AGENDA

1. Meeting Begins 1:30 p.m.

2. Updates on LGIA TF work 1:30 – 2:00
   Presentation by Bob Tumilty

3. Discussion regarding ability to change POR/POD 2:00 – 3:00
   PTP service
   Presentation by Mike Proctor

4. 15 minute break 3:00 – 3:15

5. Attachment Z - Requested Upgrades With and Without 3:15 – 4:45
   A Transmission Service Request
   Presentation by Mike Proctor

6. Discussion on upcoming SPP cost allocation workshop 4:45 – 5:30
   scheduled for Nov. 10, 10 a.m. - 5 p.m.
Follow Up on Rights for Resale or Secondary Use

CAWG

November 2, 2005
Economic Upgrades

• Requested in the form of Long-Term Point-to-Point Transmission Service: provides reservation for use over a specific path
  • POR = location of the generation (typically a single node but can be a set of nodes)
  • POD = location of the loads (typically a set of nodes but can be a single node)
• What if the holder wants to change the use (schedule), particularly the POR(s).
Robert Pennybacker’s Presentation
Summary of What is Available

• Secondary Use
  – Non-firm, as available (same priority as Network Service use of non-DNRs)

• Modify POR(s) on Firm Basis
  – Treated as a new request for firm service (same as request for new/changed DNR)

• Sale or Assignment
  – Available for sale by SPP when not scheduled and subject to price cap
What About Process for Economic Upgrades?

• Long-Term PTP Service as currently offered assumes that physical transmission service from a specific POR is required.
  – Similar to having a Designated Resource

• Suppose the objective is to increase the import capability to a set of loads.
  – In the EIS market this could be to lower the LIPs at a set of loads.
  – Should SPP have in place a process by which the customer can determine what LT PTP service has become available because of the economic upgrade?
MISO Type Process

• Entity funding an economic upgrade is allowed to submit three (3) requests for LT PTP transmission service at no additional cost to the customer.
  – The Transmission Provider determines how much LT PTP transmission service is available from the designated POR(s) and POD(s)

• The customer can then choose which LT PTP transmission service to take with its economic upgrade.
  – Per SPP Attachment Z, the customer is eligible to receive transmission credits from any new PTP service sold that impacts the upgrade in the direction of the requested LT PTP transmission service.
ATTACHMENT Z
AGGREGATE TRANSMISSION SERVICE STUDY PROCEDURES

I. Introduction

a. This attachment describes the process used to evaluate long-term transmission service requests using an Aggregate Transmission Service Study process. The Transmission Provider will combine all long-term point-to-point and long-term designated network resource requests received during a specified period of time into a single aggregate transmission service study. Using this aggregate study process, SPP will combine all requests received during an open season to conclude an optimal expansion of the transmission system that provides the necessary ATC to accommodate all such requests at the minimum total cost. For the purposes of this Attachment Z, all Transmission Owners that are not taking Network Integration Transmission Service will be treated the same as Transmission Customers taking Network Integration Transmission Service.

b. This attachment details: (i) cost allocation for Requested Upgrades; and (ii) cost recovery and transmission revenue credits for Requested Upgrades, Economic Upgrades, and directly assigned costs that are in excess of the Safe Harbor Cost Limit for Network Upgrades associated with new or changed Designated Resources. Requested Upgrades and Economic Upgrades that do not have an associated transmission service request are included for cost recovery and transmission revenue credits in this attachment.

Note: The cost allocation section only applies to Requested Upgrades that come via a transmission service request. This would include both long-term point-to-point and new or changed Designated Network Resources. However, the cost recovery and revenue credit sections apply to all upgrades, including those that are requested without transmission service.
II. Open Season

The Aggregate Transmission Service Study process commences with the initiation of an open season. The open season will be 4 months in duration. During that period, customers may make requests for long-term transmission service that start no earlier than 4 months after the close of the season. Customers may submit and withdraw requests during the open season without any obligation. At the close of the open season, the Aggregate System Impact Study (ASIS) will include only queued requests for which Aggregate System Impact Study Agreements (ASISAs) have been executed. At the close of the open season, customers will have 15 days to execute such ASISAs per Section 19 of the Tariff. Existing long-term firm service Customers who desire to exercise a reservation priority under Section 2.2 of the Tariff shall do so pursuant to the terms of Section 2.2 and shall not be included in the aggregate study.

