SPP Southwest Power Pool

Southwest Power Pool, Inc.

TRANSMISSION EXPANSION

COST ALLOCATION PROPOSAL

Economic Upgrades

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Straw Proposal for Economic Upgrades

The purpose of this short paper is to summarize the key elements that must be addressed to define a methodology for allocating costs of economic upgrade projects within SPP. Economic upgrades are defined as projects that are not Base Funded and are economic expansion facilities constructed pursuant to the SPP Regional Transmission Expansion Plan approved by the SPP Board. At the heart of this debate is whether this type of upgrade project should be a market-based investment, i.e. funded voluntarily by market participants, or if the investments for such upgrades should be allocated to market participants using some form of beneficiaries test, i.e. mandatory funding by those who are identified as beneficiaries from the upgrade. The paper first introduces the key elements that must be addressed to form any proposal and then describes how these elements can be defined to form a voluntary funding approach and a mandatory funding approach.

1. Key Elements of Proposal to Allocate Costs for Economic Upgrades

The CAWG has discussed a variety of issues in the context of a cost allocation policy for economic upgrades. These issues generally follow into the following categories:

1. Mandatory vs. voluntary – the first order question has always been whether or not economic upgrades should be funded voluntarily or through a set of mandated charges. In a voluntary approach, parties who voluntarily agree to pay for the project costs fund the project. Under a mandatory approach, a methodology must be established to identify beneficiaries, and the parties identified as the beneficiaries of the project are required to fund the project.
2. Method for identifying beneficiaries – specifically required if a mandatory funding policy is adopted. Such a method may also be useful in identifying potential beneficiaries under a voluntary methodology; however, the analysis would not be binding on them.
3. Regional contribution – this element refers to whether or not any costs associated with an economic upgrade project should be allocated to the region as a whole. If so, what percentage of these costs should be allocated to the region? Arguably, allocating some or all of the investment costs with a regional allocation could be considered a form of mandatory funding.
4. Net benefit threshold – while there are a number of potential economic upgrades, not all will have the same level of benefit to SPP members. Hence, a logical question is whether or not there should be some pre-defined minimum level of benefit that must be demonstrated before such an upgrade would be eligible for some form of regional cost-sharing.
5. Transmission Rights – this element describes the transmission rights a participant(s) receives in return for funding an economic upgrade project.

2. Combinations for Consideration

There are two basic approaches and these are summarized in the table below.

Element	**Approach 1 – Current CAWG Straw Proposal**	**Approach 2 – Mandatory Approach**
Mandatory vs. voluntary	Voluntary	Mandatory
Method for identifying beneficiaries	Generally, this is up to the parties. SPP could perform the cost-benefit analysis req'd under the mandatory approach to identify the initial set of parties who may benefit from the upgrade. However, the parties would be free to determine how the costs would be allocated amongst themselves.	Perform cost-benefit study that evaluates the potential economic benefits of the project and the potential beneficiaries.[1] Assessment must also take into account issues such as the potential avoided costs for reliability upgrades and bilateral contract positions of parties i.e. do they actually benefit or are they indifferent to the upgrade due to their bilateral contracts.
Regional contribution	The SPP may roll into rates (either allocated or postage stamp)up to 100%-Y% of the funding of an economic project provided the requestors fund up to their MW share of the capacity of the upgrade, their funding equals or exceeds Y% of the funding of the project and it can be shown that the benefits remaining equal or exceed the costs being rolled into SPP rates.	Option 1 – None. Option 2 – set base line the same as base funded upgrades (i.e. 33%). That is, for economic projects that pass the net benefit threshold test, there would be a regional contribution of X. Moreover, if the project demonstrated net benefits to a majority of the region, the entire project investment gets rolled into the SPP wide regional rate.
Net benefit threshold	Project's net benefits must exceed costs by a pre-defined factor.[2]	Project's net benefits must exceed costs by a pre-defined factor.
Transmission rights	See section on Transmission Rights	See section on Transmission Rights

Under Approach 1, economic projects would be voluntarily funded by parties who believe they will derive an economic benefit from the proposed project. While SPP may assist in identifying opportunities for such projects, the parties themselves make their own internal cost-benefit assessment.

[1] To the extent this option is selected, the CAWG recognizes that a specific methodology for measuring benefits and identifying beneficiaries will have to be developed.

[2] For example, this factor could simply measure if the project's projected benefits exceed the project's costs over time by a pre-defined multiplier (e.g. benefits exceed costs by a factor of 4), or it could measure the projects rate of return based on projected benefits and costs.

