amount of seasonal ATC within each year of a reservation period.

- (1) When the 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, the Deferral of Service is applicable.
- (2) Allocated ATC to the Transmission Customer on an annual basis.
- (3) OKGE redispatch is to be implemented for interim mitigation to allow 600MW of transmission service.
- (4) ATC shown is with planned upgrades modeled. With Selected Upgrades modeled for 1200 MW, Facility limits service to 1195 MW 6/1/2009-10/1/2009 and limits Renewal Rights to 1165 MW 6/1/2010.

**Table 9  
Base Rate Transmission Service Charges**

Operating Period (Month)	2004		2005		2006		2007	
	ATC (MW)	Base Rate Revenues (\$)	ATC (MW)	Base Rate Revenues (\$)	ATC (MW)	Base Rate Revenues (\$)	ATC (MW)	Base Rate Revenues (\$)
January	N/A	N/A	600	665,832	620	688,026	620	688,026
February	N/A	N/A	600	665,832	620	688,026	620	688,026
March	N/A	N/A	600	665,832	620	688,026	1200	1,331,664
April	N/A	N/A	600	665,832	620	688,026	1200	1,331,664
May	N/A	N/A	600	665,832	620	688,026	1200	1,331,664
June	N/A	N/A	600	665,832	620	688,026	1200	1,331,664
July	N/A	N/A	600	665,832	620	688,026	1200	1,331,664
August	N/A	N/A	600	665,832	620	688,026	1200	1,331,664
September	600	665,832	620	688,026	620	688,026	1200	1,331,664
October	600	665,832	620	688,026	620	688,026	1200	1,331,664
November	600	665,832	620	688,026	620	688,026	1200	1,331,664
December	600	665,832	620	688,026	620	688,026	1200	1,331,664
Subtotal By Year	\$2,663,328		\$8,078,760		\$8,256,312		\$14,692,692	
Total For All Years	\$33,691,092							

Note: Values of ATC are based on items received by September 1, 2004 including 1) a signed Service Agreement and letter of credit received by the Transmission Provider, and 2) authorization to proceed with engineering and construction received by Transmission Owners from the Transmission Provider. Annual ATC allocated to the Transmission Customer is determined by the least amount of seasonal ATC within each year of a reservation period.

**Table 9  
Base Rate Transmission Service Charges (Continued)**

Operating Period (Month)	2008		2009		2010		2011	
	ATC (MW)	Base Rate Revenues (\$)	ATC (MW)	Base Rate Revenues (\$)	ATC (MW)	Base Rate Revenues (\$)	ATC (MW)	Base Rate Revenues (\$)
January	1200	1,331,664	1200	1,331,664	1195	1,326,115	N/A	N/A
February	1200	1,331,664	1200	1,331,664	1195	1,326,115	N/A	N/A
March	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
April	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
May	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
June	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
July	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
August	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
September	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
October	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
November	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
December	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
Subtotal By Year	\$15,979,968		\$15,924,478		\$2,652,230		\$34,556,676	
Total For All Years	\$68,247,768							

**Table 10  
Network Upgrade Revenue Requirements Including Pre-Payments**

Operating Period	2007		2008		2009		2010	
(Month)	ATC (MW)	Network Upgrade Revenues (\$)	ATC (MW)	Network Upgrade Revenues (\$)	ATC (MW)	Network Upgrade Revenues (\$)	ATC (MW)	Network Upgrade Revenues (\$)
January	0	0	1200	867,178	1200	867,178	1195	867,178
February	0	0	1200	867,178	1200	867,178	1195	867,178
March	1200	867,178	1200	867,178	1195	867,178	0	0
April	1200	867,178	1200	867,178	1195	867,178	0	0
May	1200	867,178	1200	867,178	1195	867,178	0	0
June	1200	867,178	1200	867,178	1195	867,178	0	0
July	1200	867,178	1200	867,178	1195	867,178	0	0
August	1200	867,178	1200	867,178	1195	867,178	0	0
September	1200	867,178	1200	867,178	1195	867,178	0	0
October	1200	867,178	1200	867,178	1195	867,178	0	0
November	1200	867,178	1200	867,178	1195	867,178	0	0
December	1200	867,178	1200	867,178	1195	867,178	0	0
Subtotal By Year	8,671,780		10,406,136		10,406,136		1,734,356	

Note: Values of ATC are based on items received by September 1, 2004 including 1) a signed Service Agreement and letter of credit received by the Transmission Provider, and 2) authorization to proceed with engineering and construction received by Transmission Owners from the Transmission Provider. Annual ATC allocated to the Transmission Customer is determined by the least amount of seasonal ATC within each year of a reservation period.

