



OCTOBER 2020

# Capacity Auction Training

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# Market Rules

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# Agenda

- Overview
- Pre Auction
- Auction
- Forward Period
- Commitment Period
- Settlement

# Overview

- Change in the electricity consumption patterns of load/end user to better match the demand for power with the supply
  - Incentivised through availability payments
- Available to both dispatchable and non-dispatchable participants

# Capacity Auction

- How to compete for a capacity obligation in exchange for an availability payment during two, six month sequential Obligation Periods
- 2020 Capacity Auction Changes
- The 2020 CA auction will be held on Wednesday, December 2, 2020

# Eligibility

- Demand Response (DR)
- Capacity Generation Resources
- System-Backed Capacity Import Resources
- Capacity Storage Resources

# Capacity Auction Periods

The Capacity Auction is divided into four major periods



# Periods

- The Pre-Auction Period begins approximately two months before the auction, when the IESO publishes a Pre-Auction Report
- The Auction Period is the length of time from when the IESO begins accepting auction offers to the time when the IESO posts auction results
- The Forward Period is the time between an auction and the first day of the obligation period
- Participants that clear the auction receive payments in the Commitment Period during the applicable Obligation Period(s) based on their total cleared capacity and the applicable auction clearing price



# Obligation Period and Availability Window

## **Summer** - May 1 to October 31

- Nine hours on business days, 12 - 9 pm EST or HE 13 to HE21.

## **Winter** - November 1 to April 30

- Five hours on business days from 4 - 9 pm EST or HE 17 to HE21.

IESO markets are on Eastern Standard Time (EST) all year round and do not change for Daylight Savings Time.

# Auction Steps

Online IESO will be the primary system to manage most auction steps

Ensure your organizations participation roles and contact roles are set up well in advance



# Online IESO

- Access– Applicant Representative, Primary, Rights Administrator
- Operations – Bids and Offers, Day-Ahead-Bids and Offers, Emergency Contact, Contributor Information Contact Role, Revenue Metering Contact, Equip Reg. Specialists, Dispatch Data Submitter, Dispatch Instruction Operator, Compliance and Market Surveillance
- Market and Finance – Capacity Auction Contact, Contributor Information Contact, Invoicing and Banking , Notice of Disagreement, Prudential Requirements, Settlement Data and File Submitter

# Timelines

There are a number of timelines to which organizations must adhere

[http://www.ieso.ca/-/media/Files/IESO/Document-Library/engage/ca/Capacity-Auction-Timelines\\_Dec2020.pdf?la=en](http://www.ieso.ca/-/media/Files/IESO/Document-Library/engage/ca/Capacity-Auction-Timelines_Dec2020.pdf?la=en)

<http://www.ieso.ca/en/Sector-Participants/Calendars/Market-Calendars/2020-Calendars>

Process	Activity Milestones	Dates
Capacity Enrollment	Suggested start date to Submit Capacity Auction Enrollment Request. <a href="#">Link to Online IESO</a>	9-Oct-2020
	Last date to complete Submit Capacity Auction Enrollment Request (including posting of capacity auction deposit).	24-Nov-2020
<b>Auction Period</b>		
Conduct Capacity Auction	Start of Capacity Auction Offer Submission Window. <a href="#">Link to Online IESO</a>	2-Dec-2020 - 09:00 AM
	End of Capacity Auction Offer Submission Window.	3-Dec-2020 - 23:59 PM
Reports	Publish CA Post-Auction Report. <a href="#">Link to Post-Auction Report</a>	10-Dec-2020
<b>Forward Period Activities (Pre-2021)</b>		
Post-Auction Registration	Suggested last date to start authorization as a Capacity Market Participant (CMP) for the 2021 summer Obligation Period.	28-Jan-2021
	Last date to start "Register/Update Capacity Resources" process.	28-Jan-2021
	Last date to complete market registration process to change attributes of energy resources in order to assign a capacity obligation.	24-Feb-2021



# Pre-Auction

# Pre Auction

- All of the necessary pre-auction information is found in a Pre-auction report
- This Pre-auction report is published at least two months before the auction at <http://reports.ieso.ca> Public Report “CA-PreAuction”
- See the Auction Timelines Report to see when the report is published

# Pre-Auction Report

Provides important information about amount of capacity per zone

Important dates

Links to IESO mapping tool

[http://reports.ieso.ca/public/CA-PreAuction/PUB\\_CA-PreAuction\\_2021\\_v1.xml](http://reports.ieso.ca/public/CA-PreAuction/PUB_CA-PreAuction_2021_v1.xml)

## Periods

Commitment Period	Season	Obligation Period
May 01, 2021 - Apr 30, 2022	Summer	May 01, 2021 - Oct 31, 2021
	Winter	Nov 01, 2021 - Apr 30, 2022

## Key Milestones

Milestone	Due Date
CAP to start and complete capacity enrollment (including posting auction deposit)	Sep 01, 2020 - Nov 24, 2020
CAP to submit Capacity Auction offers	Dec 02, 2020 - Dec 03, 2020
IESO to publish Capacity Auction results	Dec 10, 2020

