

# OVERVIEW OF POST-AUCTION REQUIREMENTS

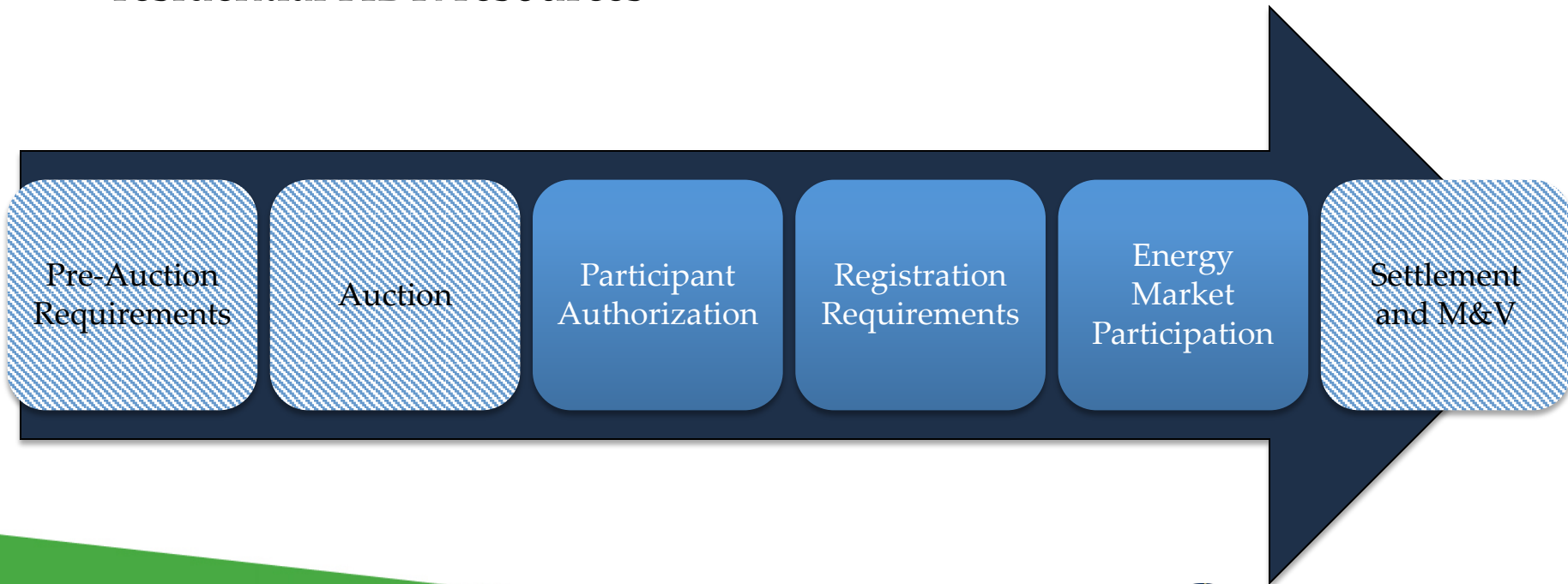
Demand Response Working Group  
Meeting #5

