Proposed Elements of Congestion Cost

For Discussion Purposes Only

Transmission Congestion

- NY OATT: **A characteristic of the transmission system produced by a constraint on the economic operation of the power system, such that the marginal price of Energy to serve the next increment of Load, exclusive of losses, at different locations on the transmission system is unequal**.

- ***In general, congestion*** **is the result of physical limitations of discrete transmission grid components that limits the amount of power that can flow over portions of the transmission lines without jeopardizing the reliability of the system. Ideally, the goal of "*economic dispatch*" is to supply load utilizing resources which result in the lowest overall cost. However, because system conditions can result in transmission delivery limitations into a particular location or zone in the grid, lower cost generation that is available to supply the load cannot be utilized and higher cost generation must be operated to meet the demand at that location.**

Proposed Elements of Congestion Cost

Proposed Element	Description
Congestion Rental or Transmission Opportunity Costs.	Congestion component of the LBMP transmission usage charge
Congestion Rent	Is the congestion rental times the constrained load.
Congestion Payments to Generators & Imports	Payments to resources in the constrained area.
Congestion Payments Available to Holders of TCCs	Total energy payments minus energy payments to G&I
Normalized Congestion Costs	Congestion costs adjusted for “unusual” (TBD) facility outages
Hedgeable Congestion Costs	To be determined

Proposed Elements of Congestion Cost

Proposed Element	Description
Unhedgeable Congestion Costs	To be determined
Societal Congestion Costs	Increase in energy production costs as result of transmission constraints.
Baseline Congestion Costs	The difference between the as found load payments and the unconstrained system load payments
The ESPWG consensus at the 9/19 meeting was to develop the last two elements further and, also, incorporate aspects of prior elements, e.g., normalizing for unusual facility outages.	