## Auction Parameters

Demand Curve Elements	Summer Obligation Period	Winter Obligation Period
Target Capacity (MW)	700	0
Capacity Auction Reference Price (\$/MW-day)	413	0
Minimum Capacity Auction Clearing Price (\$/MW-day)	0	0
Maximum Capacity Auction Clearing Price (\$/MW-day)	516	0
Minimum Auction Capacity Limit (MW)	0	0
Maximum Auction Capacity Limit (MW)	1260	0
Maximum Auction Capacity at the Maximum Capacity Auction Clearing Price (MW)	560	0

## IESO Electrical Zones Mapping

[IESO Zonal Map Tool](#)

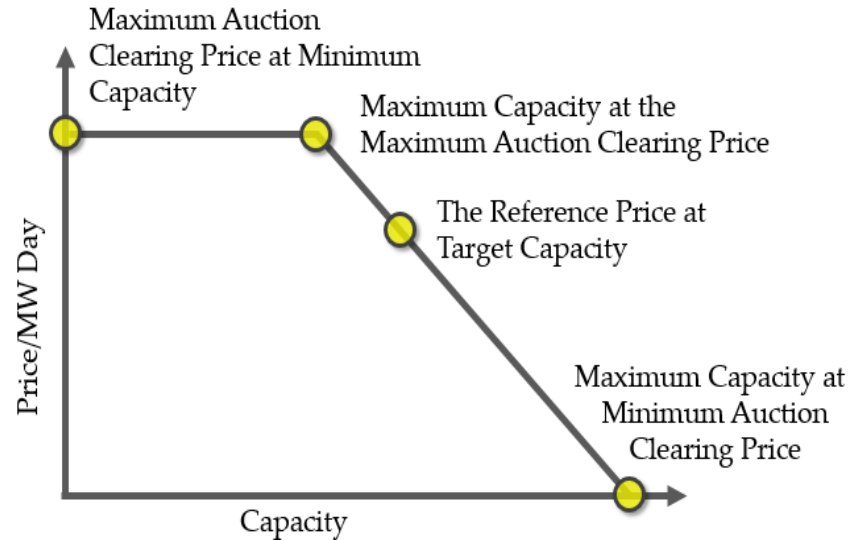
[Capacity Auction Zone Table](#)

# The Auction Demand Curve

The curve is a representation of capacity that the market is willing to buy and the price its willing to pay

Curve parameters impact slope and positioning

It's important to understand these parameters and how they impact the auction





# Registration

- Register your organization as a Capacity Auction Participant (CAP)
- If you've already participated in an auction (including the Demand Response Auction) or already authorized as a CAP, then you do not need to authorize again
- The IESO will issue a Registration Approval Notice (RAN) upon completion of the CAP authorization process

# Enrol Your Capacity

- Start the Capacity Enrollment process once you are a CAP and the Pre-Auction report has been published
- Enroll your capacity through Online IESO, including identifying the potential Capacity Auction Resource(s) (CARs) you intend on using to deliver on the potential capacity obligation
- CAPs submit information describing the capacity you wish to offer through Online IESO

# Enrollment Information

- The amount of capacity of at least 1 MW
- Commitment Period(s), Summer/Winter
- The zonal location of the contributors
- Virtual/Physical Resource, Res/C&I – HDR only
- Revenue metering status

# Physical or Virtual Resource

- **Physical Obligation (1:1 relationship with resource to obligation)**

- Generator
- Storage (only generation portion)
- System Backed Capacity Import
- Physical HDR (DR resource, this is a NDL but is registered as HDR and participates on its own)
- Dispatchable Load (DR resource)

- **Virtual Obligation (1 obligation with multiple contributors)**

- Virtual HDR (Residential) – virtual residential, smart metered contributors
- Virtual HDR (C&I) – Non-IESO metered C&I contributors AND/OR physical non-dispatchable load contributors

# Electrical Zones

10 IESO Electrical Zones

Up to 2 limits per zone:

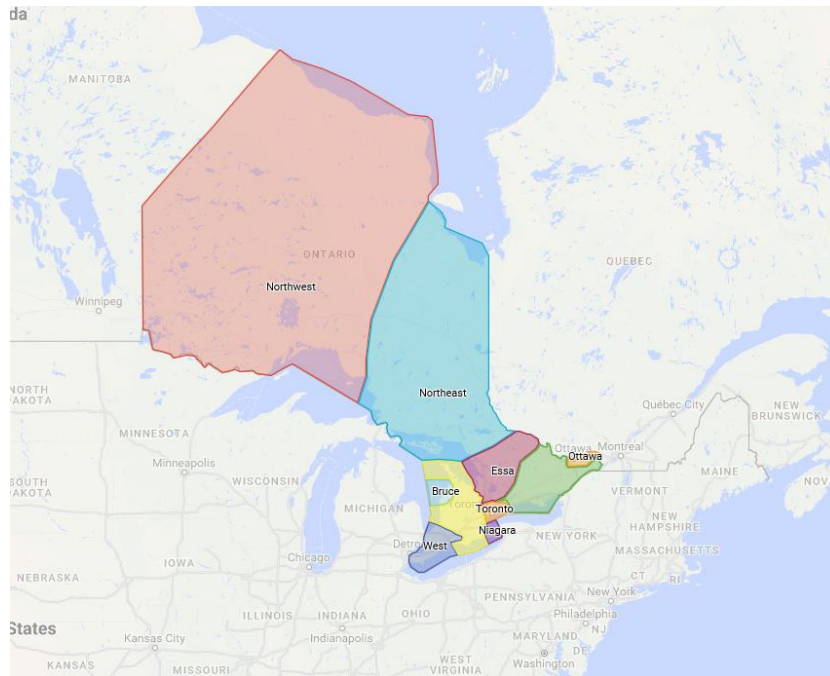
Zonal Max:

The maximum amount (MW) that can be procured in a zone.

