Notes from 8-31-22 RA Reform Working Group Meeting

SCE presented first (see slides). It addressed DR Resource Characteristics; the differences among Nameplate, Pmax, QC, NQC, Contract MW and ELCC; and LSE showings. It also provided an LSE Showing Validation example.

For DR Resource Characteristics, SCE said DR programs with no snap back could be treated like other use-limited resources and LSEs should choose which hours to show DR resources consistent with their capability, much like use-limited resources. DR programs with snap back (e.g., temperature-sensitive resources like A/C cycling or EV charging) without fixed shapes would need multiple candidate use profiles based on call time and duration. SCE believes it is still necessary to determine hourly ELCC as a starting point.

PCE asked why DR would be less flexible than storage. SCE replied there is a tradeoff. DR programs with snap back, if called at different hours, would have different capacity values and different amounts of snap back. If one did not want such variations, one could use one shape based on the net load peak. CalCCA asked how to handle the allocation of utility DR programs to other LSEs. Would increased load due to snap back also be allocated? Can LSEs show the increased load in any hour they want? SCE said that one could base the capacity value on the expected shape. MRP asked why snap back could not be represented by negative capacity values; it also discussed pre-cooling. ED said that if one implemented program-specific shapes for different DR programs, third-party DR has lots of resource IDs and this would require program-specific profiles for all resource IDs on the NQC list. SCE said DR is a lot like solar. Similar solar technologies in the same geographic area will have similar profiles and one could do the same for DR.

SCE said the CAISO expresses deliverability in 1 of 2 different ways for each resource. The first is as a percentage of QC. The second is a “not to exceed” level. Generic resource shapes need to be relative to some known value as a percentage between zero and one in each hour. You can mathematically convert RA contracts to a percentage of the resource to get a maximum showing amount, taking deliverability into account. (See slides for formulas.). CESA asked how this would apply to storage. SCE replied that if storage can operate every hour, every hour’s shape would be 100%.

SCE then presented a CPUC validation example using its spreadsheet. The upper left-hand part is where checks are performed. MRP asked what an LSE would input. SCE said rows 13-26, one line for each resource. The template would then extend the values to the 24 slices per day. SCE did not include auto-population in this spreadsheet but could add it to help LSEs optimize their portfolios. EBCE said it would like to see flexibility in showing for SOD and that the LSE showing tool and the CPUC validation tool should be consistent. Gridwell asked if the spreadsheet would include what is needed to pass CAISO validation. SCE said that if an LSE passes the validation test in all 24 hours in its CPUC showing, it will pass any test at the CAISO. This can further be discussed at the workshop on CPUC/CAISO interaction. ACP was concerned about validation of 11 points for each of 12 months, creating 132 risks of non-compliance. It asked how one would translate deliverability into an hourly profile. SCE referred to the bottom of slide 4. ACP said deliverability is at peak, not at all 24 hours. CESA asked how storage charging capacity requirement would be derived, especially efficiency. SCE said total MWh shown divided by efficiency. CESA asked about the hybrid check. SCE said it was in a separate sub-table. CESA asked how storage charging would affect the solar shape in a hybrid resources and asked if it was pre-determined. SCE said it would be selected by the LSE.

Vista asked a series of questions which ED translated as a question as to whether resources under construction can be included in the year-ahead 90% showing for system RA. ED said this was not proposed to change from the way it is now. Vistra asked if the compliance tool could be used for showing or for procurement guidance. SCE said an LSE could use the tool for optimization. SCE noted that this information must be submitted to the CPUC to count for RA and the CPUC has to validate it. MRP disagreed. It also asked whether the amounts listed are physical or contractual obligations, e.g., what if you contracted for one cycle per day but the resources can cycle more than that. SCE said the showing should represent what is being offered to the CAISO. The CAISO said cycles/day should be physical or contractual between the LSE and the supplier. SCE said it could be one cycle/day in a tolling agreement but a developer could sell the tolling agreement to one LSE and the RA to another. What is shown should be the RA part and should reflect what the LSE will show to the CAISO. It could offer multiple cycles/day. SCE asked if it makes sense to limit the RA showing to 1 cycle/day.

Gridwell said older RA offers had 1 cycle/day and the resource tried to manage its dispatch through bids, not outage cards, so the limitations were market-based and not contractual. This applies to RA-only contracts. Now there are more annual limitations than daily.

