**R.21-10-002: RA Reform Workshop Chat**

**8/31/2022**

[9:55 AM]

9:55 AM Meeting started

[10:00 AM] Alexander, Maggie (she/her)

Thank you for joining today's RA Reform workshop. Friendly reminders:

* This meeting is being recorded.
* Please mute yourself. If necessary, your line will get muted if there's excessive background noise.
* Next workshop: PRM and Test Year on Wednesday, 9/14 (note we will take next week off for the Labor Day holiday week).
* If you are interested in presenting at the following workshop, please contact the co-facilitators by COB today (8/31) and send presentation materials to the co-facilitators by Monday morning 9/12.
* If you need to find the call-in information, schedule, or contact information for these workshops, they are included in the emails sent to the service list.

[10:42 AM] Rich Viebrock

Does the storage excess capacity check have temporal considerations (i.e. must the storage resource show a charge prior to showing a dispatch)?

[10:48 AM] Doug Karpa (Peninsula Clean Energy)) (Guest)

I would think that having it populate from the database for the standard shapes would be valuable.  Storage and DR of course can't really use standard shapes, so that'd need to be input by hand.

[10:49 AM] Nuo Tang

i recall seeing a version of this where the formulas automatically populated storage into slices that's needed. that seems easier for LSEs to manage compliance

[10:50 AM] Rich Viebrock

**Nuo Tang**

i recall seeing a version of this where the formulas automatically populated storage into slices that's needed. that seems easier for LSEs to manage compliance

Agreed - such logic would be very helpful for long-term position management

[10:50 AM] Rich Viebrock

**Nuo Tang**

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Agreed - such logic would be very helpful for long-term position management

[10:52 AM] Colbert, Cathleen

**Nuo Tang**

i recall seeing a version of this where the formulas automatically populated storage into slices that's needed. that seems easier for LSEs to manage compliance

I have that recollection too. I recall providing the feedback that storage logic could be automated but that the logic needs to include max number of cycles, no continuous discharge hours, and no non-continuous discharge hours. I thought this could be input as excluding hours outside those boundaries...

[10:52 AM] Doug Karpa (Peninsula Clean Energy)) (Guest)

The issue with that is that storage would have infinite shapes in the showing, so I don't see how that would work.  LSEs are likely to use storage for shaping, so it would be impossible to have a single standard shape that would work.

[10:52 AM] John Newton

The automatic populating seems to have been part of the LSE showing tool, at least the version that we see from the (approximately) October 2021 timeframe

[10:52 AM] Doug Karpa (Peninsula Clean Energy)) (Guest)

I should say, yes, there was an early version that automatically populated storage, and that was the first thing we needed to change when we worked with it.

[10:52 AM] Nuo Tang

Doug, SCE's tool did that automatic population.

[10:52 AM] Colbert, Cathleen

**Doug Karpa (Peninsula Clean Energy)) (Guest)**

The issue with that is that storage would have infinite shapes in the showing, so I don't see how that would work. LSEs are likely to use storage for shaping, so it would be impossible to have a single standard shape that would work.

I assumed the LSEs would populate the spreadsheet with all resources first and then see the hours with gaps and then add storage and DR for those hours to meet their hourly needs.

like 3

[10:52 AM] John Newton

We also appreciate this auto populating feature as a **starting point** for populating the LSE showing.

[10:53 AM] Doug Karpa (Peninsula Clean Energy)) (Guest)

Ah.  Sounds like we're on the same page.  My sense is the same as Cathleen's

heart 1 like 1

[10:54 AM] Cristy Sanada

Workshop on CAISO compliance on 9/21 we do plan to over what values CAISO will need and how values flow into our processes

like 4

[10:55 AM] Hill, Joy (she/her/hers)

Will LSEs be able to utilize the CPUC validation logic prior to submitting our plans? (be able to look "under the hood" before uploading)

[10:55 AM] John Newton

**Hill, Joy (she/her/hers)**

Will LSEs be able to utilize the CPUC validation logic prior to submitting our plans? (be able to look "under the hood" before uploading)

I certainly hope so. We would like to see this.

like 2

[10:59 AM] Rich Viebrock

**Colbert, Cathleen**

I assumed the LSEs would populate the spreadsheet with all resources first and then see the hours with gaps and then add storage and DR for those hours to meet their hourly needs.

That's the way I see it too - although I think this will get very challenging when managing monthly RA positions for 24+ months to inform procurement decisions.