Virtual Max:

The maximum amount (MW) of Virtual MW that can be procured in a zone

[www.ieso.ca/zonal.map](http://www.ieso.ca/zonal.map)



# Capacity Enrollment Submission Window

- Once you submit all of your capacity enrollment information you will receive a notification through Online IESO to submit a deposit
- The capacity that is qualified represents the maximum amount that you can offer in the auction
- You are required to submit the capacity auction deposit amount at least five business days prior to the start of the auction offer submission window.

# Auction Deposit

- To establish the creditworthiness of the market participant for auction activities
- A function of Qualified CA Capacity per commitment period and Maximum Auction Clearing Price per commitment period
- Letter of credit provided by IESO approved bank or cash deposit
- If unsuccessful in the auction, your deposit will be returned, upon request, within ten business days from the publication of the Post-Auction Report



# The Auction



# Offer Window

- The auction offer window opens at 09:00 EST and lasts approximately two business days, ending at 23:59 EST on the next day
- During this window, CAPs submit offer(s) on a zonal basis (i.e., can submit in more than one zone)
- December 2 and 3, 2020

# What do you offer?

- Any quantity between one MW and your qualified capacity
- First lamination must be at least one MW
- You can submit in tenth of a MW increments following the first MW
- Up to 20 Price/Quantity pairs or laminations

# Offer Example

Assume you have 5 MW of Qualified Capacity and you want to offer in;

3 MW, partial at \$200, 1 MW full at \$300, 2 times .5 MW full at \$325

#	Price (\$/MW-Day)	Cumulative Quantity (MW)	Delta Quantity (MW)	Flag
1	200	3	3	Partial
2	300	4	1	Full
3	325	4.5	0.5	Full
4	325.01	5	0.5	Full

Please fill or modify the information for the offer and laminations, then click "Submit" to submit the offer.

**Create a New Offer - 2021 / SUMMER / TASARNIA-LT.G861**

Obligation Period\*  
2021 SUMMER (May 1, 2021 to October 31, 2021)

Capacity Auction Resource (CAR)\*

<input checked="" type="checkbox"/>	CAR Name	Obligation Type	Zone	CAR Type	CAR Sub Type
<input checked="" type="checkbox"/>	TASARNIA-LT.G861	PHYSICAL	WEST	Capacity Generation Resource	

Resource Name (ID) TASARNIA-LT.G861 (107814)

Auction Capacity Enrolled (MW) 0 Remaining Auction Capacity (MW) for This Offer 0

**Laminations**

#	Price (\$/MW-Day)	Cumulative Quantity (MW)	Delta Quantity (MW)	Flag
1	500	60	60	FULL

\*Add Lamination

EXIT BACK SUBMIT

SUBMISSION WINDOW (OPEN)  
2020/01/22 01:00:00 AM EST - 2020/01/31 11:59:00 PM EST

# Auction Clearing Timeline

- The auction clearing process will start after the offer window closes
- The results will be posted no later than 5 business days after the offer window closes

# Clearing the Auction

- An auction clearing price(s) will be determined for each commitment period
- Some zones may clear at a lower price if there are more offers than capacity needed
- The tie breaker for identical offers is time precedence
- Ontario price vs Zone price



# Forward Period

# Post Auction Report

Reports will be published;

Publicly to post the prices in the auction

Privately to alert the CAP of their capacity obligation

Deposit will be returned if unsuccessful, upon request



## Demand Response Auction: Post-Auction Summary Report

Created at Dec 12, 2019 16:03:20

### DR Auction Results

Zone	Summer Commitment Period (May 01, 2020 - Oct 31, 2020)			Winter Commitment Period (Nov 01, 2020 - Apr 30, 2021)		
	Physical DR Cleared (MW)	Virtual DR Cleared (MW)	Auction Clearing Price (\$/MW-day)	Physical DR Cleared (MW)	Virtual DR Cleared (MW)	Auction Clearing Price (\$/MW-day)
BRUCE	4.5	-	268.16	4.5	-	221.83
EAST	18	66.2	268.16	18	73.8	221.83
ESSA	-	25.1	268.16	-	22.9	221.83
NIAGARA	9	20.2	268.16	11.1	20.2	221.83
NORTHEAST	15	49.2	249.59	15	51	214.15
NORTHWEST	7.3	-	268.16	32.5	-	221.83
OTTAWA	25	32.3	268.16	25	31.3	221.83
SOUTHWEST	20.4	188.9	268.16	32.1	192.3	221.83
TORONTO	72	235.7	268.16	76.5	243.3	221.83
WEST	-	69.8	160.64	-	69.8	114.35
<b>Ontario Total</b>	<b>171.2</b>	<b>687.4</b>		<b>214.7</b>	<b>704.6</b>	