---

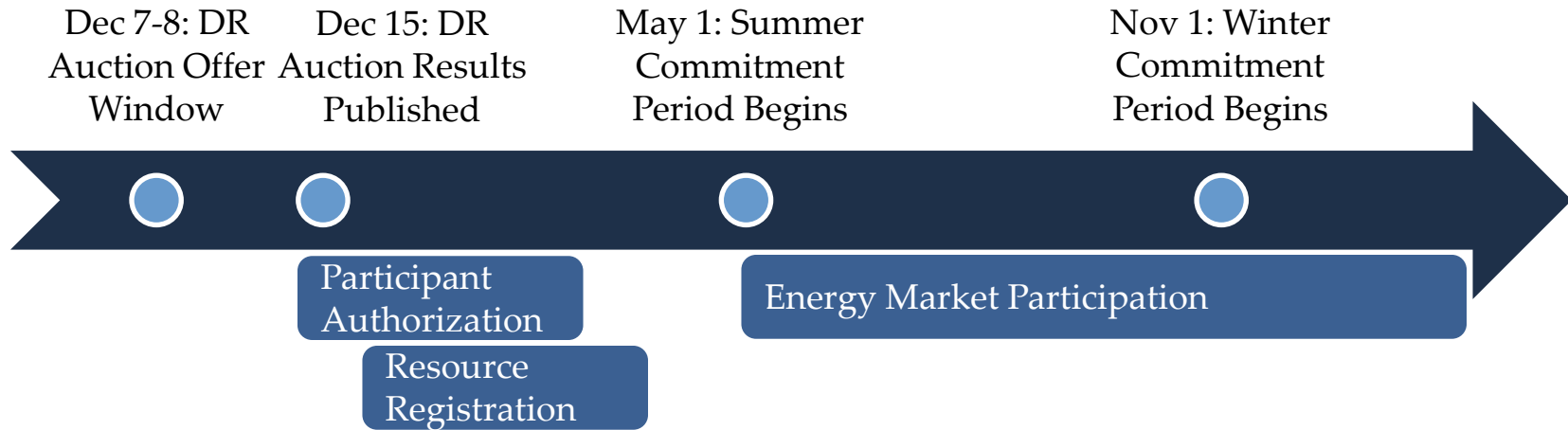
November 22, 2016

# Objective

- This presentation provides an overview of the requirements of DR Auction Participants after the clearing of the DR Auction
- Refresher for most DRWG members but includes updates for residential HDR resources



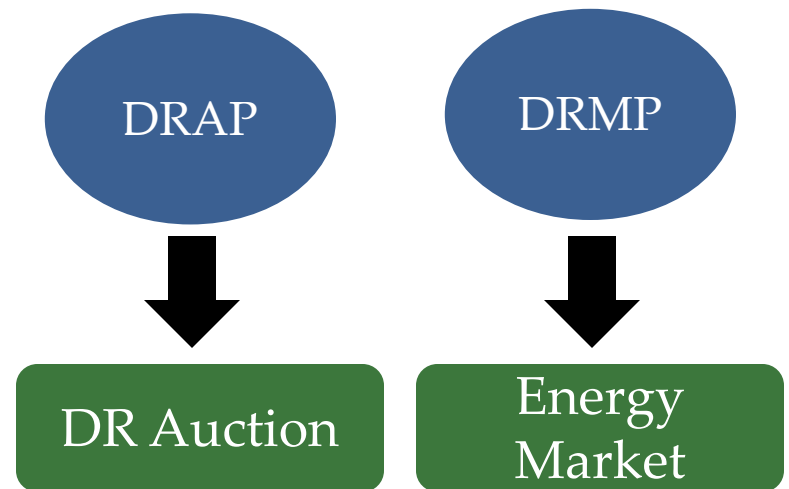
# DR Auction



- This presentation covers the post-auction requirements of DR Auction Participants that have a DR Capacity Obligation

# Participant Authorization

- Participants that clear the DR Auction must become authorized as Demand Response Market Participants (DRMP) to deliver DR into the energy market



- Suggested last day to start DRMP authorization is February 1, 2017 for the Summer Commitment Period and July 31, 2017 for the Winter Commitment Period
- One-time authorization process

# Resource Registration

- Participants will deliver on their DR Capacity Obligations in the energy market with demand response resources
  - Resources will be either physical (revenue-metered) or virtual (eg aggregated, including residential)
- Residential DR will participate in the energy market as a virtual Hourly DR resource
  - Requires new resource registration as residential and is separate from C&I virtual Hourly DR resources
- Participants without existing resources in the applicable zone will need to create them to participate in the energy market
  - Last day to start register/update DR resources process is:
    - February 1, 2017 for Summer Commitment Period
    - July 31, 2017 for the Winter Commitment Period
    - Failure to do so can result in delayed participation

