BTM Workshop Chat History:

November 24, 2020 9:55 AM from Linnan Cao to everyone: For everyone's information, event materials (agenda, slides, and a "factsheet") are sent out to service lists R19-11-009, A17-01-012 and R.13-09-011 yesterday afternoon. The materials, along with the workshop recording and copies of chat and Q&A history will be published onto the RA history website after the workshop within 1-2 days. If you are not part of the service lists, and would like the materials now, please send me an email at LINNAN.CAO@cpuc.ca.gov

November 24, 2020 10:00 AM from Linnan Cao to everyone: If people would like to be added to a distribution list or service list for future, please email the docket office and request to be added to the specific proceeding numbers. docketoffice@cpuc.ca.gov (e.g. please add me to R.19-11-019)

November 24, 2020 12:39 PM from Luke Tougas to all panelists: Question for Delphine: The CAISO understandably desires to have as much visibility as possible of these BTM hybrid resources; however, the CAISO has stated on numerous occasions that the current number of PDR resources is slowing down their market settlement systems. Would they be able to manage a potentially large number of BTM hybrid resources?

BTM Workshop Q&A Session for BTM RA capacity value workshop

Session number: 1464654461 Date: Tuesday, November 24, 2020 Starting time: 9:09 AM

 $\square$  -Siva Gunda - 9:10 AM Q: Good morning and good luck with the event everyone. Priority: N/A- $\square$ 

□-J McAllister - 9:29 AM Q: Andrew McAllister here Priority: N/A-□

□-Samantha Reifer - 9:42 AM Q: Where do we find the cpuc incentive fact sheet if we didn't receive it before the workshop? Priority: N/A-

-Linnan Cao - 9:47 AM

A: Hi Samantha, it is sent out to service lists R19-11-009, A17-01-012 and R.13-09-011 yesterday afternoon. It will be published onto the RA history website after. If you are not part of the service lists, you can send me an email at LINNAN.CAO@cpuc.ca.gov-

□-priya sreedharan - 9:52 AM

Q: Will the slides be made publicly available and if so can you please share the link? Priority: N/A-

-Simone Brant - 9:55 AM A: answered in chat-□

□-Gabriel Petlin - 10:20 AM

Q: It would be helpful to understand the primary regulatory, policy and market barriers to using the DERP model. My understanding is to date there are no active DERPs and it would helpful to understand why that is and what it would take to enable DERP. Priority: N/A-

-Linnan Cao - 11:32 AM A: This question has been answered verbally.-□

□-Jin Noh - 10:29 AM Q: Jill, thanks for the refresher. Can you elaborate on some of the history of the 24x7 participation requirement for DERP? Priority: N/A--Simone Brant - 11:30 AM A: This guestion has been answered verbally.-□

□-Michael Alcantar - 10:32 AM Q: Would the CAISO comment on the limited or restricted participation from the many existing customer generation distributed resources in engaging in the CAISO market particularly with the apparent need for existing and new resources for RA and emergencies. Priority: N/A-□

□-Michael Alcantar - 10:34 AM Q: What barriers to entry or failure of sustaining pricing has the CAISO considered related to participation of existing DER resources? Priority: N/A-□

 Fangxing Liu - 10:41 AM
 Q: Hi Jill, can you elaborate on the challenges of no value to determine an RA capacity value for DERAs. How is RA value for DERAs different from that for DERs?
 Priority: N/A--Simone Brant - 11:19 AM

A: This question has been answered verbally.-

□-Dave Fribush - 10:52 AM

Q: If a DER is going to participate for multiple years under PDR, does the baseline reset at some point so that the load reduction provided by the DER no longer gets credit for load reduction due to a baseline reset? Priority: N/A-□

□-Lorenzo Kristov - 10:53 AM

Q: Jill - A few years ago CAISO developed rules to enable DERs to get deliverability status under streamlined process that did not require new deliverability study. Is that available for a DERA? Priority: N/A-

-Simone Brant - 11:29 AM

A: This question has been answered verbally.-□

□-Anja Gilbert - 11:02 AM

Q: Are we talking about developing two different DER enablement pathways (i.e., real time rates with the CEC and direct DER participation at the CAISO)? In both cases customers would respond to real time signals but from (possibly) differenent entities.

Priority: N/A-

-Simone Brant - 11:26 AM

A: This question has been answered verbally.- $\square$ 

□-Allie Detrio - 11:18 AM

Q: For BTM microgrids that are composed of solar + storage + carb certified gen, which path would allow them to provide capacity quickest? It appears they would still have to go through deliverability study meaning 2+ yr intx. could this process be sped up? Priority: N/A-

-Simone Brant - 11:28 AM

A: This question has been answered verbally.-

□-Scott Murtishaw - 11:22 AM

Q: Can CAISO or utility panelists provide a concrete example of a circumstance in which generation from DERs would not be deliverable? Is there an existing case of a determination that DERs were not deliverable? Priority: N/A-

-Simone Brant - 11:26 AM

A: This question has been answered verbally.-

-habib maiga - 11:20 AM
 Q: is there a clear strategy to address the double counting issue for resources under NEM that would like to also be a WDAT because of their exports
 Priority: N/A-

