

At approximately 1:50 EST Wednesday, December 19, 2007, the IESO completed the installation of an upgrade of the Energy Management System (EMS)¹ to the latest platform.

A data management problem, that intermittently impacted the pricing calculation, was discovered shortly after the deployment of the new system. The new system at times failed to correctly transfer accurate import and export schedules to the price calculating sequences, commonly referred to as the Market Schedule, within the IESO's Dispatch Scheduling & Optimization tool. The error, which did not appear during testing, would generate incorrect results in the real-time market schedule in the first interval of the hour resulting in potential administrative pricing events.

Administrative pricing events occur when the pricing calculations are incorrect due to interruptions and/or corruption to hardware, software, communication systems or data inputs. Administrative pricing is performed as per Market Rule Chapter 7, Section 8.4A.

1. Event Details

As a result of the underlying defect, administrative pricing occurred from December 20 to 31. Fifty-nine intervals were administered due to energy pricing errors. One event has occurred to date in 2008.

The problem was identified on December 23 and a temporary measure was put in place on December 24. The temporary measure involved a manual process to reset the real-time market schedule sequence during recognized data transfer failures. The temporary measure effectively reduced the probability of administrative pricing intervals.

¹ The EMS is one of several tools used by the IESO, to continuously process and validate network data used to manage the operation of the IESO controlled grid and supervise the IESO administered market.

	Number of Administrative Pricing Events
December 20 – December 24, 2007	52
December 25 – December 31, 2007	7
January 1 – January 3, 2008	1
January 4 – January 6, 2008	0
Total:	60

Table 1 – Number of Administrated Intervals during Selected Periods

Although the temporary measure reduced the frequency of administrative pricing, it did not completely eliminate them. A revised measure was put in place that automatically resets the real-time market schedule process in the first interval of each hour. This was implemented on January 3, 2008, and no further administrative events have occurred related to the EMS upgrade.

As soon as the problem was identified, the IESO began working on a permanent solution to address the error.

2. Market & Participant Impacts

Administrative prices are used for settlement purposes, meaning that they affect all market participants. Participants are notified of intervals under review for administrative action through an e-mail communication.

When Administered Pricing is required the IESO has two business days after the end of the dispatch day to assess and implement all administrative prices and schedules, after which the already published data is used for settlement.

For further information regarding administrative pricing and their impacts, participants can reference documents linked in section 3.

In all cases where a data transfer error occurred the price was administered by copying the results from interval 2 into interval 1. This was done with one exception where an error occurred in both the first two intervals, and the third interval was copied to both interval 1 and 2.

The greatest change to the Hourly Ontario Energy Price (HOEP) for the administered intervals was an increase of \$0.44 and a decrease of \$6.72. The average effect on HOEP by administrative pricing was a decrease of \$1.24.

Largest HOEP Increase	+\$0.44 (Increase in HOEP)
Largest HOEP Decrease	-\$6.72 (Decrease in HOEP)
Average HOEP Change	-\$1.24 (Decrease in HOEP)

Table 3 – HOEP Change Statistics

3. Additional Information

If you require pricing information to a 5 minute granularity please see the link below. If you have further questions, please contact Customer Relations at customer.relations@ieso.ca or (905) 403-6900 or toll free at 1-888-448-7777. Additional information can be found with respect to Administrative Pricing in the following locations:

- Administrative Pricing Quick Take:
http://www.ieso.ca/imoweb/pubs/training/QT4_AP.pdf
- Market Rules Chapter 7 Section 8.4A:
http://www.ieso.ca/imoweb/pubs/marketRules/mr_chapter7.pdf
- Administrative Pricing Event Correction Form 1549:
http://www.ieso.ca/imoweb/pubs/settlements/se_IMO_FORM_1549.xls
- 5 minute prices: <http://reports.ieso.ca/public/RealtimeMktPrice/>