# Contributor Management

- Aggregated portfolios will need to register contributors for virtual resources
  - Market Manual 12, Section 6.2 contains current contributor requirements and will be updated to include residential requirements
  - Existing resources that have a DR Capacity Obligation in the previous Commitment Period are not required to restart this process
- Contributor management is an on-going monthly process
  - C&I aggregated resources will update contributor information, *as required*, by the specified monthly deadline
  - Residential aggregated resources **will update contributor information monthly by the specified monthly deadline** including identifying the new control group members

# Contributor Management cont.

- IESO proposal for Residential DR is that contributor management registration and updates can be submitted through a spreadsheet listing all contributors, identifying:
  - Control group for the month
  - Contributor address, LDC name and acct#
- Last day to Register/Update Contributor Management is:
  - April 12, 2017 for the Summer Commitment Period
  - Oct 12, 2017 for the Winter Commitment Period
  - Failure to complete on time can result in delayed participation

# Energy Market Participation

- Participants will meet a DR Capacity Obligation through providing DR Availability over the specified Availability Window
  - Summer Commitment Period: business days 12:00-21:00 EST
  - Winter Commitment Period: business days 16:00-21:00 EST
- Availability is signalled by the participant through their hourly energy market bids
  - Participant determines the price and quantity of MW they are willing to provide to the market each hour of the availability window
  - Bids required to be submitted into the Day-ahead Commitment Process (prior to 10am day-ahead) and maintained in real-time, as required
  - Energy bid prices must be  $> \$100$  and  $< \text{MMCP}$  ( $\$2,000$ ) to be considered a Qualified DR Energy Bid



# Energy Market Participation

## *For HDR Resources*

- Residential DR participants will deliver DR capacity into the energy market as virtual Hourly DR resources (HDR)
- HDR resources submit hourly bids into the energy market and activate DR when economically scheduled to do so
- DR activations are for four-hour blocks during the Availability Window up to the quantity of the resource's bid