### Commitment Periods

Commitment Period	Commitment Period
	May 01, 2016 - Oct 31, 2016
	Nov 01, 2016 - Apr 30, 2017

Commitment Period	Zone	Type (Physical / Virtual)	DR Capacity Obligation (MW)	Clearing Price (\$/MW-day)
Summer	NORTHWEST	Physical		
Winter	NORTHWEST	Physical		

## Forward Period

- The forward period is the period of time following an auction, to the first day participants are obligated to make their capacity available
- Authorize as a CMP
- Post Prudential - 2 months prior
- Register/Update Resources - 2 months prior
- Assign Resources to Obligations
- Manage Contributors (Virtual Only) - Must be completed by the 14th business day before the start. Will then be completed monthly by the 14th business day before the effective month.

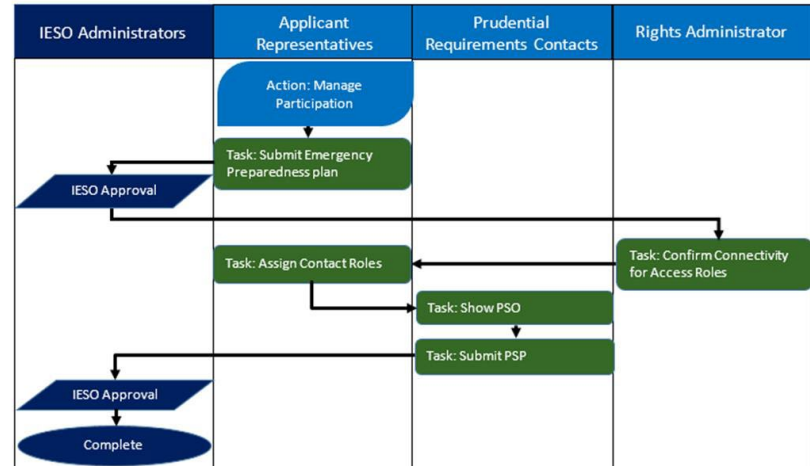


# Authorize as Capacity Market Participant

A Capacity Market Participant (CMP) is a CAP that has had a capacity obligation secured in an auction

Complete before the beginning of the month preceding the obligation period

CMP – Owner: CMP – Operator:  
CMP – Metered Market Participant (MMP) CMP – Registered Market Participant (RMP)



# Posting Prudential Support

- You are required to post Prudential Support for each Commitment Period
- You should post at least 60 days prior to a commitment period
- Prudential Support must be met through irrevocable commercial letter of credit
- Highest monthly availability payment x 50% less allowable reductions

# Assigning Resources

- A CMP that receives an obligation for a physical DR resource that did not participate in the energy market at the time of capacity enrollment (a “new” resource) must now register their facility with the IESO to meet their capacity obligation
- Assign resources to a capacity obligation for “new” Physical Resources

# Overview - Contributor Management

- The CMPs must submit their contributor information for each registered HDR resource(s); where the physical address of the contributors must be in the same electrical zone as the associated CAR
- The CMPs must register all contributor(s) within the specified submission window prior to the start date of the effective month
- A new Meter Point ID (MPID) will be generated to track monthly (virtual) contributor changes: CA1000012345
- Refer to CA Contributor Management Timelines

# Supporting Registration Documentation for Virtual Contributors

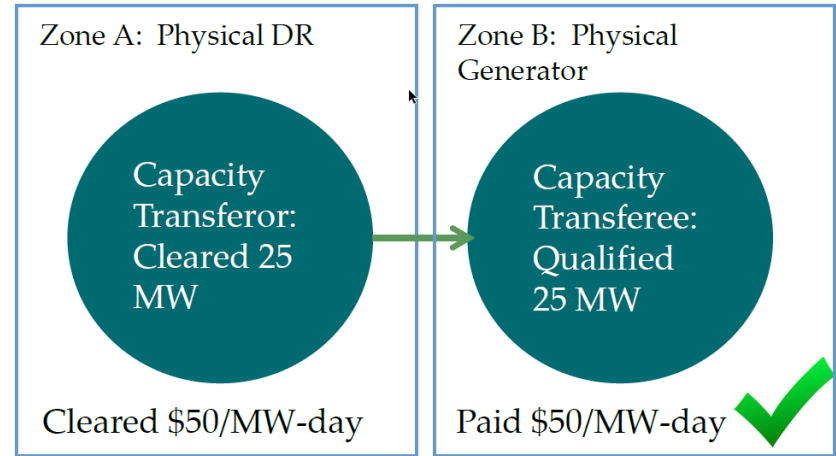
- Virtual HDR's must submit their contributor information through Online IESO within the specified submission window, but no later than the 14th business day prior to the start date of the effective month
- The LDC Statement shall be within last three months of the commitment month
- If behind the meter generation, SLD required

# Transfers

An organization can choose to request a full or partial transfer of their capacity obligation to another organization, or to itself (i.e. a different CAR in its own portfolio) in Online IESO

During the Forward Period, no later than 14 business days prior to the start of the Obligation Period

When the transfer is occurring between two different organizations, the transferee must confirm that it accepts the new/additional capacity obligation.