III. Aggregate Impact Study

a. At the close of the Open Season, all transmission service requests subject to an ASISA will be included in the ASIS. This study shall be done in accordance with Section 19 of the Tariff. The power flow models shall be developed for each season for the period from the earliest start of service to the latest end of service for the applicable requests. The models will include all other applicable existing reservations having equal or greater queue priority including prospective renewals of existing service having a reservation priority pursuant to Section 2.2 of the Tariff. System constraints will be identified and appropriate upgrades determined during the ASIS. The Transmission Provider shall determine the upgrades required to reliably provide all of the requested service. SPP shall also perform a regional review of the required upgrades to
determine if alternative solutions would reduce overall cost to customers. The Transmission Provider shall estimate the total cost of these upgrades.
b. SPP shall recognize constraints due to contractually limited facilities and allocate available capacity on a first come first served basis on the contractual constraint only.
c. Within the ASIS the Transmission Provider will identify the facilities limiting the availability of the requested aggregate transmission service and the upgrades required to provide this service. It will also provide an estimate of the cost of those upgrades. The assignment of upgrade costs to each reservation will be provided to enable customers to estimate their costs.

Upon receipt of the Impact Study, customers will have 15 days to execute an Aggregate Facilities Study Agreement (AFSA) per Section 19 of the Tariff.

IV. Aggregate Facilities Study

The Transmission Provider shall perform an Aggregate Facilities Study including the requests of all customers who have executed an Aggregate Facilities Study Agreement (AFSA). The first phase of the facilities study process shall consist of a revision of the impact study to reflect the withdrawal of requests for which an AFSA was not executed, if any. The Aggregate Facilities Study shall be done in accordance with Section 19 of the Tariff. The Transmission Provider, in conjunction with the applicable Transmission Owners, shall determine the necessary cost and lead-time for construction of each upgrade and the estimated cost of service for each request. The Transmission Provider, in conjunction with the applicable Transmission Owners, shall determine the optimal set of solutions to reduce the overall costs for the study group and reliably provide the requested service in a timely manner.

V. Cost Allocation for Requested Upgrades
The cost of Requested Upgrades shall be allocated in accordance with this Section.

a. For the purpose of determining the cost responsibility for each transmission service request, all upgrades required to provide transmission service for all transmission service reservations included in an Aggregate Facilities Study shall be included in an Aggregate Cost Allocation Assessment. The cost of each transmission upgrade component will be allocated to each customer in the aggregation group on a pro-rata impact basis as provided in paragraph b. The cost of a facility upgrade shall be allocated to all customers in the aggregate group whose reservation period begins after commercial operation date of a facility upgrade (COD) or begins before the COD of a facility and extends past the COD. If an upgrade is first required during a season after completion of service, no cost would be assigned to the customer. With regard to the cost allocation, SPP shall review all upgrades and determine the earliest date that each upgrade is required. This date is considered the COD for each upgrade. All requests that have a positive impact on the upgrade and for which the service has not been completed prior to the COD for such upgrade, shall be allocated costs for the upgrade. These requests shall be reviewed and the request that ends at the latest point in time (End of Term: EOT), shall define the amortization period for the facility.

b. An allocation of the cost of each facility upgrade to each request shall be determined on a pro-rata basis for the positive incremental power flow impacts of the requested service on such upgraded facility in proportion to the total of all incremental impacts on such upgraded facility. For each upgraded facility identified, the average incremental power flow impact of each request in the aggregate study shall be determined using each summer model available for the aggregate study period, after the COD of such upgraded facility. Each impact amount shall be determined by first establishing an initial case that excludes flows associated with all requests included in the
Aggregate Facilities Study. Then each request will be added to the model and the change in flow across such upgraded facility shall be determined for each request included in the Aggregate Facilities Study. The cost of an upgrade allocated to each request shall be proportional to the average positive incremental impact of each request on such facility divided by the total average positive incremental impact of all requests included in the Aggregate Facilities Study on such upgraded facility. The cost of each upgrade shall be allocated to requests independently. Incremental flows having a negative impact on an upgraded facility shall be ignored.

c. After concluding the above cost allocations to each reservation in the aggregate group, the Transmission Provider shall determine the charges for each request by using the levelized monthly revenue requirement associated with the transmission service requested by each customer in the aggregate group. This levelized monthly revenue requirement is determined by calculating the present worth of the revenue requirements associated with the upgrades as allocated to each customer in the aggregate group and then calculating an appropriate monthly amount for each customer in the aggregate group for each respective reservation.

