How is the loss component of the LMP calculated?

The System Operator shall calculate Nodal Prices for an hour for the Day-Ahead Market or the Real-Time Market at a given Node i using the following formula, or a formula similar in substance and effect:

$$\gamma_i = \lambda^R + \gamma_i^L + \gamma_i^C,$$

where:

$\gamma_i =$ the Nodal Price at Node *i* in $/megawatthour;

$\lambda^R =$ the marginal cost in $/megawatthour, based on Demand Bids and Supply Offers, to serve additional load at the Reference Node;

$\gamma_i^L =$ the Marginal Loss Component of the Nodal Price at Node *i* in $/megawatthour; and

$\gamma_i^C =$ the Congestion Component of the Nodal Price at Node *i* in $/megawatthour.

The Marginal Loss Component of the Nodal Price at any Node *i* on the Transmission System is calculated using the equation

$$\gamma_i^L = (WF_i - 1)\lambda^R,$$

in which WF_i, the Withdrawal Factor at Node *i* relative to the system Reference Node, is calculated using the following equation:

$$WF_i = \left(1 - \frac{\partial L}{\partial P_i}\right),$$

where:

L = Transmission System losses;

P_i = the net amount of Energy injected into the Transmission System at Node *i*; and

$\frac{\partial L}{\partial P_i}$ = the ratio of: (1) the amount by which Transmission System losses occurring in the Day-Ahead Schedule or Real-Time dispatch would have increased, as calculated by the System Operator's Day-Ahead or Real-Time computer algorithm, if a very small additional amount of Energy had been injected at Node *i* (in addition to the injections and withdrawals already scheduled to occur on the Transmission System in the Day-Ahead schedule or occurring on the Transmission System in the Real-Time dispatch), to (2) the size of the additional injection of Energy at Node *i*.