# Buy-outs

- The IESO processes buy-out requests within one week of receipt. At the end of this review period, the IESO either approves or rejects the buy-out request
- Capacity Obligation ID; Buy-Out Obligation Period; Electrical Zone for which you would like to buy-out; Effective Date of Buy-Out; and Amount of capacity (in MW) that you would like to buy-out ('Buy-out Capacity').
- Email Customer Relations with details the IESO processes buy-out requests within 7 business days of receipt. Pre-Auction deposit will be refunded as needed



# Commitment Period



# Energy Market

- All resources must participate in the energy market to satisfy their capacity obligation
- The availability window is:
  - Summer (May to Oct): Business Days, 12:00 to 21:00 EST
  - Winter (Nov to Apr): Business Days, 16:00 to 21:00 EST

# Offers and Bids

All offer/bid information is collectively called “dispatch data”

Day/hour

Price/quantity pairs

Ramp rates

Resource ID

# Daily or Standing Bid?

- There are two types of offers/bids:
- Daily: Applies only for one day, submitted starting at 6:00 am EST on the day prior to the dispatch day, must be submitted by 10:00 am EST on the day prior to the dispatch day
- Standing: A bid that is expected to be the same from day-to-day or week-to-week, remains effective until changed, expired or withdrawn

## Price/Quantity Pairs

- If you want to bid 30 MW in an hour and for each MW you wanted to pay at most \$500 then you would need to supply these PQ pairs

$(500,0),(500,30)$

# Ramp Rates

- Submitted ramp rates specify up/down rates and the applicable operating range, as indicated by breakpoints:
- (10,11,12) From 0 – 10 MW, 11 MW/min ramp up, 12 MW/min ramp down
- Enter a ramp rate for HDR Capacity that allows your capacity to fully ramp up and down within one interval.

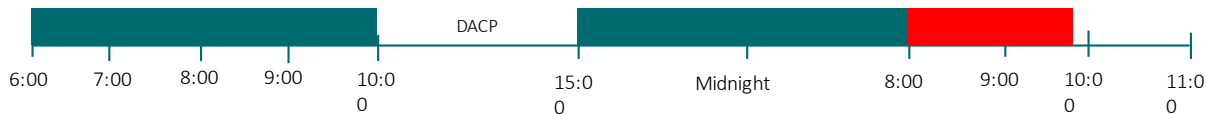
# Offer Window Example

For HE 11;

The unrestricted window is from 6:00 a.m. the day before up to 8:00 a.m.

The mandatory window is from 8:00 a.m. to 9:50 a.m.

Change is restricted during the DACP



# Offer Changes – Unrestricted Window

Existing offers can be changed until 2 hours before the start of the dispatch hour

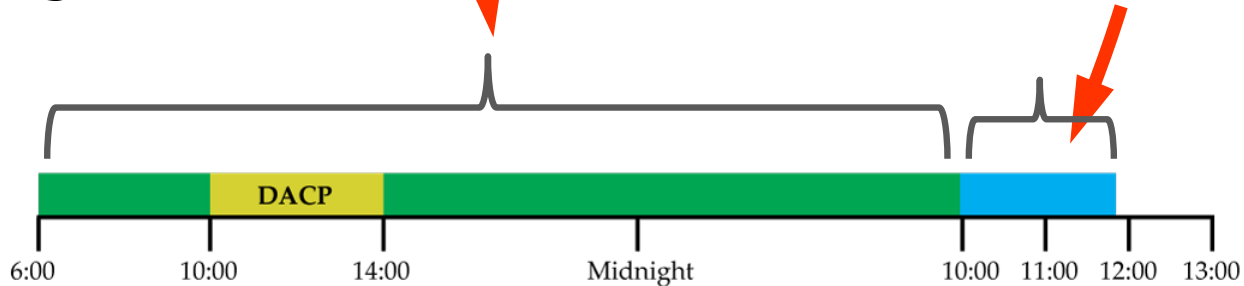
New offers can be made if: We ask for them; if you return early from or cancel an outage; if not running would violate a law, endanger safety, or damage equipment or the environment

# Mandatory Window for HE13

- The "mandatory window" is the period between 2 hours before the dispatch hour and 10 minutes before the dispatch hour

Make unrestricted changes here

Request approval for changes here





# Activations Summary

- Types: Market, Emergency, Test
- Test Activation Amount: 2 per Obligation Period
- Duration: Up to 4 Hours
- Notice:
  - 1 Hour (Dispatchable Load, Quick Start Gen, Storage, Import-PD-1)
  - 1 Day (HDR, Non-quick start Gen)
- Performance Criteria: Market Manual 12, Market Manual 5.5

# Test Activations

- Two test activations may be scheduled during each obligation period for all sources with a capacity obligation
- Failure to perform a successful test activation may result in one or more of the following:
  - Non-performance charges;
  - A subsequent test activation; and/or
  - A compliance investigation