ED presented next (see slides). It recapped its previous presentation and added the goal of adding automation to its tools. It decided against use of the Masterfile to populate the Master Resource Database because of confidentiality issues. Instead, it will use default values and ask generators to make corrections. Then ED can compare the results to the CAISO Masterfile. If there are differences, ED will contact the generator. MRP asked if the follow-up would be needed. ED said if the 1Q23 decision concludes that additional information is needed, it will be included. The previous decision provided for a minimum number of fields. ED expects the Database will be updated annually as today for deliverability and NQC. Resources can be added to the NQC list when they come online. Vistra asked if it would be helpful to make storage efficiencies public. ED said yes. As for cycling, it will assume that all batteries operate for 4 hours per cycle and parties can provide changes based on contract values.

LSEs submitted 24-hour load forecasts. The template was posted to the RA Compliance website 8-29-22. The CEC will now go through its load forecast adjustment process. There should be dry run results in September or October.

EBCE would like to see the draft Master Resource Database shared before 1Q23 and would like to see how the pieces would fit together, i.e., how the List will flow into the showing tool. ED said it can post its draft list, but it will not be put into SCE’s tool. MRP asked if ED was working on a compliance tool separate from SCE’s. ED said SCE’s is the only tool with all the logic built in. ED does not have compliance templates that it is ready to share. It is not sure if SCE will cover all that is needed.

ED then discussed the allocation in the data base for CAM, RMR, and DR among LSEs. Outages will not affect crediting of RA, the same as today. The LSE will choose the 4 hours in which it wants to show the battery. PCE asked if each LSE would get a slice of a CAM resource and ED said yes and pointed to slide 9. ED said today an allocation reduces an LSE’s RA requirement. Alternatively, an LSE could put its allocation in as a physical resource tab as a credit.

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EBCE presented next (see slide). It said it believed there was consensus that 1) if there is sufficient energy, LSEs have discretion in allocation of energy storage discharge in SOD showing, 2) within operational or contractual constraints, LSEs have discretion to allocate generation in any hour of the SOD showing, and 3) storage can charge from co-located EO generation if there is sufficient excess capacity. PCE asked if LSEs have discretion to allocate the charging. EBCE asked if there was a charging showing or just a showing of excess capacity. CESA said there was no need to show charging in other hours, just to show excess capacity. For paired resources, there might be a showing requirement. EBCE said it makes sense not to have a charging showing since you show for one day of the month. SCE said it thinks it agrees; excess capacity to cover stand-alone storage must be RA capacity. EBCE agrees.

MRP asked if in the SCE validation tool, charging need and excess showing is on an aggregated basis. SCE asked if all the excess capacity is in one hour. SCE said if an LSE has shown excess capacity that could include some excess storage if it is all RA. MRP was not sure that made sense. CalWEA asked if the showing relates to CAISO dispatch when most needed. EBCE said the LSE showing for SOD is constrained by resource capability data base and contractual obligations. SCE said the MOO into the CAISO would not be affected by the showing and the showing would not affect CAISO dispatch.

VoteSolar said the changes to the ITC under recent legislation would mean that storage could charge from both behind the point of Interconnection and from the grid. If charging from the grid, it should be shown as part of load.

PCE asked if an LSE could show storage for more hours at lower capacity and SCE said yes. The current version of the tool only has allocation of maximum capacity so it would only be for 4 hours but a battery could be shown for more hours at a very low level of discharge.

VoteSolar suggested a seminar for CCAs that covers such issues.

MRP asked about the next PRM workshop. ED asked if it wanted a follow-up from ED regarding the new LOLE study for RA. MRP said this was important for how to convert LOLE for PRM for RA. MRP is concerned that there should be upfront agreement on the inputs for the LOLE study for RA so ED can do the study without concerns about the inputs. It does not want to delay the LOLE study run until after June 2023. ED said it would take this back and add a discussion on September 14 on the future LOLE study and what assumptions will be used. NRDC wants a discussion of monthly vs. annual LOLE at that meeting.

SCE will share its validation tool this week and the optimization next week.

MRP expressed concern that the LOLE study capture the operational aspects to make sure reliability can achieve one event in ten years.