Cost Allocation for Reliability Projects

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The question of how to allocate costs among the NY utilities for the construction of projects necessary for the reliable operation of the NY transmission system is a difficult one. It is also an enduring question - one that the NY TOs have wrestled with for a quarter century under the prior New York Power Pool arrangement.

The sponsors of this paper favor a "beneficiaries pay" allocation methodology. We describe two variations of "beneficiaries pay" that members of the ESPWG can consider when debating this issue.

Cost Allocation Principles:

1. The allocation criteria should be fair to the parties paying the costs. Efforts should be made to insure that no party is overburdened and pays more than their fair share of costs and likewise there should be no free riders, or those who receive measurable value without contributing.

2. The method should strive to be deterministic and relatively easy to apply to actual cases. In other words, clear-cut criteria should be available upon which to base decisions, rather than by relying on subjective measures that could (and have) cause endless debate and appeals.

Variations of "Beneficiaries Pay"

1. Standard "Beneficiaries Pay" - Under this alternative, the beneficiaries of a project would pay the costs. Benefits can be determined in several different ways, but each are related to the degree of reliability improvement experienced by the utilities' systems, based on an underlying need to meet a reliability deficiency identified by the NYISO.

2. Those who need it pay - This is similar to #1, but is slightly different in that only those customers that rely on the portions of the transmission system that do not meet the reliability criteria pay the costs. This alternative can be described as being more consistent with a true cost-causation methodology.

Meeting the Cost Allocation Principles:

1. Standard "Beneficiaries Pay" - By aligning those who pay with those who benefit, a good match is achieved regarding the fairness principle. But it is necessary to understand and define what is meant by "benefit". Reliability criteria are distinctly deterministic. Historically, either a system has met applicable reliability criteria or it hasn't. For example, if a given project reduces loading on another transmission facility from 80% on peak to 70%, does this facility experience a reliability improvement that should be classified as a benefit that has measurable value? The situation is better, but the facility meets criteria both before and after the other project is placed in service. The idea of a continuous spectrum measurement of reliability is a concept that is not yet fully developed, and may be difficult to design and understand. Because of the difficulty in defining "benefits", it may be somewhat more difficult satisfying principle #2 with this alternative, but perhaps not impossible.

2. Those who need it pay - Because the subject is reliability, perhaps the most direct approach would be to assign the project costs to the load on those buses that don't meet the reliability criteria the project is designed to overcome. This is deterministic and relatively easy to apply, satisfying principle #2. But there is a potential free-rider issue here. One can conceive of situations where project costs are assigned solely to one utility, but because of the proximity of a nearby utility, the project may relieve line flows and/or improve voltage and benefit his neighbor by enabling him to defer a future project, even though all his lines and buses currently meet criteria. However this would not be the result all the time and there may be ways to work around this. Whether or not it is a fatal flaw will require additional analysis and discussion.

Observations and Conclusions:

Alternative #1 appears to satisfy principle #1, but may have some difficulty satisfying principle #2. For alternative #2, the situation is the reverse. We recommend that ESPWG efforts concentrate on understanding the differences and details behind the "beneficiaries pay" and the "those who need it pay" alternatives. Perhaps a solution can be established with a mechanism that solves the questions posed above.