

# Proposed Pilot Programs and Enabling Market Rules

Demand Response Public Session #2  
July 9, 2014



- DR Pilot Program Overview
- Proposed Pilot Programs
  - Unit Commitment
  - Load Following
  - Potential Learnings
  - Procurement Highlights
- Update: July 2<sup>nd</sup> Pilot Meeting
- Proposed Amendment Summary
- Enabling Changes
- Discussion

- IESO and demand response stakeholders have been working to design and implement new DR pilot programs
- Pilot could be initiated as early as January 2015, utilizing approximately 100 MW
- Pilot Programs seek to:
  - Expand opportunities for DR to participate in the market
  - Realize greater value and economic use of DR resources
  - Explore areas of system need where DR can be a cost-effective alternative
- Participants within the pilot programs will deliver their load reduction into services that are already available

- Unit Commitment
  - Day-ahead
  - Intraday, 3 hour-ahead
- Load Following
  - Hourly
  - 5-minute
- Surplus Baseload Generation
  - Quantity of MW required to effectively manage SBG are much larger than the load likely attracted to an intra-day pilot (refer to June 3 [DRWG Pilot Discussion Material](#), slides 10-12)
  - Interplay of price, uplifts, and global adjustment makes structuring a SBG pilot difficult
  - IESO is proposing to no longer pursue this as a priority pilot

- Allows consumers to compete with generators in both the Day-Ahead Commitment Process (DACP) and the 3 hour-ahead pre-dispatch
- Operational needs similar to non-quick start generators
- Scheduled day-ahead, or 3 hours in advance to reduce consumption in real-time, similar to DR3
- Both aggregators and individual consumers have indicated that unit commitment would align with how they best operate in these timeframes
- Timeframes and operational expectations similar to the transitional DR market rules with many of the same design elements
- Baseline, measurement & verification, and settlement processes will be a part of the RFP design.

- Investigate ways to make DR resources price responsive on shorter notice and for shorter periods of time
- 5-minute: Encourage consumers to adjust consumption based on a 5-min dispatch instruction or to offer operating reserve
- Hourly: compete with intertie transactions for a fixed hourly schedule
- Increase the amount of flexible resources on the system to balance the variations that can be caused by intermittent resources such as wind or solar
- Interest from both aggregators and industrial consumers in this type of participation



- Pilots allow demonstration study for ways consumers may be capable of meeting system needs cost-competitively
- Give consumers experience in day-to-day market operations and expectations
- Allow aggregators and individual consumers to manage their own bids and offers
- Migrate towards automated processes and away from e-mail based communications

- Target implementation in Q1 2015
- Approximately 100 MW in total size
- Timelines will be constructed that allow for cost recovery by pilot participants and support the desired learning outcomes for the IESO and participants
  - ~2 years in length, but subject to further stakeholder engagement



- **SBG**
  - Pilot group encourages the IESO to continue to consider potential SBG pilots but noted that the priority should be upon exploring other pilot areas for Q1 2015
- **Compensation clarification**
  - Availability payments through RFP
  - Dispatch/utilization compensation – to be discussed
- **Dispatch requirements**
  - IESO and DRWG will discuss the balance of offer requirements against the need for actual dispatch learnings in the pilot design
- **Interaction between DR3 and pilot participation**
  - RFP will have to protect against double payment
  - There may be opportunity to participate in both areas due to the set availability hours of DR3

- Market rule amendments are required to enable Request for Proposals to compensate loads participating in pilots
- The proposed amendments seek to:
  - Enable the development of demonstration projects to test alternative opportunities for Demand Response
  - Remove potential barriers to entry by enabling rules that allow industry to incorporate DR pilot programs more quickly
  - Provide an opportunity to use practical experience to discover what type of enduring Market Rule amendments would be required

- New section 16, titled “Demand Response Pilot Programs” (DRPP) proposed to be added to Chapter 7
  - The IESO is obligated to publish parameters of any DRPP demonstration project
  - A DR participant may participate in DRPP provided they have satisfied the applicable project parameters
  - A DR participant may participate in DRPP provided they have entered into a contract with the IESO and provide services pursuant to that contract
  - IESO may refuse or remove a DR participant from the program if their participation would negatively impact reliability
  - Provision that limits any single demonstration project under the DRPP to two years.

- Amendments proposed to be added in Chapter 1, section 6.3 specifying that participants in DRPP would only be obligated to comply with the proposed Chapter 7, section 16 of the market rules
  - Permanent changes will be considered after the lessons learned through DRPP and would require further rule amendments.

- New section 4.7I, titled “Demand Response Pilot Programs” proposed to be added in Chapter 9
  - A DRPP participant shall provide settlement data, which may be subject to audit, to the IESO as specified in the contract with the IESO
  - The IESO shall send payment to DRPP participants in the timeframe and manner specified in the contract
  - The IESO may recover payments made to a DRPP participant, or a portion thereof, if an audit indicates any overpayment by the IESO
- Amendments proposed to be added in Chapter 9 to section 4.8, Non-Hourly Settlement Amounts
  - At the end of each billing period the IESO shall recover from market participants, on a pro-rata basis, or distribute any compensation or adjustments made to DRPP participants.

- It is also proposed that defined terms, such as DR pilot programs, and DR participants be added to Chapter 11
- The timing of the enabling market rules for the pilots would be aligned with the transitional DR market rules

- Are the proposed pilot timelines/program features appropriate to meet the expected learnings?
- Are the proposed market rule changes sufficient to allow for the proposed piloting?
- Are there other areas of the market rules that need to be considered?
- Please provide any questions/feedback by Wednesday July 16 to [stakeholder.engagement@ieso.ca](mailto:stakeholder.engagement@ieso.ca)