

CAISO PLANNING PROCEDURE P-102

Assessment of System Benefits Associated with a Generator's System Reinforcement Beyond the First Point of Interconnection

The purpose of the following procedure is to determine the extent to which a Generating Unit should receive credit for System Benefits associated with transmission reinforcements, beyond the first point of interconnection, necessary to interconnect a new Generating Unit to the ISO Controlled Grid. The System Benefits a Generating Unit receives cannot exceed the cost of the transmission facilities paid for by a Generating Unit. For the purposes of this Procedure, reference to transmission facilities is to transmission facilities beyond the first point of interconnection to the ISO Controlled Grid that have been paid for by the Generating Unit and are necessary to satisfy applicable reliability criteria or to mitigate any incremental Intra-Zonal Congestion.

System Benefits Studies

The Participating TO will determine the System Benefits associated with a transmission reinforcement as part of completing the requisite System Impact and Facilities Studies.

Methodology

To determine the level of System Benefits, the Participating TO will apply the following methodology:

The Participating TO will create two separate base cases. One base case will model the Generating Unit's transmission facilities and the other case will have these facilities removed. All applicable contingencies will be run on both base cases. The applicable Participating TO will compare the results of the two cases to determine if any of the indicators described below are met.

Indicators

When performing the System Benefits analysis, the applicable Participating TO will determine that a Generating Unit's sponsored transmission facilities are providing a System Benefit if the system does not meet applicable reliability criteria once the Generating Unit's sponsored transmission facilities are removed from the model.

System Benefits

If the applicable Participating TO determines that it will rely on a new Generating Unit's related transmission facilities in the future to reliably serve load in its service territory, the following principles will apply.

1. The Participating TO will contribute to the cost of the transmission reinforcements beyond the first point of interconnection necessary to interconnect the Generating Unit. The Participating TO's cost-responsibility for any such transmission reinforcements shall equal the lesser of:
 - The entire cost of such reinforcements, or
 - The cost of the transmission reinforcement or other mitigation alternative that the Participating TO would have to implement to meet applicable reliability criteria absent addition of the transmission facilities associated with the interconnection of the new Generating Unit.

The following is an example of the above principle. In order to fully mitigate the Intra-Zonal Congestion impact related to the interconnection of its new Generating Unit, Developer A decides to construct a \$20 M transmission reinforcement (Project A). Project A must be in place in 2001, the in-service date of the new Generating Unit. In the applicable Participating TO's annual assessment, a transmission reinforcement is proposed to serve load in the area. The Participating TO's proposed reinforcement (Project B) is also needed in 2001 and will cost \$12 M. If Project A is constructed, the project will enable the Participating TO to serve its load as if it had constructed Project B in the first instance. The Participating TO will credit Developer A \$12 M for the cost of the cancelled Project B. Under this example, Developer A will pay the Participating TO \$8 M (\$20 M - \$12 M) for the transmission facilities beyond the first point of interconnection to the grid.

To the extent that the Participating TO's Project B has already been approved in the ISO's grid planning process, the Participating TO shall not be obligated to cancel its proposed Project B and shall not be obligated to provide any recognition of System Benefits associated with Project A's effect on Project B. In the above example, if Project B is actually approved and deemed to be constructed, the System Benefit associated with Project A would be zero, and Developer A will pay the full cost of any transmission facilities necessary as a result of its interconnection. However, the applicable Participating TO will factor in the addition of Project B when determining the mitigation measures necessary as a result of the interconnection of Developer A's Generating Unit. Therefore, if the addition of Project B to the grid would reduce the cost of Project A from \$20 M to \$18 M, Developer A would only be responsible for the \$18 M. To the extent that other projects are deferred or advanced as a result of Project A and these projects have not been approved

in the ISO's grid planning process, the PTO would provide appropriate recognition of the System Benefits for those projects.

The applicable Participating TO will not only consider transmission projects that are deferred or cancelled due to the addition of transmission facilities necessitated by the interconnection of a new Generating Unit, but also transmission projects included in the Participating TO's annual planning assessment the schedule that have been advanced. The Participating TO's assessment of System Benefits will apply to same period of time used in its most recent annual transmission assessment.