# Availability Performance Assessment

- CMP's using either dispatchable loads or HDRs are subject to an availability performance assessment as part of their capacity obligation
- Generation resources are subject to an availability performance assessment. Offers need to be maintained in pre-dispatch while considering Generator's Elapsed Time to dispatch, Min Generation Block Down Time and 2-hour Mandatory Window
- Storage, Imports subject to performance assessment to ensure offers are available for all hours of the availability window (notwithstanding Activations)

# Communication

- Control Room:
  - Call Markets to update dispatch data within the mandatory window. Must notify the Control Room to update their bids between the time they are activated (~2.5 hours prior to the dispatch hour) and the start of the mandatory window (2 hours before the first dispatch hour)
  - State your name, IESO resource name
- General: [customer.relations@ieso.ca](mailto:customer.relations@ieso.ca)

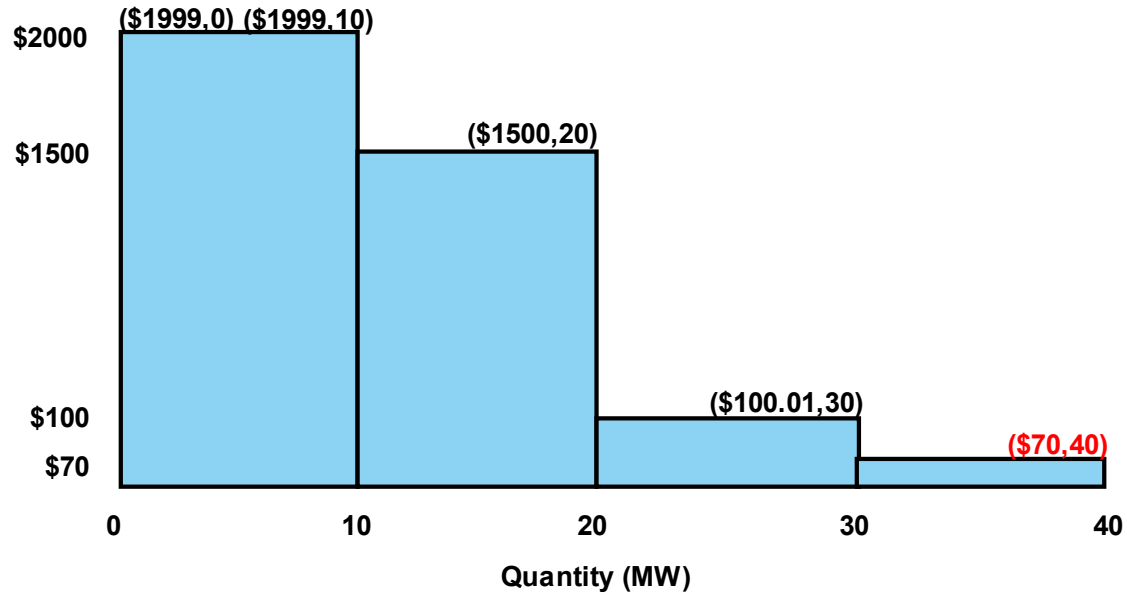


# Commitment Period – DR/HDR

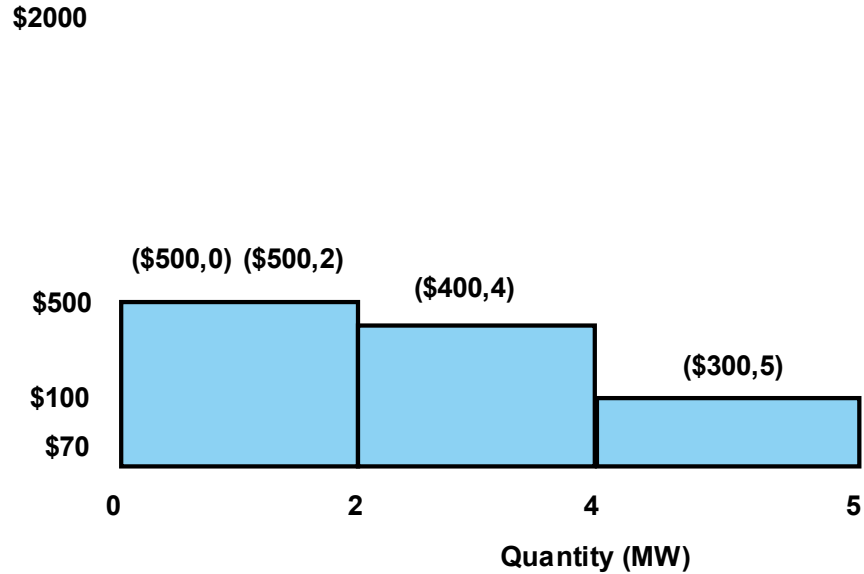
# DR Capacity

- Price your DR capacity between the maximum market clearing price minus one cent and greater than the Bid Price threshold
- Bid Price Threshold < BID < +MMCP
- \$100 < BID < \$2000

# Price/Quantity Pairs – Bids DL



# Price/Quantity Pairs – Bids HDR





# Dispatch Results - HDR

- Reports are posted at [reports.ieso.ca](https://reports.ieso.ca)
- Standby Reports are issued for each business day and can be issued multiple times for multiple resources
- Activation Reports are issued under certain conditions and can be issued multiple times for multiple resources

