

# Market Renewal FACT SHEET

## Operating Reserve – Congestion Component

#8

The single schedule market (SSM) is one initiative in the Market Renewal's Energy work stream. The IESO already manages Operating Reserves (OR) products in the current two schedule market. The OR markets operations will change under the new single schedule market.

### What is the Operating Reserve Congestion Price?

In a single schedule market, the Operating Reserve (OR) price for each type of OR procured by the IESO<sup>1</sup> is comprised of two elements - Operating Reserve Congestion Price and the Operating Reserve Reference Price.

The Operating Reserve Congestion Price varies depending on the impact of transmission constraints in different regions, which can restrict the ability of one location from providing reserves to another. The following are two examples of congestion.

- A transmission constraint blocks reserves from flowing out of a region but not into the region. This results in a negative OR Congestion Price in the region and a lower amount of OR required from that region.
- A transmission constraint blocks reserves from flowing into a region but not out of the region. This results in a positive OR Congestion Price in the region and a greater amount of OR required in that region.

Operating Reserve Reference Price is the cost of adding 1 MW of a specific reserve (i.e., 10S, 10N, or 30R) to the province wide reserve requirement.

An important difference between LMPs and OR prices in a single schedule market is that LMPs can vary at each point on the system while OR prices only vary based upon defined operating reserve regions.<sup>2</sup>

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<sup>1</sup> 10-minute spinning (10S), 10-minute non-spinning (10N), and 30-minute reserves (30R): see Market Renewal Fact Sheet on Operating Reserve Reference Price for definitions of each type.

<sup>2</sup> LMPs can vary nodally. OR prices can vary zonally with the IESO defining the transmission constrained regions.

## **Why is it important?**

OR is generally needed when a generator or transmission line is unexpectedly unavailable. The IESO must meet requirements for each type of reserve to maintain reliability for the system.

The OR Congestion Price component of the OR price captures the variation in cost of providing operating reserves across Ontario by considering transmission constraints. The single schedule market structure aligns OR market prices with system needs and system operation, thus improving overall system efficiency and increasing transparency.

## **More information**

For more information, please see the Market Renewal Fact Sheet on Operating Reserve Reference Price (#7).