Notes from September 29, 2022, RA Reform Workshop

SCE presented first on DR counting for SoD. (see slides). DR should have a separate contribution in every hour and be treated like a use-limited resource with a start hour, end hour and daily hourly limits. LSEs should choose which hours to show it. SCE proposed a fixed shape for each DR program. There was a discussion about pre-cooling, snapback and spillover effects on load reductions. SCE clarified that what it meant by ELCC was capacity contribution. A 24/7 DR program could have availability for all 24 hours, subject to duration limits.

SCE next presented on key elements of an LSE showing using its Excel tool (see slides). It said flexible and local RA requirements are satisfied by system resources. A single monthly NQC will satisfy local. Flexible capacity is NQC minus Pmin. Both continue as requirements and have to be available in single monthly amounts. For the test year, convert to single monthly amount with SoD hourly showing. The dashboard provides resource checks. The left-hand side of the spreadsheet mirrors current RA showings.

ED would provide shaped hourly NQC values for all resources. LSEs would put in the resources they have under contract. SCE believes a lot can be automated but the automation must be accurate. SCE said the resources were taken from SERVM. ACP asked if there would be exceedance numbers for each resource and SCE said the tool can handle exceedance by region or otherwise.

MRP asked about the optimization. SE said for each use-limited resource the model would find the 4 most deficient hours and allocate capacity to them. There could be a stacking or priority order and the optimization could be driven by that. The stacking order matters, and it is better to add use-limited resources last. For the test year, single monthly NQCs are already published; these can be translated into shapes. SCE has worked with ED on the data base. MRP said accurate data is needed and there may be a need for implementation workshops.

EBCE asked if there should be fewer or more granular resource shapes and asked if the resource profiles would be predetermined or open to the discretion of the LSEs making the showings. SCE said the CPUC would set the master data base and shape data base and both would be made public. They cannot be changed.

WPTF said one does not have to worry about use limitations for thermal plants except for UCAP-light.

NRDC asked if run-time limitations are incorporated for thermal resources. SCE said daily use limitations are incorporated but not start limits or daily energy limits for hydro. NRDC wants accurate limitations for thermal. It is concerned about market clearing where an LSE gets bids inconsistent with an ideal portfolio and about the potential for over-procurement should there be fewer types of resources. SCE said a 6-hour peaker is less valuable in its model than an 8-hour peaker. Hourly fungibility is clear in SoD but adds complexity for contracting. WPTF said we are supposed to capture daily use limitations but not monthly or seasonal. NRDC was concerned about the accuracy of what is included in SERVM.

SCE said hourly availability for thermal is captured by having a first available hour and a last available hour in the shape data base and there is a secondary check against showing in hour when a resource is not available.

SCE next presented on LOLE and PRM (see slides). The load forecast underlying LOLE modeling should be the same as used for PRM. All LOLE models build out an annual portfolio based around needs in the highest load periods. Since you want a single PRM for each month, it is most consistent to look at the PRM for the highest load month. A different modeling approach would be needed to develop monthly portfolios or monthly PRMs.

MRP said if you use the PRM from the highest-load month you will have higher PRMs in other months. Resources may not be contracted in all those months and this could cause leaning on non-RA resources. SCE agreed that the portfolio for the peak month may not be available in all months. This is an issue in the current RA program. Leaning in non-peak months is not a test year issue.

ED said it is thinking about stress testing for a single PRM and asked if stress testing could be incorporated into the model. SCE said this is a separate step and would involve an iterative process. The final requirement could come out of stress testing.

After lunch there was a panel discussion with MRP, Eric Little, ED, and CAISO. MRP discussed timelines. SCE said the presentation assumes the CAISO makes no changes. ED said there will be a Q1 2023 decision on RA Reform for the test year, not June 2023. The CAISO would need a stakeholder process to make tariff changes. There was a discussion of LSEs having to both make a test year showing under SoD and a regular RA showing. Eric noted that the current RA model is based on the ELCC methodology. The resources’ capacity values would be different under SoD. ED said that if the portfolio for current RA is different from SoD, there would be a need to fill out both templates. ED said if an LSE has procured resources for its year-ahead showing, ED is not asking it to procure different resources for the test year. Eric asked if there were enough resources to meet the SoD requirement. He was not sure and noted that solar would be accounted for differently. SCE said it and ED have looked at whether there are sufficient resources in aggregate to meet reliability needs. WPTF said there were 5 appeals on system RA compliance because of availability or commercial impracticability.

SCE asked if anyone was suggesting putting off the 2025 SoD requirement. Even if there are resource concerns, parties need to see how their portfolios would change under SoD.

SCE said there are 4 issues to be determined in the test year: 1) are there enough resources, 2) are there enough to meet a 1-in-10 reliability standard, 3) is too much procurement required, and 4) is there the right quantity of resources but they cannot be traded. This can be determined empirically. The CPUC and LSEs will use the test year showing to learn about their portfolios and learn the implementation mechanics. We need to make sure we identify all the issues that need to be resolved before SoD goes live.

The CAISO said the test year will be status quo for it. For “go live”, it will need a stakeholder process. It does not yet know what changes it will have to make or whether they will be ready for 2025.

The discussion then returned to PRM and LOLE. SCE’s PRM setting tool is a tab on its Excel file. It compared its results with NRDC’s. SCE said the NRDC tool had a better optimization for storage and there were PRM differences. NRDC said this plus adding run time limitations accounted for some of the differences.

ED staff said its modeling uses the CEC 1-in-2 load forecast and 1-in-10 reliability standard as in the IRP. It is not sure it will do a month-specific LOLE study. The summer months are of greatest concern. It wants the PRM to meet a 1-in-10 reliability standard for the entire year.

Every proposal must be in by October 6 to be included in the November 15 report to the CPUC.