

Demand Response 3 Integration

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- Principles for design changes to DR3
- Enhancements to DR3 program
- Current status on integration efforts and resource design
- Next steps

Principles

- Activation is better aligned with specific system needs, but consistent with existing expectations of the program as a capacity/energy shortfall response;
- Activation on an economic basis;
- Activation should be more transparent to the market to support decisions of other market participants;
- DR3 market integration with minimal or no contract changes;
- Minimize impacts to participant current operations/obligations

- Replace existing trigger mechanism
 - Supply cushion may not always accurately reflect system conditions that would signal the need to activate DR.
 - Use predispatch scheduling outcomes from market tools results to trigger notification and activation.

- Regional Activation
 - Develop and assign regions to DR3 resources and create representative resources within IESO market tools.
 - Implement triggers that allow the activation of DR3 resources on a regional basis as needed.

- Developing market tools to model DR3 resources
 - MW quantity will be contracted MW aggregated to each resource
 - 4 hour availability of resources
 - “Early” and “Late” window participation timeframes
- DR3 resources aggregated within six regions
 - When a regional resource is notified/activated, all participants within that region will receive the standby notification or activation notice

Regions – Late Window	Load (MW)
Ottawa	29
East/Toronto/Essa	172
S. Central/S.West/Georgian Bay	116
West/Long Point	31
Niagara	21
N. East	13
Region – Early Window	Load (MW)
East/Toronto/Essa	23

- New \$200/MWh trigger price
 - Assigned to aggregated regional resources to reflect the cost of energy at a different locations on the grid
- No change to standby notification and activation timelines or communications mechanism
- No changes to settlements or DR3 participants obligations (e.g. update to capacity numbers)
- New market-facing reports will be developed to show how resources are being scheduled within the market

- Standby notifications and activation notices will be sent if DR3 resources are scheduled for 4 consecutive hours
 - This will mean that shadow prices at the resources will need to be above \$200/MWh for 4 consecutive hours
- A market-facing procedure will be developed to review the trigger price and how well it signals capacity/energy shortfall conditions

- Integration of DR3 resources into pre-dispatch scheduling and notification processes will take place before summer 2014
- IESO will present to stakeholders the proposed market-facing reports through the DRWG
- Public reports on DR3 scheduling will be made available later this year