

Market Renewal FACT SHEET

Energy Price – Loss Component

#3

The single schedule market (SSM) is one initiative in the Market Renewal's Energy work stream. A SSM uses a Locational Marginal Price (LMP) for each time period at each location to operate the system. The Energy Loss Price is a component of the LMP.

What is the Energy Loss Price?

LMPs are calculated for each time period and at each location on the system as the sum of three components, the Energy Reference Price, the Energy Congestion Price, and the Energy Loss Price.¹

The Energy Loss Price reflects the cost of transmission losses at a given location relative to the Reference Location. It is calculated by multiplying the Marginal Loss Factor by the Energy Reference Price. The Marginal Loss Factor is derived from the transmission losses incurred from meeting one additional MW of load at the location with one additional MW of supply from the Reference Location. The Energy Loss Price typically account for 2-10 per cent of the costs on a system.

Why is it important?

The Energy Loss Price ensures that the cost of system transmission losses are properly included in scheduling and in payments to generators. The greater the transmission losses relative to the Reference Location, the lower the payment to the generator. The Energy Loss Price helps to ensure the market signals that indicate where new generator resources should be located will align with the goal of minimizing system costs to consumers.

For example

In the example, Location A is the Reference Location. This means that the Energy Loss Price at Location A is \$0 and the Energy Loss Price for all other locations is set in relation to Location A.

¹ LMP = Energy Reference Price + Energy Congestion Price + Energy Loss Price

Location B has a loss value of -\$2, indicating that there are losses associated with generating an additional one MW at Location B and transmitting it to Location A.

Generation at Location B has a relatively lower value than generation at Location A.

Example - Congestion and Loss Components at Each Node



For more information

For more information about other LMP components, see the Market Renewal Fact Sheets on Energy Reference Price (#2) and Energy Price - Congestion Component (#1).