

Single Schedule Market Pricing Issues

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**Phase 1 - Session 2
Introduction**

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INTRODUCTION

The IESO is changing to a Single Schedule Market (SSM) design for its electricity market pricing.

- The SSM would be paired with a financially binding day ahead market (as well as other changes, such as the introduction of a capacity auction).
- The day-ahead market design will be addressed in a separate stream of the Market Renewal Program.
- As context for the SSM discussion, it will be helpful to recall that the day-ahead market will commit generation and load for the following day and determine financially binding day-ahead schedules.
- The SSM design focuses on aligning pricing with schedules and dispatch.
- The combination of a financially binding day-ahead market followed by real-time dispatch requires a “two settlement system”.

The IESO's current constrained schedule for the Ontario grid will be the basis for SSM pricing.

- The “shadow prices” reported for the IESO's current constrained schedule are “raw” LMPs and not necessarily “settlement ready”.
- Because the shadow prices for the IESO's current constrained schedule are not used for settlements today, some mechanics behind price derivation may need to be changed to produce LMPs appropriate for SSM settlements.
 - Each of these changes has been assigned to a “Module”, and is listed as a Phase 1 SSM topic.
 - The topics will be presented in terms of how they would alter the status quo of today's constrained schedule and unconstrained pricing model.

Most of the changes to the status quo would occur by introducing a new “pricing run” or “pricing pass” into the dispatch engine, running after the current constrained schedule.

- The new pricing run would mimic the constrained schedule, except where specific modifications are made to produce settlement ready prices.
- The pricing run processes the raw data from the constrained schedule and produces constrained prices reflecting the physical constraints on the dispatch.
- The SSM pricing run is fundamentally different than today’s unconstrained pricing model.
- The Modules discuss changes that could occur to the pricing run to address, for example, operating restrictions and operator actions.

The current IESO constrained schedule dispatches the Ontario grid and calculates energy and reserve prices using essentially the same methods as are employed in single schedule markets outside Ontario.

- These markets also use pricing runs to process the LMP data from the physical dispatch for purposes of settlements.
- They have addressed several issues in their physical dispatch runs (e.g., market power mitigation and pricing of constraint violations) that Ontario has not yet included in its constrained schedule because of its unconstrained pricing rules.