As the mix of energy generation changes in a portfolio, so too do the charge / discharge needs. Logic that automates the charge / discharge based on the underlying resource mix would eliminate tedious & manual balancing of storage charge / discharge

like 2

[11:02 AM] Colbert, Cathleen

**Rich Viebrock**

That's the way I see it too - although I think this will get very challenging when managing monthly RA positions for 24+ months to inform procurement decisions. As the mix of energy generation changes in a portfolio, so too do the charge / discharge needs. Logic that automates the charge / …

I agree. The outcome won't reflect how the resources are likely to be operated, so there needs to be comfort this is "plan". I agree this is going to be really administratively burdensome for the 12x24 framework. Automating filling out the shape to maximize the use limited resources seems necessary to make it less burdensome...

like 1

[11:02 AM] John Newton

From my vantage, the auto-population feature should not be a binding consideration, simply a courtesy to facilitate completing the showing.

like 2

[11:04 AM] Colbert, Cathleen

**John Newton (External)**

From my vantage, the auto-population feature should not be a binding consideration, simply a courtesy to facilitate completing the showing.

Agree

[11:04 AM] Sergio Dueñas

Fully agree with John Newton. Forcing automation also eliminates optionality.

heart 1 like 1

[11:05 AM] Rich Viebrock

I also think it's worth exploring if there's a way to develop logic that determines compliance without needing to show the charge/discharge of storage resources. An LSE could list all of the resources they have contracted - without specifying the specific hours that storage will be charged / discharged - and logic would look at the excess energy available, all storage parameters, and the dynamics of the hourly short positions to determine if the storage is capable of filing the short.

[11:05 AM] Nuo Tang

I think you should look at the automation logic SCE had previously. It was pretty good and will most likely result in what LSEs would show anyways.

like 2

[11:06 AM] John Newton

**Nuo Tang (External)**

I think you should look at the automation logic SCE had previously. It was pretty good and will most likely result in what LSEs would show anyways.

Agree that it was a helpful feature, as a first pass.

[11:08 AM] Scott Murtishaw

**Sergio Dueñas**

Fully agree with John Newton. Forcing automation also eliminates optionality.

It doesn't hurt to have optionality, but it seems like the need for an LSE to override the automatic population of storage would rarely arise. If the tool correctly identifies the gaps and fills them in with the storage in an LSE's portfolio, while observing all charging, discharging, and deliverability constraints, why would an LSE need or want to manually adjust it?

[11:08 AM] Nuo Tang

auto-populating data of HE1 to HE24 does not automatically eliminate optionality and would make this process much less complex from an LSE standpoint

[11:14 AM] Carrie Bentley

I missed the requirement tab discussion - anyone know - is the annual requirement 90% of load for each hour or will it move to 100%?

[11:17 AM] Carrie Bentley

They are answering this now - thanks Jaime.

[11:23 AM] Colbert, Cathleen

**Carrie Bentley (External)**

I missed the requirement tab discussion - anyone know - is the annual requirement 90% of load for each hour or will it move to 100%?

Gannon, Jaime Rose Did you mention if the 90% would be hourly now? I missed it. Sorry!

[11:26 AM] Gannon, Jaime Rose

I did not mention. But, I think that would make sense.

like 2

[11:30 AM] Doug Karpa (Peninsula Clean Energy)) (Guest)

To be honest, in a perfect world, the Clean System Power Tool, Resource Data Template and the RA showing tool would all be the same tool.  Duplicative data requests are actually a serious concern.

[11:31 AM] John Newton

**Doug Karpa (Peninsula Clean Energy)) (Guest)**

To be honest, in a perfect world, the Clean System Power Tool, Resource Data Template and the RA showing tool would all be the same tool. Duplicative data requests are actually a serious concern.

Don't cross the streams. 

laugh 1 like 1

[11:32 AM] Nuo Tang

CSP isn't reliability

[11:34 AM] Carrie Bentley

Some RA-only contracts also have daily cycle limits.

[11:34 AM] Scott Murtishaw

**John Newton (External)**

Don't cross the streams. 🙂

IRP and RA = Montagues and Capulets. Never the twain shall meet...

laugh 2

[11:36 AM] Nuo Tang

I feel like there was already a discussion at the CAISO on market vs physical limitations for use limited resources, years ago

[11:39 AM] Nuo Tang

maybe since this database isn't for the CAISO, it can reflect contractual limits and not the CAISO physical limits

[11:41 AM] Moussa, Effat A

How charging capacity presented in the sheet .?

