

Market Efficiency Process Enhancement Task Force – Phase 3

AEP Support for Status Quo of Benefit Calculation

AEP Request of IMM

At the MEPETF meeting on 07/30/19, the IMM referenced market mechanics and examples to argue for changes to the benefits calculation. AEP would appreciate having the same argument made using qualitative and policy principles. Such an approach would better illustrate the issue of economic inefficiencies caused by transmission constraints. AEP would welcome having the following qualitative example used to illustrate the issue raised by the IMM as opposed to using the calculation of market mechanics.

Several loads have joined the same RTO with the expectation that the system would be planned and operated in an economically efficient manner, and thus, all loads are paying the same price for generation at any given point in time.

A transmission constraint results in the middle of the system that causes the cheaper generation that is located upstream from that constraint to run less frequently and at a lower output level than it would if that constraint was not present. That same constraint also now causes the more expensive generation that is located downstream from that constraint to run more frequently and at a higher output level than it would if that constraint was not present.

This transmission constraint effectively provides the loads that are located upstream from that constraint the unintended positive of having exclusive access to the cheaper generation that is located upstream from that constraint. That same constraint also provides the loads that are located downstream from that constraint the unintended negative of having exclusive access to the more expensive generation that is located downstream from that constraint.

Given the initial expectation that the loads joined the same RTO with the expectation that the system would be planned and operated in an economically efficient manner, and thus, all loads were paying the same price for generation at any given point in time prior to the transmission constraint, the fundamental policy question becomes:

Does the downstream load have the right to advise the regional planner that it wants to fund a transmission upgrade that would mitigate the transmission constraint, thus giving that downstream load access to the cheaper generation that is located upstream from that transmission constraint?

The logical answer would be “yes”!

Understandably, given that this mitigation would effectively increase the cost of the generation that is being accessed by the upstream load (while decreasing the cost of the generation that is being accessed by the downstream load), that upstream load would not be asked to fund that transmission upgrade.

That upstream load, however, cannot prevent that transmission upgrade from being constructed by insisting that their increased generation costs must be taken into account when determining the economic benefits of that transmission upgrade, since the transmission upgrade is eliminating unintended positives that the transmission constraint was providing to the upstream load. For that reason, the upstream load cannot claim as costs the elimination of the unintended positives that the upstream load was receiving as a result of that transmission constraint.