A Transmission Owner may require that a Transmission Customer pre-pay for all assignable Network Upgrades which it designs and constructs. These pre-payments are in the amount of the Transmission Owner's estimated engineering and construction costs. Applicable refunds are also included. The estimated monthly revenue requirements listed in this table include these pre-payments and refunds. All estimated monthly revenue requirements excluding pre-payments and refunds are \$31,218,408.

**Table 10 (Continued)**  
**Network Upgrade Revenue Requirements Including Pre-Payments**

Operating Period	2011		2012		2013		2014	
(Month)	ATC (MW)	Network Upgrade Revenues (\$)	ATC (MW)	Network Upgrade Revenues (\$)	ATC (MW)	Network Upgrade Revenues (\$)	ATC (MW)	Network Upgrade Revenues (\$)
January	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
February	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
March	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
April	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
May	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
June	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
July	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
August	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
September	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
October	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
November	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
December	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Subtotal By Year	\$0		\$0		\$0		\$0	
Total For All Years	\$31,218,408							

Note: Values of ATC are based on items received by September 1, 2004 including 1) a signed Service Agreement and letter of credit received by the Transmission Provider, and 2) authorization to proceed with engineering and construction received by Transmission Owners from the Transmission Provider. Annual ATC allocated to the Transmission Customer is determined by the least amount of seasonal ATC within each year of a reservation period.

A Transmission Owner may require that a Transmission Customer pre-pay for all assignable Network Upgrades which it designs and constructs. These pre-payments are in the amount of the Transmission Owner's estimated engineering and construction costs. Applicable refunds are also included. The estimated monthly revenue requirements listed in this table include these pre-payments and refunds. All estimated monthly revenue requirements excluding pre-payments and refunds are \$31,218,408.

**Table 11**  
**Generation Re-Dispatching Revenue Requirements**

Operating Period (Month)	Generation Re-Dispatching Revenue Requirements					
	2003 (\$)	2004 (\$)	2005 (\$)	2006 (\$)	2007 (\$)	2008 (\$)
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	0	0	0	0	0	0
June	0	0	0	0	0	0
July	0	0	0	0	0	0
August	0	0	0	0	0	0
September	0	0	0	0	0	0
October	0	0	0	0	0	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
Subtotal By Year	\$0	\$0	\$0	\$0	\$0	\$0
Total For All Years	\$0					

**Table 12**  
**Total Estimated Revenue Requirements**

Operating Period	2004		2005		2006		2007	
(Month)	ATC (MW)	Base Rate Revenues (\$)	ATC (MW)	Base Rate Revenues (\$)	ATC (MW)	Base Rate Revenues (\$)	ATC (MW)	Base Rate Revenues (\$)
January	N/A	N/A	600	665,832	620	688,026	620	688,026
February	N/A	N/A	600	665,832	620	688,026	620	688,026
March	N/A	N/A	600	665,832	620	688,026	1200	1,331,664
April	N/A	N/A	600	665,832	620	688,026	1200	1,331,664
May	N/A	N/A	600	665,832	620	688,026	1200	1,331,664
June	N/A	N/A	600	665,832	620	688,026	1200	1,331,664
July	N/A	N/A	600	665,832	620	688,026	1200	1,331,664
August	N/A	N/A	600	665,832	620	688,026	1200	1,331,664
September	600	665,832	620	688,026	620	688,026	1200	1,331,664
October	600	665,832	620	688,026	620	688,026	1200	1,331,664
November	600	665,832	620	688,026	620	688,026	1200	1,331,664
December	600	665,832	620	688,026	620	688,026	1200	1,331,664
Subtotal By Year	\$2,663,328		\$8,078,760		\$8,256,312		\$14,692,692	
Total For All Years	\$33,691,092							

Note: Values of ATC are based on items received by September 1, 2004 including 1) a signed Service Agreement and letter of credit received by the Transmission Provider, and 2) authorization to proceed with engineering and construction received by Transmission Owners from the Transmission Provider. Annual ATC allocated to the Transmission Customer is determined by the least amount of seasonal ATC within each year of a reservation period.