VI. Cost Recovery

A. Requested Upgrades and Economic Upgrades – Cost Recovery

Note:

1.38a Requested Upgrades: Transmission upgrades, requested by a Transmission Customer or other entity, which do not meet the definition of any other category of Network Upgrades. [Would include capacity upgrades requested by a generator, or will “Capacity Upgrades” become a defined term and need to be added to this section?]

1.10a Economic Upgrades: Elective upgrades, identified in the SPP Transmission Expansion Plan, which have potential economic benefit to the SPP Region, but are not required for reliability reasons.

The cost of Requested Upgrades and Economic Upgrades shall be recovered in accordance with this Section.
Issued on: February 28, 2005 Effective: May 5, 2005

1. For Long-Term Point-to-Point Service, the levelized monthly revenue requirement derived from the cost allocation process shall be compared to the charge applicable for each request under the transmission access charges of Schedule 7, Sections 1 and 7, and each customer shall be required to pay the higher of the total monthly transmission access charges or the monthly revenue requirement associated with the facility upgrades. Customers paying the above charges may receive credits in accordance with Section VI.B.

2. For Requested Upgrades or Economic Upgrades not taking Long-Term Point-to-Point service the charge shall be a direct assignment charge pursuant to Schedule 9, Section 4 and each customer will be required to pay the monthly revenue requirement associated with the facility upgrades in addition to any other applicable transmission charges. Customers paying the above charges may receive credits in accordance with Section VI.B.

B. Requested Upgrades and Economic Upgrades – Transmission Revenue Credits

Transmission Customers paying for Requested Upgrades and Project Sponsors bearing the costs of Economic Upgrades shall receive transmission revenue credits in accordance with Section VII. Any charges paid by a customer in excess of the transmission access charges in compensation for the revenue requirements for allocated facility upgrade(s) shall be recovered by such customer from future transmission service revenues until the customer has been fully compensated. [Is this meant to apply to Capacity Upgrades paid for by generators that are not Designated Resources?]

C. Network Upgrades Associated with Designated Resources – Cost Recovery for Costs in Excess of the Safe Harbor Cost Limit

To the extent a waiver is not granted pursuant to Section III of Attachment J, the cost in excess of the Safe Harbor Cost Limit of Network Upgrades associated with Designated Resources shall be recovered in accordance with Section VII. Each Transmission Customer shall be required to pay the monthly revenue requirement associated with the cost of facility upgrades that were
directly assigned to that Transmission Customer in accordance with Section III.B. of Attachment J, in addition to any other applicable charges under this Tariff. Transmission Customers paying the above charges may receive credits in accordance with Section VI.D.

D. Network Upgrades Associated with Designated Resources - Transmission Revenue Credits

Transmission Customers shall receive transmission revenue credits in accordance with Section VII for directly assigned costs of Network Upgrades associated with Designated Resources. Any charges paid by the Transmission Customer in excess of the transmission access charges in compensation for the revenue requirements for allocated facility upgrade(s) shall be recovered by such Transmission Customer from future transmission service revenues until that Transmission Customer has been fully compensated.

VII. Service Crediting

Customers paying for a Directly Assigned Network Upgrade shall receive credits for a portion of new transmission service using the facility as a credit based on Section VI. The credit amount shall be recovered, with interest calculated in accordance with 18 CFR §35.19a(a)(2)(ii), from new transmission service using the facility as defined below until the credit balance has zeroed.

1. Point-To-Point Transmission Service: Revenues from new point-to-point service that increases loading on the new Network Upgrade in the direction of the initial overload will be included for crediting purposes. For each new point-to-point reservation having such loading impact on such Network Upgrade, made after the facility upgrade is completed (EOC date), the customer shall receive a portion of the transmission service charge equal to the positive response factor of such new reservation on the Network Upgrade facility times the new reservation capacity times the rate applicable to such new reservation. The response factor shall be
calculated on a monthly basis. This allocation from new service shall continue until the customer paying for a Directly Assigned Network Upgrade has been fully compensated for all charges paid in excess of the normally applicable transmission access charges pursuant to Schedules 7, 8 or 9 and 11.

2. Network Transmission Service: Credits will be provided for New Long-Term Network Transmission Service using the Network Upgrade in the direction of the initial overload to accommodate, Base Plan Upgrades, including any new or changed Designated Resources.