It is also recognized, however, that transmission investments are lumpy by nature. That is, the additional transfer capability provided by the economic upgrade will always meet or exceed the requestors requirements meaning there may be some excess capacity available to be used by others in the region. Hence, there may be some justification for a portion of the costs to be allocated to the region as a whole. The proposal in Approach 1 is that if the incremental benefits to the region of the project are greater than the costs that would be assigned to the region, then those costs can be rolled in to the SPP region wide rate. For example, assume that a proposed economic upgrade project was to cost $10M. Moreover, the parties requesting the upgrade are requesting service that will use approximately 80% of the transfer capability created by the new facilities, meaning they would be required to fund at least 80% of the project costs. SPP performs a cost-benefit study that measures the future benefits to the parties requesting the project and to the region as a whole. Now suppose the benefits to the region are in excess of $2M. Under this scenario, the net benefits exceed the residual costs of the project (i.e. the minimum costs that would be assigned to the requestors - $8M in this example) and would be eligible to be rolled-into the SPP wide rate. If these benefits did not exceed the $2M, only a portion would be eligible.

The mandatory approach outlined in the table is premised on two key triggers. First, any proposed project must exceed some pre-defined net benefits threshold. Second, for projects that exceed this threshold, a methodology must be established to identify the beneficiaries and assign the costs of the project to these beneficiaries. Such a methodology must address whether this allocation is fixed once or changes over time. It must address how the benefits are measured: will it be a measure of future market prices? A measure of production cost benefits? Will it measure the reduction in congestion costs? Answering these questions is fundamental to this approach.

As shown in the table, Approach 2 also includes the potential for a regional contribution. Under this proposal, an economic project that demonstrates broad reaching benefits in the region would be eligible to have a portion of its costs rolled-in to the SPP wide rate. For instance, such a test may require that a minimum number of zones beyond those where the facilities are being built have net benefits from the project.

3. Transmission Property Rights

The reason a Transmission Customer will fund an economic upgrade, in whole or in part, is so that SPP will be able to grant the Transmission Customer's request for firm transmission service. This funding will occur under the FERC's "or" pricing policy where the transmission customer pays the higher of the cost of the upgrade or the base rate for firm transmission service. In essence, when the cost of the upgrade exceeds the base rate for the requested transmission service, the excess above the firm transmission rate will be defined as the portion of the upgrade that has been funded. By definition, the Transmission Customer that funds an economic upgrade will:

1) Receive its requested firm transmission service, either network or point-to-point;
2) Be eligible to receive revenue credits from any point-to-point service sold because of the additional transmission capability made available from the funded upgrade;
3) Be eligible to receive the outstanding balance of funding contributed in excess of the base rate for either network or point-to-point service when at a future date this excess is rolled into rates; and
4) Such transmission service will be included in future base plans, recognizing the termination date for such transmission service or any Section 2.2 rights under the SPP OATT for such transmission service.

Transmission Customers that fund upgrades in whole or in part will receive revenue credits in a manner similar to the revenue crediting mechanism provided in Section 6.b. of Attachment Z to the SPP OATT.[3] Any charges paid by Transmission Customers in excess of the base rate for either network or point-to-point service will entitle those Transmission customers to receive future transmission service revenues as credits against their transmission charges. These revenue credits will be paid to the Transmission Customers until the excess funded above the base rate with interest is refunded.

The revenues for crediting will be recovered from new point-to-point service that increases the loading on the transmission facilities involved in the economic upgrade above the level available prior to the upgrade in the direction of the initial overload. For each new point-to-point service (i) having such loading impact on the economic upgrade and (ii) made after the economic upgrade is completed, the Transmission Customer that funded the upgrade will receive a portion of that point-to-point service charge. The portion will be equal the product of the following factors:

a. The positive response factor of the new point-to-point service on the upgrade;
b. The capacity reserved for the new point-to-point service;
c. The percent of funding contributing to the upgrade in excess of the base rate for either network or point-to-point service requested by the transmission customer(s) providing the funding; and
d. The applicable rate.

Other Considerations:

Economic Upgrade Decision Process

SPP conducts its planning cycle on a two year cycle with economic upgrades being evaluated specifically during the second year of this cycle. One question that arises, particularly if a mandatory funding approach is taken, is the timing and process that should be followed between the identification of an upgrade and the actual construction of the project. Specifically, should there be a mandatory delay period that allows the market to respond with alternative solutions, such as generation projects, demand-side management, or alternative transmission solutions, before a commitment is made to fund an economic project. Such a delay would not be mandated if the project was being voluntarily funded by market participants with no regional contribution. In this case, the project is by definition a market based solution.

Waivers

With respect to the base plan, the CAWG recognized that any plan must have sufficient flexibility built in to it so that it is both practical and doesn't create any undesirable barriers to the competitive market place. Should those same waivers apply to economic upgrades?

[3] Recall that Attachment Z provides for future aggregation of transmission service requests.