**Table 12 (Continued)**  
**Total Estimated Revenue Requirements**

Operating Period	2008		2009		2010		2011	
(Month)	ATC (MW)	Revenue Requirements (\$)	ATC (MW)	Revenue Requirements (\$)	ATC (MW)	Revenue Requirements (\$)	ATC (MW)	Revenue Requirements (\$)
January	1200	1,331,664	1200	1,331,664	1195	1,326,115	N/A	N/A
February	1200	1,331,664	1200	1,331,664	1195	1,326,115	N/A	N/A
March	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
April	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
May	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
June	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
July	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
August	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
September	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
October	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
November	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
December	1200	1,331,664	1195	1,326,115	0	0	N/A	N/A
Subtotal By Year	\$15,979,968		\$15,924,478		\$2,652,230		\$34,556,676	
Total For All Years	\$68,247,768							

Note: Values of ATC are based on items received by September 1, 2004 including 1) a signed Service Agreement and letter of credit received by the Transmission Provider, and 2) authorization to proceed with engineering and construction received by Transmission Owners from the Transmission Provider. Annual ATC allocated to the Transmission Customer is determined by the least amount of seasonal ATC within each year of a reservation period.

**Table 13**  
**Annual Average Transmission Service Costs**

Calendar Period (Year)	Maximum ATC (MW)	Average Of Allocated Monthly Peak ATC (MW)	Total Revenue Requirements (\$)	Average Transmission Service Cost (1) (2) (\$/MW-Month)
2004	600	600.00	2,663,328	1,109.72
2005	620	606.67	8,078,760	1,109.72
2006	620	620.00	8,256,312	1,109.72
2007	1200	1,103.33	14,692,692	1,109.72
2008	1200	1,200.00	15,979,968	1,109.72
2009	1200	1,195.83	15,924,478	1,109.72
2010	1195	1,195.00	2,652,230	1,109.72
2011	N/A	N/A		
2012	N/A	N/A		
2013	N/A	N/A		
2014	N/A	N/A		
2015	N/A	N/A		
2016	N/A	N/A		
<b>Total</b>		<b>931.82</b>	<b>68,247,768</b>	<b>1109.72</b>

Note: Values of ATC are based on items received by September 1, 2004 including 1) a signed Service Agreement and letter of credit received by the Transmission Provider, and 2) authorization to proceed with engineering and construction received by Transmission Owners from the Transmission Provider. Annual ATC allocated to the Transmission Customer is determined by the least amount of seasonal ATC within each year of a reservation period.

- (1) The average transmission service cost is based on the average of the monthly peak ATC within the calendar year.
- (2) If revenues are required of the Transmission Customer for Network Upgrade pre-payments and generation re-dispatching prior to the calendar year that includes the initial portion of the first operating year, then these costs are added to those in the first calendar year for the purpose of determining an Average Transmission Service Cost in the first calendar year. Therefore, all costs prior to and including the first calendar year, which includes all or the first portion of the first operating year, are accumulated for determining the Average Transmission Service Cost as listed for the first calendar year.

**Table 14**  
**Annual Letter Of Credit Requirements**

Start Date (M/D/Y)	Annual Amount (\$)
9/1/04	\$24,550,000.00
9/1/05	\$16,560,016
9/1/06	\$8,303,704

For intra-control area point- to- point service, all base rate revenue is allocated to that control area.





**Table 16**  
**Summary Of Transmission Service Costs**

Cost Components & Descriptions	Units	
Start Date	(M/D/Y)	March 1, 2007
End Date	(M/D/Y)	March 1, 2010
Term	(Years)	3 years
Maximum Allocated Capacity	(MW)	1200
Average Of Allocated Monthly Peak Capacity Over Term	(MW)	931.82
Pricing Methodology	(And/Or)	or
<b><u>Base Rate Estimate</u></b>		
Total Revenue Requirements	(\$)	68,247,768
Average Rate Over Term	(\$/MW-Month)	1109.72
<b><u>Network Upgrade Estimate</u></b>		
Total Assigned Eng. & Const.	(\$)	24,550,000
Expedited Eng. & Const.	(\$)	0
Total Levelized Cost	(\$)	31,218,408
Average Rate Over Term	(\$/MW-Month)	723.65
Average Indirect Cost Multiplier	(Per-Unit)	1.2716
(Based On Assigned Eng. & Const.).		
Network Upgrades Requiring Pre-Payment	(\$)	0
(Included In Assigned Eng. & Const)		
Expedited Network Upgrades Requiring Pre-Payment & Refund	(\$)	0
(Included In Expedited Eng. & Const)		
<b><u>Generation Re-Dispatching Estimate As Required For Construction Only</u></b>		
Total	(\$)	0
Average Rate Over Term	(\$/MW-Month)	0.00
Note: All Re-Dispatch Costs Require Pre-Payment		
<b><u>Network Upgrade &amp; Generation Re-Dispatching</u></b>		
Total	(\$)	31,218,408
Average Rate Over Term	(\$/MW-Month)	723.65
<b><u>Total Transmission Service</u></b>		
Total Estimate Of Allocable Costs	(\$)	68,247,768
Average Rate Over Term	(\$/MW-Month)	1109.72