Day-Ahead Hourly Intertie Energy Pass 1 LMP Report

Help File

Purpose of the Day-Ahead Hourly Intertie Energy Pass 1 LMP Report

This report contains final day-ahead hourly intertie energy locational marginal prices (LMP) from the Pass 1 pricing algorithm of the DAM calculation engine and its components for all Intertie Pricing Locations after the successful execution and validation of the DAM calculation engine run. It is intended to provide more clarity on the LMPs associated with boundary entity schedules in Pass 1 of the DAM. These schedules are capped in successive passes of the DAM calculation engine (see notes section).

The following information is included in this report:

1. Intertie Pricing Location
2. Intertie Pass 1 LMP
3. Components of the Pass 1 LMP
    a. Energy Loss Price
    b. Energy Congestion Price
    c. External Congestion Price
    d. Net Interchange Scheduling Limit (NISL) Price

Confidentiality

Public

Frequency

Daily

Granularity

Hourly for every Intertie Pricing Location

Description of the Day-Ahead Hourly Intertie Energy Pass 1 LMP Report Fields

Report Field Title	Description of Report Field Title
Created at	This field indicates the date and time that the report was created. It will be displayed as mmm dd, yyyy hh (24):mm:ss e.g. Jul 02, 2022 01:05:05.
For	This field indicates the dispatch date that the day-ahead calculation engine is optimizing for. It will be displayed as mmm dd, yyyy.
Intertie Pricing Location	This field will display the Intertie Pricing Location for which the Pass 1 LMP applies. If there are no bids or offers from an intertie resource at an Intertie Pricing Location, the pricing location will not have a Pass 1 LMP. Therefore, the Intertie Pricing Location will not appear in this report.
Intertie Pass 1 LMP & Components	This field will display the components for each Intertie Pricing Location: • Intertie LMP (Uncapped) • Energy Loss Price (Uncapped) • Energy Congestion Price (Uncapped) • External Congestion Price (Uncapped) • Net Interchange Scheduling Limit (NISL) Price (Uncapped)
Day-Ahead Intertie Energy Pass 1 LMP ($/MWh) for hour	The Pass 1 LMP and components for the indicated hour for energy for each Intertie Pricing Location.
Intertie LMP	This field indicates the LMP (Uncapped) calculation: LMP (Uncapped) = Energy Reference Price at Reference Location (Uncapped) + Energy Loss Price (Uncapped) + Energy Congestion Price (Uncapped) + External Congestion Price (Uncapped) + Net Interchange Scheduling Limit (NISL) Price (Uncapped)

Report Field Title	Description of Report Field Title
Energy Loss Price	The Energy Loss Price (Uncapped) 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.
Energy Congestion Price	The Energy Congestion Price (Uncapped) is the change in incremental cost at any location on the grid, due to transmission congestion between that location and the Reference Location
External Congestion Price	The External Congestion Price (Uncapped) is the portion of the locational marginal price that consists of the cumulative congestion costs resulting from the binding import or export transmission limits that affect transactions scheduled at an intertie
Net Interchange Scheduling Limit (NISL) Price	The NISL Price (Uncapped) designates the NISL congestion component for the intertie congestion price applicable to each dispatch hour
Hour	This field lists out the delivery hour and is denoted as hours 1 to 24 of the day.

Notes: The DAM calculation engine performs three passes. As per design, import schedules will not decrease and export schedules will not increase in successive passes of the DAM, even if the LMP produced by the DAM calculation engine changes in later passes[1]. This is done to preserve energy balance across passes of the DAM. The LMP may change from Pass 1 to Pass 3 of the DAM as various changes occur across passes, including (but not limited to) changes in congestion, price setting eligibility, market power mitigation processes, and schedules of other resources.

This report has been generated to provide more clarity on boundary entity schedules in the DAM in the event that LMP changes across passes make final DAM schedules appear non-intuitive. Please note that the Day-Ahead Energy Pass 1 LMP and its components in this report are uncapped, meaning that they can exceed the range between the Maximum Market

[1] Market Manual 0.4.2 Operation of the Day-Ahead Market; Appendix A: Day-Ahead Market Calculation Engine, Section A.2.

Clearing Price (MMCP) and the negative MMCP. Day-Ahead Pass 1 LMPs are also not used for settlement, as only the DAM Pass 3 LMPs are financially binding. For more information on passes of the DAM Calculation Engine and constraints to respect decisions of preceding passes, see Market Rules Chapter 7 section 4.6.1 and Appendix 7.5 sections 18.8 and 20.8.

Contact Information

For additional information, please e-mail IESO Customer Relations at customer.relations@ieso.ca.

A Help File has been prepared for this report to provide the reader a brief overview on the report. The Help File will also outline what the purpose of the report is, the publication frequency of the report, how the report can be accessed, and a description of the report fields. Users of the Help File are reminded that that they remain responsible for complying with all of their obligations under the market rules and associated policies, standards and procedures relating to the subject matter of this Help File, even if such obligations are not specifically referred to herein. While every effort has been made to ensure that any extracts from the market rules or other documents in this Help File are accurate and up to date, users must be aware that the specific provisions of the market rules or particular document posted on the web site of Ontario's Independent Electricity System Operator shall govern