Transmission Congestion Cost Definition

For Discussion Purposes Only

BIC Agenda #11B

Background

- **In September the OC approved the Initial Planning Process**
  - *The Initial Planning Process calls for a detailed reporting of historical congestion*
- **In approving the Initial Planning Process the OC directed the ESPWG to present for OC approval a proposed definition for reporting historical congestion, the methodologies for the quantification of historical congestion and the analytical tools to be used in the analysis of historical congestion**
  - *ESPWG has discussed this over 3 meetings since the OC approved the Initial Planning Process*
- **Today ESPWG will recommend that the OC approve a definition of congestion for purposes of reporting historical congestion along with supporting computations intended to provide detailed information on the causes and location of congestion**
  - *ESPWG is still discussing specific analytical tools with the ISO and at present is not prepared to make a recommendation to the OC at this time.*
- **This proposal was supported by a majority of market participants at ESPWG.**

Definition: Transmission Congestion Cost

- 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. The goal of "***least bid cost dispatch***" is to supply load utilizing resources which result in the lowest overall bid cost. However, because system conditions can result in transmission delivery limitations into a particular location or zone in the grid, lower cost generation cannot be utilized and higher cost generation must be operated to meet the demand at that location.

  For purposes of measuring the long term impact of congestion, and of reporting historical congestion, ***the cost of congestion is defined as the change in the bid production costs that results from the transmission congestion***.

  To reflect the fact that the wholesale price of electricity in NY is based on locational based marginal prices (LBMP), the analysis of historical congestion undertaken by the ISO also will measure and report: (i) the impact of transmission congestion on load and congestion payments with appropriate adjustments for hedges; and (ii) a physical measure of transmission congestion.