## Monitor For a Standby Notice - HDR

- Monitor the Standby Report for a Standby Notice from 15:00 EST day ahead until 07:00 EST on the dispatch day
- You receive a Standby Notice if issued a pre-dispatch schedule less than your maximum bid quantity for any hour in the Availability Window or when the shadow price of the resource is greater than or equal to \$100/MWh (May 2020)
- HDR resources may be activated, once a day, for 1 up to 4 consecutive hours during the availability window

## End of the Standby Notice Period - HDR

- If you receive a Standby Notice, move on to monitoring for an Activation
- If you do not receive a Standby Notice, you may remove your bids.
- If you fail to remove your bids;
- You may still be activated
- If you fail activation you may be subject to charges/sanctions

# Monitoring the Activation Period - HDR

- An Activation Notice will occur at least 2 hours in advance of an activation
- Start monitoring at 10am EST and stop at 6pm EST. If you are not activated you do not need to remove bids
- Activation reports are issued when the pre-dispatch schedule is less than the resource's total bid quantity for 1 up to 4 consecutive hours of the availability window on the dispatch day
- Includes only HDR resources that are activated

## Activation types - HDR

- In-market – price based trigger (PD-3 shadow prices > Bid)
- Emergency – Result of Control Room actions to manage an Energy Emergency Alert Level 1 (EEA-1)
- Test – to demonstrate capabilities

## Bid Revision After Activation - HDR

- After the initial activation hour, CMPs can call the Control Room to change their bids for the rest of the activation hours
- For any quantity, capacity market participants whose HDR resources received an activation report with an activation notice on the dispatch day are required to notify the IESO Control Room by telephone as soon as practical if they are unable to provide their activation amount.

## Bid Changes - HDR

- Can not change offers/bids after the close of the mandatory window
- If a facility becomes unable to meet its activation/dispatch instructions, participants need to:
  - Contact the Control Room
  - Update bids for future hours if the problem is expected to persist

## Non Performance Events - HDR

- Capacity market participants with an hourly demand response resource that have a capacity obligation are required to maintain records of all reductions to demand response capacity of 5 MW or greater during an obligation period



## Test Activations - HDR

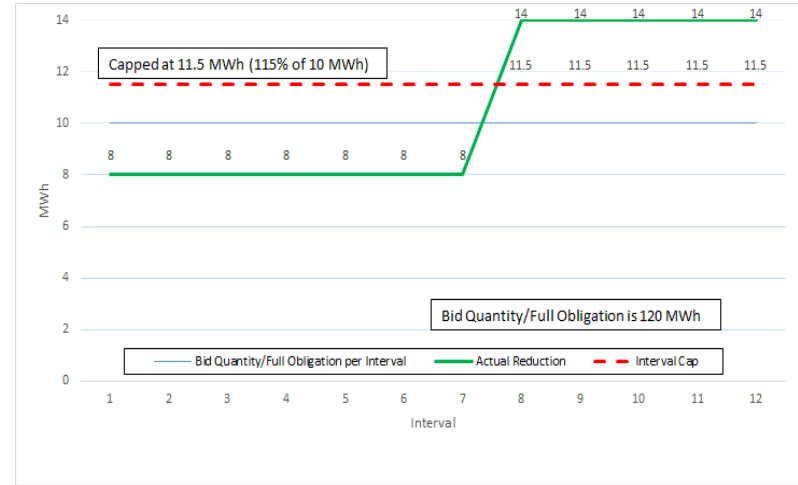
- When tested/activated Demand Response Resources are required to demonstrate a reduction in energy during the availability window
- An HDR resource that successfully delivers its full capacity obligation during a four-hour test or four-hour in-market activation will be subsequently tested for reduced duration
- The IESO has posted scenarios that outline testing practices for DR resources on the DRWG webpage

# Assessment Criteria - HDR

## Operational Assessment

Performance of an HDR resource means the capacity obligation for the HDR resource is delivered for each hour of the activation period within a 15% dead-band (e.g. at least 85% of the capacity obligation must be delivered)

May qualify for reduced testing



Interval	1	2	3	4	5	6	7	8	9	10	11	12	Total	Percentage of DR Reduction Target
Bid Quantity/Full Obligation per Interval (MWh)	10	10	10	10	10	10	10	10	10	10	10	10	120	
Actual Reduction (MWh)	8	8	8	8	8	8	8	14	14	14	14	14	126	105%
Reduction Recorded for Test Assessment (MWh)	8	8	8	8	8	8	8	11.5	11.5	11.5	11.5	11.5	113.5	95%

## Measurement Data - HDR

- DR Resources with no IESO meter must submit measurement data to the IESO which is used for settlement on activation months
- Failure to submit measurement data (monthly and historical for C&I, or when activated for Residential) by the applicable deadline will result in an Administration Charge for the entire month
- Common Formatting Errors: Leading/Trailing text spaces, midnight 24:00, YYYY/MM/DD

## Missing Measurement Data – VEE Process

- If a participant is unable to obtain data for a full period for issues outside of CMP's control a new Validation Estimation and Edit (VEE) process is available
- CMP to submit 'Measurement Data Control Sheet' with each Measurement Data Submission identifying contributors with VEE data

# Measurement Data - Processing Data Files

- The IESO will process all measurement data submissions and notify participant of any data errors by the 4th business day before month end.
- The participant will then have up to 2 business days to correct and resubmit a revised measurement data file.