-Simone Brant - 11:25 AM A: This question has been answered verbally.-□

□-Scott Murtishaw - 11:28 AM Q: In light of Order 2222, could CAISO modify the PDR tariff to allow resources interconnected under Rule 21 to receive compensation for exports? Priority: N/A-□

□-Greg Lamberg - 11:29 AM Q: With thousands of back-up generators in CA, it seems that one of the intentions of FERC 2222 is to allow these resources to participate in wholesale markets. Is it the intent of CA to recognize these resources to address RA shortfalls? Priority: N/A-□

□-Naor Deleanu - 11:29 AM Q: Would each individual DER of a DER Aggregation need to go through a WDAT and deliverability study to participate in CAISO markets? Priority: N/A-□

□-Jin Noh - 12:09 PM

Q: A couple questions for Lynn: (1) Can the CEC accommodate removal of DERs from LSE-specific forecasts to support more simplified incrementality assessments? Priority: N/A-□

□-Jin Noh - 12:10 PM

Q: (2) what are the rules, requirements, and processes for the CEC verification process to give it certainty to remove DER capacity-reducing impacts from forecast? Priority: N/A-

-Simone Brant - 12:51 PM A: This question has been answered verbally.-□

□-Arthur Haubenstock - 12:12 PM Q: Can you address the treatment of DERPs for RA-Priority: N/A--Simone Brant - 12:58 PM A: This question has been answered verbally.-□

□-Fangxing Liu - 12:25 PM Q: Hi Aloke, can you explain why zero capcacity value was assigned to solar + storage under SSDR? Priority: N/A-□

Luke Tougas - 12:49 PM
 Q: Question for Lynn: On Slide 30, can you please clarify what you mean when you say that CPP is not included in the CEC hourly forecast?
 Priority: N/A 
 Simone Brant - 12:51 PM

A: This question has been answered verbally.-

□-Luke Tougas - 12:49 PM

Q: le of these BTM hybrid resources; however, the CAISO has stated on numerous occasions that the current number of PDR resources is slowing down their market settlement systems. Would they be able to manage a potentially large number of BTM hybrid resources? Priority: N/A-

-Simone Brant - 12:52 PM

A: This question has been answered verbally.- $\square$ 

□-Scott Murtishaw - 12:53 PM

Q: For Aloke and Lynn, what are your thoughts on providing a demand credit for LMDR (Aloke's option 2) for the first year or two of a new resource's participation and then transition to measured impacts on peak load (current practice) for subsequent years?

Priority: N/A-

-Simone Brant - 12:56 PM

A: This question has been answered verbally.- $\square$ 

□-Matt Duesterberg - 12:53 PM

Q: Delphine - can you describe the type (and perhaps scope and scale) of data that the CAISO is looking for to generate more comfort with the reliability of these novel resources? Priority: N/A-

-Simone Brant - 12:57 PM

A: This question has been answered verbally.-

□-Scott Murtishaw - 12:56 PM Q: For Delphine, the no export rule in PDR strands a significant amount of BTM storage capacity behind the meter. What is the principal impediment to modifying PDR to allow exports? Priority: N/A-

-Simone Brant - 12:57 PM

A: This question has been answered verbally.-

□-Dave Fribush - 2:33 PM Q: With regard to incrementality, should the question be whether a resource gets paid twice for potentially overlapping services, or whether the resource would be there at all were it not for access to both revenue sources?

Priority: N/A-

□-Arthur Haubenstock - 3:38 PM Q: How can metering or telemetry requirements minimize costs and complexity, and maximize value and ease of deployment of BTMs? Priority: N/A-

□-Greg Lamberg - 3:49 PM Q: Is the intent to have gas/BESS hybrids be eligable for RA as well? THe RA revenue could address the significant costs of replacing diesel back-up generation with natural gas. The gas RA would be very valuable in that it would have multi-day duration. Priority: N/A-

□-Greg Lamberg - 3:50 PM Q: Clarifiaction: talking about BTM gas.bess hybrids Priority: N/A-

□-Dave Fribush - 3:54 PM Q: For what it's worth, my question was whether we should look at the incrementality of RESOURCE vs the incrementality of individual revenue streams Priority: N/A-

-Rachel McMahon - 3:57 PM A: Thank you for clarifying, Dave. My response - incrementality of services, aka work that the resource is doing.-□

□-Fred Heutte - 4:00 PM Q: from Fred Heutte - NW Energy Coalition - thanks for the thorough discussions . we are interested in California developments for a number of reasons, but one in particular is the impact on resources participating in the EIM and (soon we hope) the EDAM . . . Priority: N/A-

□-Fred Heutte - 4:04 PM

Q: and additionally, we hope to build partnership and coordination between California and the NW on market transformation for customer side resources -- one great example being interconnection standards such as CTA-2045 (and also OpenADR) Priority: N/A-□

□-Matthew Tisdale - 11:20 AM Q: from a process perspective, what can we learn from our last ten years of evaluating this question to ensure we are more efficient and effective going forward? Priority: N/A-□