Meeting Summary
UCAP Discussions – Storage

Meeting date: June 28, 2021
Meeting time: 9:00 am
Meeting location: Microsoft Teams Meeting

Chair/Sponsor: Ryan King
Scribe: Nicole Kosonen

Informal Working Group Discussion

Purpose

A series of resource-specific UCAP discussions were hosted by the IESO in order to review in more detail and in an informal setting with stakeholders, initial proposals for resource-specific UCAP methodologies that were presented to stakeholders at the May 28, 2021 Resource Adequacy engagement webinar.

Attendees

Abdi Mohamed	Heather Sears	Mike Zajmalowski	Sarah Griffiths
Allen Freifeld	Jason Rioux	Nicole Kosonen	Sarah Simmons
Alvin Zhang	Jennifer Jayapalan	Paul Luukkonen	Tanner Behrend
Courtney Conway	Jennifer Xu	Paulo Antunes	Utilia Amaral
Dale Fitzgerald	Karen Miller	Rahul Mittal	
David Mitchell	Laura Zubyck	Rob Coulbeck	
Fahad Rashid	Leonard Olien	Rob Sinclair	
Garry Spence	Mark Hartland	Ryan King	

Theme: Peak Shape

- How does the load shape on a high demand day (system peak) compare to the 4 hour availability requirement? Is the peak historically flat (lasting for 4 hours or more) or "peakier" (spiking for 1 or 2 hours)? If this data were available, it could help inform the availability requirement.
- Request made by participants to post/share data on peak load and change in load within availability window.

- If system is constrained for 1 or 2 hours a day, IESO could be procuring more capacity than necessary if 4 hours is used as the availability requirement. Similarly, if it is longer than 4 the IESO won't be procuring enough.

Theme: 4 Hour Requirement

- Generally, participants asked for more information to understand the 4 hour criteria.
- If UCAP is going to be used in future procurements (medium and long term), recommendations made against making the duration criteria (e.g. 4 hours) a fixed number in the formula. This would enable the duration to be changed as appropriate, depending on the drivers for future procurements / auctions.
- Would the IESO consider procuring shorter or longer duration resources / diversifying capacity products? Current OR market given as an example, with 10 and 30 min spinning.
    - *IESO responded that any type of resource can participate, but benchmark of 4 hours will be used.*
- Clarity requested regarding 4 hour requirement for other resources (or lack of requirement) and need for explicit requirement for storage versus other resources.
    - *IESO responded by indicating that the four our capability requirement needs to be part of the methodology for storage to ensure duration is reflected –this requirement is similar to what is done in other jurisdictions. For testing purposes, all resources can be asked to run up to 4 hours.*
- IESO design principle is to find a balance between system needs, operability and cost.
- 4 hour requirement will have impact on a storage resource's value.
- Participant clarified, and IESO confirmed, that the UCAP amount a resource qualifies for is the amount the resource can deliver over 4 hours. A resource can still qualify if it can't deliver for 4 hours, but the UCAP value will reflect this.

Theme: 5% EFORd

- Participants requested more information regarding the basis for 5% as the EFORd value to be used.
    - *IESO noted there is limited data on historical performance.*
- Going forward, historical data could be incorporated into EFORd as more is available.
- Inquiry as to possibility of participants submitting technical info such as design specs, or operations of same technology in different jurisdictions that may demonstrate a different EFORd.
- Would planned outages be included in future calculations of EFORd?
- IESO asked to consider what forms of outage might exist for distribution connected storage that are out of the participant's control, such as a network outage, and what work could be done in the future to work with LDCs for improvement.

Theme: Comparison to ICI

- ICI program requires participants to offer only 1 hour, a 4 hour requirement does not exist.
- Participants expressed that storage can offer more MW and more responsiveness than ICI, so there seems to be a discrepancy between the goals/benefits of the ICI program and the 4 hour requirement.
- Recommendation to have resources submit testing data, instead of or in some combination with historical data.
    - *IESO noted that the ICI program is a government program designed around the payment of the Global Adjustment, not explicitly designed for capacity requirements, and the IESO does not control the rules of its operation.*

Theme: Data from Existing Storage Projects

- What does the data from current storage projects in Ontario suggest on outage rates? Request made to post this data.
    - *IESO noted that data may be confidential given previous contract structures.*
    - *IESO Noted that current pilot projects haven't been operating in the market as merchant and their operation has been dictated by different incentives that may not make them a relevant comparison.*
- Recommendation to use outage data like MISO, basically develop an EFORd for hydro.
- IESO could combine testing and outage data.

Other

- Methodology for future auctions will be refined as more historical data becomes available.