2. A Generating Unit shall only receive recognition of System Benefits for transmission facility additions necessary as a result of its interconnection to the ISO Controlled Grid, and shall not receive System Benefits or other recognition for the same facilities pursuant to either the ISO's grid planning process or the ISO's LARS process.
3. If the transmission reinforcements paid for by a new Generating Unit increases the rating or the transfer limit on an Inter-Zonal transfer path, the new Generating Unit will receive the proceeds of any auction of the resulting incremental Firm Transmission Rights (FTR) associated with that Inter-Zonal interface.
4. If a Generating Unit pays for a transmission reinforcement, the Generating Unit will receive the benefits identified in the ISO Tariff.
5. No Generating Unit shall receive System Benefits associated with a reduction of Inter-Zonal Congestion due to its operation. Likewise, no Generating Unit will be responsible for mitigating or paying the cost of increased Inter-Zonal Congestion.
6. No Generating Unit shall receive System Benefits associated with a reduction in transmission system losses resulting from its operation. Likewise, no Generating Unit shall be responsible for mitigating or paying the cost of increased transmission system losses.

A System Benefits example is attached to this Procedure as Appendix B. This example demonstrates how the principles described in this Procedure will be implemented in the specific situation described.

APPENDIX A: DEFINITIONS

First Point of Interconnection The point where the Load or Generating Unit's conductors or those of their respective agents meet a PTO's existing power system.

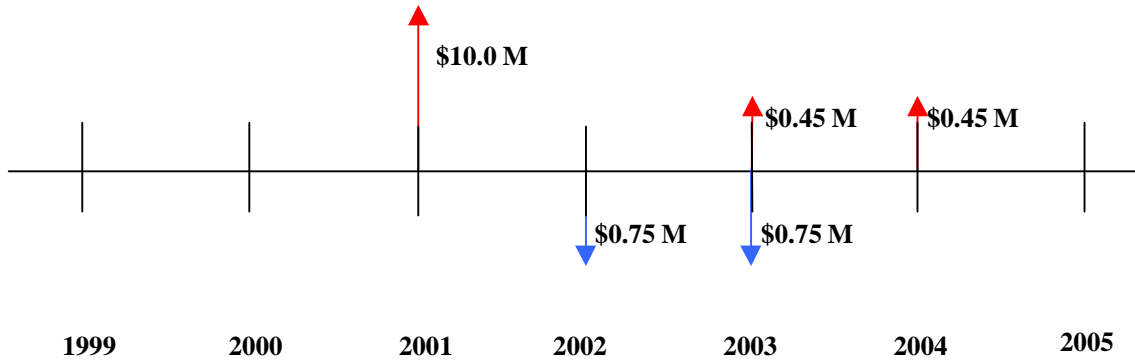
APPENDIX B: SYSTEM BENEFITS EXAMPLE

System Benefits Example

Assumptions:

- (1) The new generator requires project A to mitigate intra-zonal congestion caused by the new generator.
- (2) Project A defers Project B from 2002 to 2004
- (3) Project A advances Project C from 2005 to 2003
- (4) Inflation is 0%, but reasonable values for inflation would be used in real world situations
- (5) Annual carrying charge is 15% of the project cost
- (6) Rate of Return used to calculate the present values would be equal to the PTO's authorized rate of return on transmission investment.

Project	Required In-Service Date	Original Planned In-Service Date	Cost	Annual Carrying Cost
A	2001	N/A	\$10 M	N/A
B	2004	2002	\$5 M	\$0.75 M
C	2003	2005	\$3 M	\$0.45 M



$$\text{System Benefit} = \text{Present Value}_{2001}(0.75_{2002} + 0.75_{2003} - 0.45_{2003} - 0.45_{2004})$$

$$\text{Total Congestion Cost Payment}_{2001} = \$10 \text{ M} - \text{System Benefit}$$