# Settlements

# Settlement

- Settlement of Capacity Obligations begins upon completion of required registration activities
- Monthly settlements settled at month-end of the following month
- i.e. May 1st to 31st trading days will be settled on June 30th PSS (published in July)
- Settlement timeline as per existing Physical Settlement Schedule and Payments Calendar (SSPC)

# Availability Payment (CT1314)

- Participants with Capacity Obligations will receive a monthly Availability Payment calculated as follows:

$$\sum_{h=1}^n CCO_k \times CACP_h$$

'h' is an hour within the hours of availability for the month

'n' is the number of applicable hours x # of business days in the month

CCOk is the Capacity Obligation (MW)

CACP is the normalized hourly Auction Clearing Price (MW-day)



# Out-of-Market Activation Payment

- Test: \$250/MWh
- Emergency Operating State Control Action: Based on Bid – HOEP x hours of curtailment

# Non-Performance Charges

Non-performance charges promote compliance with CMP Capacity Obligations

Four types of non-performance charges may apply:

- Capacity Charge

- Availability Charge

- Administration Charge (where applicable)

- Dispatch Charge (where applicable)

# Capacity Charge

- Capacity charges are settlement charges applied to capacity market participants for non-performance of capacity delivery
- For HDR resources, failure to deliver capacity when activated would result in a Capacity Charge. Missing measurement data or contributor information submissions will also result in a Capacity Charge.
- For Dispatchable resources, failure to deliver on a test activation would result in a Capacity Charge
- Non-performance or not delivering capacity in the energy market will result in a Capacity Charge equal to one month's Availability Payment

# Availability Charge

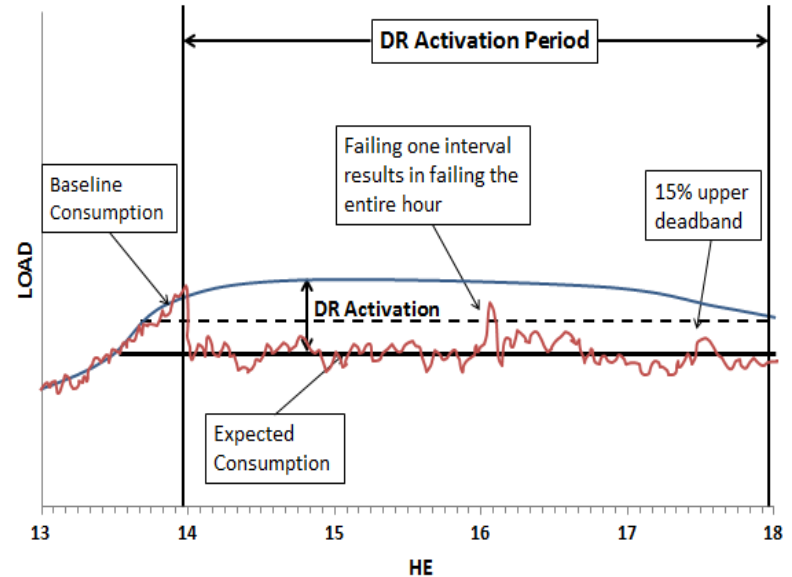
- Availability charges apply when CMPs fail to submit their demand response energy bids or energy offers, as applicable, for the day-ahead commitment process or in the real-time market for auction capacity up to their capacity obligation
- Calculated each business day
- $Availability\ Charge = \sum_{h=1}^n -1 \times \text{Max}(0, CA\ Capacity\ d - CA\ Bid\ Qty\ h) \times Availability\ Rate \times PF\ h$

# Administration Charge

- This charge applies only to hourly demand response resources with contributors not revenue-metered by the IESO
- DR Resources with no IESO meter must submit measurement data to the IESO which is used for settlement
- Failure to submit measurement data (monthly and historical for C&I, or when activated for Residential) by the applicable deadline will result in an Administration Charge for the entire month

# Dispatch Charge

The Dispatch Charge is used to ensure a C&I HDR resource is compliant to dispatch instructions



## Audits – Virtual Resources

- CA Audits ensure Balance, Consistency, Efficiency and Transparency
- The CMP is required to provide to IESO;
- 3 months of contributor meter data (audit month and the two previous months)
- LDC statements for each contributor for the 3 month period

# Settlements Data Files Report

- Because the CA settlement lags behind the normal settlement process by one month, the real-time market does not include all the data participants need to reconcile their CA settlement
- The CA Settlements Data Files Report supplements the other settlement data files to ensure that CA participants have all the information they need



# Notice of Disagreement Process

- If you disagree with a settlement amount on your PSS, you may submit a notice of disagreement within four business days after the statement has been issued
- Notice of Disagreements are submitted using the Online IESO

## Settlement – Payment Dates

- Capacity Obligations are settled on the Preliminary Settlement Statement (PSS) of the last day of the next month
- E.g. May obligations, settled on June 30th, invoiced mid-July
- Payment Dates:
- Payment to you, expect payment within four business days following the invoice
- Payment to the IESO, required to pay within two business days following the invoice

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# Thank You

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