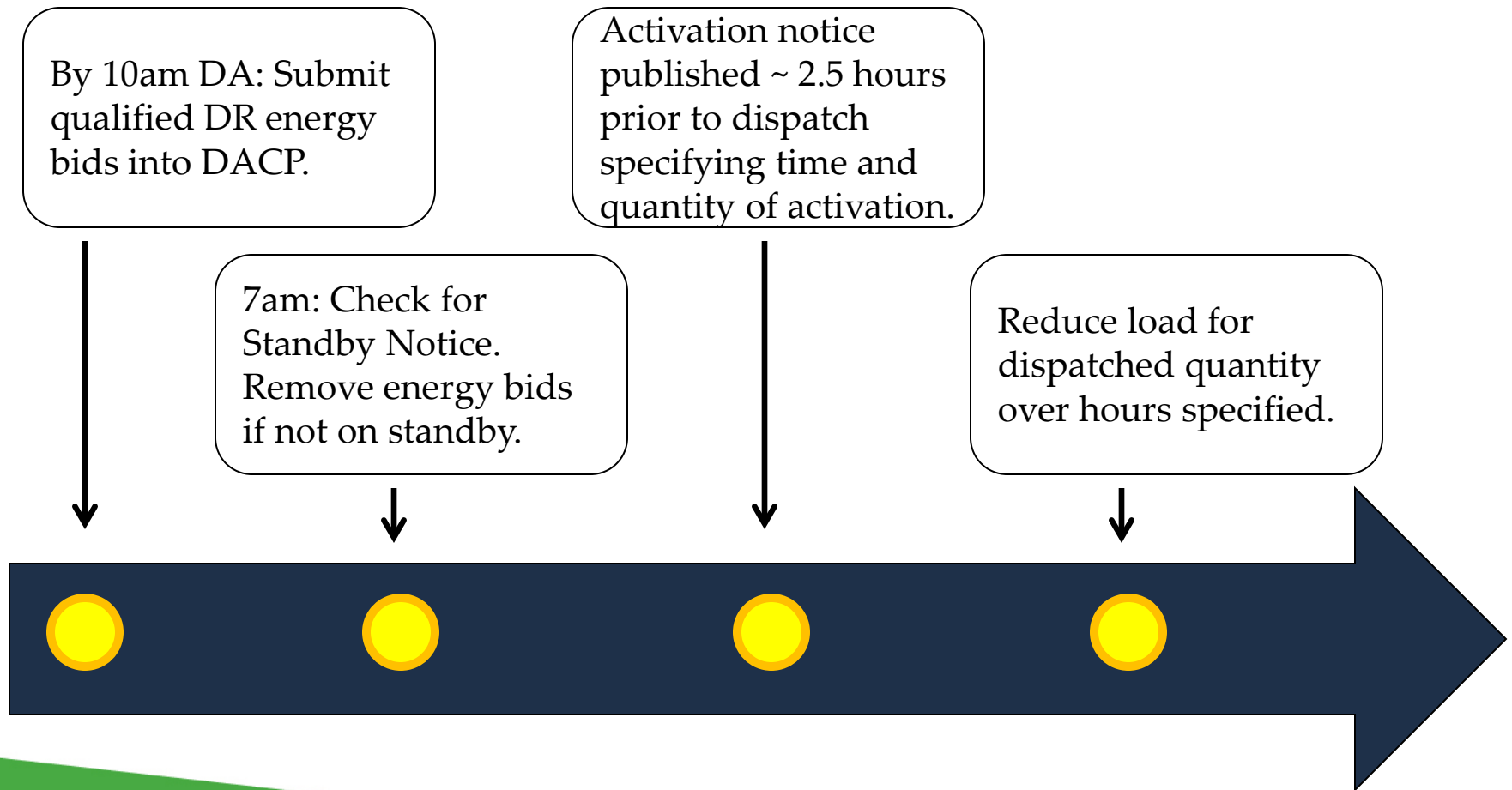
# Energy Market Participation

## *For HDR Resources*

- Standby report will be published for each DRMP by 7am EST daily to advise if a standby notice is issued for the resource
  - Standby notice is issued when a resource is scheduled
  - If no standby notice issued, resource required to remove energy bids by 9am
  - If standby notice issued, resource is to check for an activation notice hourly for the Availability Window
- Activation report will be published for each DRMP ~2.5 hours in advance of a DR activation
  - DR Activations for HDR resources are currently 4 hours in duration only
- DRMPs are required to check IESO site for the publishing of their private Standby report and Activation report, when applicable

# Energy Market Participation

## *HDR Timeline Summary*



# Energy Market Participation

## *Testing*

- DR resources can be tested up to twice during a Commitment Period to verify DR capacity is deliverable
- IESO will schedule the test activation and provide notification to the DRMP one day in advance
- Failure to perform a successful test may result in:
  - Non-performance charges
  - Further tests
  - Compliance investigation

# Energy Market Participation

## *Outage Management*

- HDR resources are required to notify the IESO of reductions of DR capacity 5MW or greater by email
- Energy bids must always reflect the resource's DR capability

# DR Capacity Obligations

- Participants with DR Capacity Obligations may be able to end their obligation early by exercising either a Buy-out or Capacity Transfer
- Buy-Out
  - A participant may buy-out of an existing DR Capacity Obligation and pay the applicable buy-out charge
  - Process outlined in MM12, Sec 8 and MM 5.5, Sec 1.6.26
- Capacity Transfer
  - A participant may transfer a DR Capacity Obligation to a qualified DR Auction Participant prior to the start of a Commitment Period
  - Rules will be effective Jan 2017 and will be outlined in MM12, Section 9

# Summary

- This presentation provides a general overview of a participant's responsibilities from the Auction to delivery into the energy market
- Refer to published Market Manuals and training documentation for specific details
- For greater detail:
  - Review:
    - Market Manual 4.2, 4.3, 5.5, 7.3, 12
    - DR Auction Training: <http://www.ieso.ca/Documents/training/DR-Auction-Workbook.pdf>
    - Timelines: [http://www.ieso.ca/Documents/DR-Auction/DR-Auction Timelines-2017 Final.pdf](http://www.ieso.ca/Documents/DR-Auction/DR-Auction%20Timelines-2017%20Final.pdf)
  - Contact IESO Customer Relations: [customer.relations@ieso.ca](mailto:customer.relations@ieso.ca)