

OPA Demand Response 3 (DR3) Program

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- Status of the DR3 program
- OPA & IESO
- Dispatch Methodology
- Notifications
- Activations
- Documentation

- Program Rules and Contracts have been posted on the website
- OPA has invited direct participants and aggregators to begin signing contracts
 - Direct participant: minimum of 5 MW curtailment
 - Aggregator: minimum of 25 MW curtailment
 - Some contracts have already been signed
 - Contracts will run for 1, 3, or 5 years
- Scheduled first dispatch date: June 1, 2008

- Demand Response 3 (DR3) is an OPA program developed by the OPA with input from the IESO and other stakeholders
- OPA determines program eligibility and criteria for achieving a contract
- The IESO is providing dispatching and settlement services to the OPA through a Service Level Agreement
- IESO internal processes will be developed only in so far as they support the services that we have agreed to provide
- All external documentation for the program will be produced and maintained by the OPA
 - There will be no IESO Market Manual since it is not an IESO program

- OPA's objective is to target times when the reduction of demand has the greatest value to the province (reduced demand, reduced market clearing price)
- Separate trigger points will be defined by the OPA to target the best 100 and 200 hours (25 or 50 activation events)
- OPA's dispatch trigger for demand resources will be global adequacy.
- The OPA is currently looking at a multi-trigger approach which will include local areas.

Global Adequacy

$$\text{Supply Cushion} = \frac{\text{EO} - (\text{ED} + \text{OR})}{\text{ED} + \text{OR}} \times 100$$

Where,

- EO = total amount of available energy offered (including imports but excluding linked wheel import legs)
 - ED = total amount of energy forecast
 - OR = operating reserve requirements
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- Triggers will be reviewed regularly to ensure that the most appropriate activation events are being targeted
 - IESO will provide a recommendation to OPA on trigger levels, which OPA may accept or reject
 - OPA will publish the trigger levels on their website

- Standby notifications:
 - IESO will send standby notifications to provide participants with advance notice of the potential activation of load curtailment at one or more of their resources within the availability window
 - Will be sent either day-ahead or day-at-hand by the IESO for a DR3 day
 - Day-ahead notifications may be sent between 12:00 and 17:00 EST.
 - Day-at-hand notifications may be sent between 00:00 and 07:00 EST.
 - Standby notifications are not reflected in demand forecast

- Standby notifications:
 - May be “Fixed” or “Open” notifications
 - Fixed: Participants to provide monthly contracted MW for contracted dispatch period (4 hours)
 - Open: Participants to provide at least monthly contracted MW for contracted dispatch period, but may offer more curtailment MW or hours
 - There will be separate trigger points for fixed and open notifications

- Activations:
 - Triggers will be used to target either 100 hours or 200 hours of activation (25 or 50 activation events) per year, depending on the contract terms of a participant
 - Activation notices must be sent at least 2.5 hours before the curtailment is to begin
 - the last available time to send an Activation Notice is nominally 14:30 EST
 - 2.5 hour notice allows changes to energy bids and operating reserve offers to reflect participation in DR3 and to set accurate predispatch signals

- **Activations:**
 - Primary demand forecast will be updated to reflect demand reduction resulting from DR3 activation
 - Demand forecast will only be updated when an activation is sent
 - SSRs will be issued when the demand forecast changes by more than 1.5%
 - same as existing publishing procedure