[11:41 AM] John Newton

We eagerly await this latest workbook. Thanks Brent & SCE for putting this together!

[11:44 AM] Brent Buffington

**Moussa, Effat A (External)**

How charging capacity presented in the sheet .?

Based on the total excess capacity in each slice

[11:44 AM] Nuo Tang

Brent, did you include CAM yet?

[11:45 AM] Brent Buffington

**Nuo Tang**

maybe since this database isn't for the CAISO, it can reflect contractual limits and not the CAISO physical limits

Since it isn't a physical limitation, showing one cycle or multiple cycles will not change the MOO. Why would we limit the resources for RA purposes? CB Hall (Guest)

[11:47 AM] Nuo Tang

If memory serves, FERC rejected CAISO's request to store contractual limitations into the CAISO's masterfile.

[11:48 AM] Colbert, Cathleen

**Nuo Tang**

If memory serves, FERC rejected CAISO's request to store contractual limitations into the CAISO's masterfile.

Storage max daily cycles is not in Master FIle.

like 1

[11:51 AM] Colbert, Cathleen

**Colbert, Cathleen**

Storage max daily cycles is not in Master FIle.

Partha Malvadkar (CAISO) (Guest) CB Hall (Guest) I can see the desire to allow for contractual limits to be reflected in Master File and other negotiations with the CAISO for storage, hybrid, and co-located. The issue is that these same tensions exist for conventional resources that are required to register their physical capabilities and cannot register their contractual requirements. The market based parameters as Nuo mentions was rejected. It'll be important for CAISO to shift this policy across all resource types to avoid concerns with discriminatory treatment.

like 1

[1:00 PM] Alexander, Maggie (she/her)

Welcome back to the second half of today's RA Reform Workshop. As a reminder, we will be recording this meeting.

[1:13 PM] Nancy Rader

How do you see these showings relating to the fact that storage is required to follow CAISO’s dispatch orders to shift solar production to the hours of maximum need, which is necessary to guard against discharging when solar is producing at high levels?

[1:20 PM] Brent Buffington

**Nancy Rader**

How do you see these showings relating to the fact that storage is required to follow CAISO’s dispatch orders to shift solar production to the hours of maximum need, which is necessary to guard against discharging when solar is producing at high levels?

LSE choices for showing use limited resources will not impact MOO or CAISO operations.

like 1

[1:20 PM] Nancy Rader

Yes, but shouldn't CAISO operations inform showings?

[1:21 PM] Brent Buffington

**Nancy Rader**

Yes, but shouldn't CAISO operations inform showings?

Are you referring to expected CAISO unit commitment/dispatch or resource characteristics?

[1:22 PM] Nancy Rader

dispatch

[1:22 PM] Nancy Rader

(forgive my ignorance; subbing for Dariush)

[1:23 PM] Brent Buffington

**Nancy Rader**

dispatch

I don't think they should. If an LSE has a portfolio need in HE 2-5 it can show a 4 hour battery in those hours, even if we'd expect CAISO to use it differently. Slice of day showings not meant to be representative of actual market operations.

[1:23 PM] Ed Smeloff (Guest)

My observation is that the Inflation Reduction Act now provides the Investment Tax Credit for storage.  Thus, paired projects can charge both from the behind the POI source of generation and from the grid.  If charging is to occur from the grid it should be shown as part of load.

[1:26 PM] Nuo Tang

**Brent Buffington**

I don't think they should. If an LSE has a portfolio need in HE 2-5 it can show a 4 hour battery in those hours, even if we'd expect CAISO to use it differently. Slice of day showings not meant to be representative of actual market operations.

I think that's where exceedance would define those hourly NQC values, which I think would work for hybrids under 24 slices, but there's no proposal for exceedance for stand alone storage.

[1:36 PM] Ed Smeloff (Guest)

Many of the issues raised in this discussion suggest it could be valuable to organize a webinar for CCAs that covers the topics from various subject matter experts.

[1:48 PM] Alexander, Maggie (she/her)

Thank you all for joining! Please remember to send your request to present at the next workshop (PRM and Test Year on Wednesday, 9/14) by COB today (8/31) and send your presentation materials to the facilitator by Monday morning 9/12.

[1:54 PM] Nickerman, Luke

One logistics issue: There was a request to move the workshop scheduled for October 5th due to Yom Kippur. The facilitators met recently and decided to move this workshop to October 6th. It was also discussed that this workshop will likely address PRM issues (it's currently listed as a placeholder)