Revenues credited shall be determined based on the MW usage of the facility divided by the increased capacity provided by the Network Upgrade. This will provide a percent usage for which the Base Plan Upgrades, including any new or changed Designated Resources will be charged based on the original cost of the facility. What is meant by “original cost of the facility?” Does this exclude any depreciation? If so, why? Note, this simply determines the basis for the charge, not the form of the charge. This charge shall paid for by the Network Customer directly assigned costs that are in excess of the Safe Harbor Cost limit for Network Upgrades associated with new or changed Designated Resources and where eligible, applied to rates based on the Base Plan funding formula in Attachment J and credited to the customer paying for a Directly Assigned Network Upgrade. [Note: This credit appears to be an ongoing monthly credit based on a monthly charge paid for by the Network Customer of via Base Plan funding.]
3. Power Controlling Devices: For cost recovery on power controlling transmission devices, the Upgrading Transmission Customer shall receive credit for Point-To-Point and Network Transmission service using the facility in both directions. Revenues credited shall be determined based on the MW usage of the facility divided by the sum of the increased capacity provided in both directions by the Network Upgrade. This will provide a percent usage for which the Network Service Customer [It may be new service, but is not necessarily a new customer.] will be charged based on the original cost of the facility. This charge shall paid for by the Network Customer based on the Base Plan funding formula in Attachment J and credited to the customer paying for a Directly Assigned Network Upgrade. Crediting for Point-to-Point Transmission Service using the power controlling device shall be the percent usage of the total revenue received by the Transmission Provider that is not required for other transmission funding obligations. [Need an explanation of what this means.]

VIII. Future Roll-In

When a facility upgrade being paid for pursuant to the provisions of this Attachment Z is rolled into the revenue requirements used for the development of generally applicable transmission service rates, the Transmission Owner that constructed the facility upgrade shall pay the remaining balance of each customer’s unrecovered payments described in Sections VI.B and VI.D that are applicable to that facility upgrade. All customers who have upgraded facilities and have remaining balances subject to cost recovery pursuant to Section VI of this Attachment Z, shall be paid in full. The customer shall continue to pay the charges specified in the customer’s transmission service agreement for the transmission service initially reserved [What happens when a portion of the facilities are rolled into the revenue requirements used for the development of generally applicable transmission service rates? For example, if a portion]
of the capacity is used for Base Plan Upgrades, is that portion then rolled into generally applicable transmission rates? If so, does this section need to be rewritten to account for this possibility?
Discussion of Objectives for Nov. 10 Workshop

CAWG

November 2, 2005
Integrating DNRs With Base Plan Upgrades

• Background
  – Base Plan Upgrades are approved by the SPP Board for five (5) years forward.
  – DNR requests are evaluated by the SPP for ten (10) years forward.

• Discussion
  – With a $180,000/MW cap on DNR costs covered by Base Funding, should the cost of future upgrades that might otherwise be Base Plan Upgrades be attributed to the cost for DNR requests?
  – If not, how do we change the process?

- Problem: Load serving entity issue RFPs and receives multiple responses for DNRs with “long” lead times (~3 years or longer until on-line date).
  - The estimates include the generation costs as delivered to the transmission grid.
  - In order to evaluate the alternatives, the LSE must have “reasonable” estimates of the transmission costs for the various alternatives.

• Discussion: As alternative resources responding to RFPs become more and more regional, it has become increasingly difficult for LSEs to make reasonable estimates for transmission costs.
  – What level of “accuracy” do LSEs want in estimates of transmission costs?

  • System Impact Study vs. Facilities Study?
    – Transmission Provider will identify the facilities limiting the availability of the requested aggregate transmission service and the upgrades required to provide this service
    – Transmission Provider, in conjunction with the applicable Transmission Owners, shall determine the necessary cost and lead-time for construction of each upgrade and the estimated cost of service for each request.

  • Long-term planning study?
    – Is the Aggregate Transmission Request evaluation process offered by SPP a reasonable process for obtaining such estimates?
      • Do multiple requests result in misleading information?
      • Is the level of commitment to great for projects that have long lead times?

• Long-Term Planning Process
  – As a part of its planning process should SPP provide a service to evaluate DNR alternatives, assuming those using this service pay for its use?
    • When should such a service be offered?
      – As a part of its planning process on a scheduled basis?
      – On a more frequent, but scheduled basis?
      – On a demand basis?
    • Should this service be included in SPP tariff? If users pay, it would seem that it would need to be.
    • Does giving LSEs estimates of lead times in a long-term planning process help to determine when they should submit DNRs in the Aggregate Study process?
      – To what extent should SPP make users of this service aware of the uncertainties (possible differences from what would be the ultimate cost to the LSE)?
Other Issues??