



## Stakeholder Comments Template

### CAISO RA Workshop: Current Processes and Interoperability with the CPUC's Slice of Day Reform

This template has been created for submission of stakeholder comments on the CAISO RA Workshop: Current Processes and Interoperability with the CPUC's Slice of Day Reform stakeholder call that was held on June 06, 2023. The meeting presentation and meeting recording for this initiative have been posted to the Miscellaneous stakeholder meetings [webpage](#).

Upon completion of this template, please submit it to [initiativecomments@caiso.com](mailto:initiativecomments@caiso.com).

Submissions are requested by close of business on **June 20, 2023**.

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### CAISO June 6, 2023 RA Workshop on Current Processes and Interoperability with the CPUC's Slice of Day Reform

Vistra appreciates the California ISO (CAISO) holding the Resource Adequacy workshop providing an opportunity to share education and background on California Public Utility Commission's (CPUC) rulemaking 21-10-002 that adopted California Resource Adequacy (RA) reform on its system requirements and on CAISO's current processes and tools to help administer the California RA program. We applaud CAISO for starting with this type of background and education as a best practice going forward. It is Vistra's view that it is not yet clear whether there will need to be any changes to CAISO's processes related to its administration of the CPUC RA program as result of Slice of Day, also called hourly RA framework. But it appears to be clear that, based on the CPUC's Slice of Day decisions, that there are no changes to the seller's obligations for its plan submissions, must-offer obligations, or penalties as result of the Slice of Day framework.

As a threshold matter, at the workshop there was genuine confusion regarding the role of the CAISO and the CPUC with respect to the RA program, and the Slice of Day reforms. It appeared that stakeholders had many questions focused at the wrong regulator and in the wrong venue. Many of the questions and discussions should be directed and held at the CPUC and its parties, not the CAISO. Vistra suggests many

of these questions need to be discussed and answered at the CPUC. Unfortunately, the workshop discussions on whether multiple hours should be provided to the CAISO and assessed for the RA program is a decision already made by the CPUC, and thus is not a matter the CAISO has a role in deciding. This is because the CPUC decisions are clear that multiple NQC values with varying must-offer obligations (MOO) are not allowed under the Slice of Day framework and instead it determined that a single value representing a minimum four-hour availability that maintains existing must-offer obligations was the best decision for suppliers' obligations and appears to also decide that the CAISO compliance assessment should also only use a single value at the peak hour.<sup>1</sup> As such, Vistra does not believe the CAISO needs to change its systems to support Slice of Day. We believe some clarifications in the business practice manual (BPM) may be useful to ensure accurate plan data submissions.<sup>2</sup>

The majority of slice of day's impact will occur through commercial activities as the result of the CPUC compliance assessment that will assess all twenty-four hours. The Slice of Day reform replaces the CPUC's compliance review with a new energy sufficiency check, which introduces a time component to Load Serving Entities' CPUC compliance that will adjust LSE's value judgement of each resource based on the number of non-continuous and continuous dispatchable hours it may be available. System RA is likely to be differentiated based on how much energy is bundled under a MW of capacity. This impact will materialize in the \$/kW-mo price that buyers and sellers are willing to transact at in the bilateral markets. Slice of Day reform does not change seller's RA MW value based on a minimum 4-hour continuous availability requirement, but instead its bundled system RA with energy will be reflected through adjustment to the price at which the RA can transact based on the buyer and sellers view of the resource's value.

It is clear to Vistra that there is nothing in the Slice of Day decisions that would preclude the CAISO from continuing to perform its system RA peak hour check and to use the single peak hour check as the trigger for a collective system deficiency to trigger a need for Capacity Procurement Mechanism designation. This is because there are no changes to supplier obligations for the contracted NQC<sup>3</sup> as a single monthly value on the plan, and suppliers will be subject to the same must offer obligation and Resource Adequacy Availability Incentive Mechanism penalties.<sup>4</sup> The existing compliance checks are already set to apply to the Slice of Day framework.

We believe that at a minimum the CAISO should continue to perform its insufficient cumulative system capacity review to determine need for CPM, as done today. One nuance on maintaining the existing compliance assessment that needs to be explored is whether a minimum peak hour requirement across the BAA should also be used to identify CPM needs. We request that the CAISO revisit in the upcoming RA Enhancements effort the minimum system RA requirement proposal that would set a minimum

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<sup>1</sup> See Appendix – Slice of Day Decisions Summary and Citations for summary of slice of day decisions and citations to the discussion and orders that support Vistra's findings.

<sup>2</sup> E.G., new business manual language containing the expectations in Appendix A for variable energy resources to ensure the LSE is submitting the correct single value for the test year versus binding year described in Appendix A Section B.1 of D.23-04-010. The existing BPM language captures the requirement for other resources since they are required to submit the contracted MW capped at their deliverable NQC.

<sup>3</sup> This statement implicitly accepts that the NQC methodologies for some resource types will change under hourly RA framework.

<sup>4</sup> See Appendix – Slice of Day Decisions Summary and Citations for detailed support for Vistra's finding.

requirement for the single peak hour check across the entire BAA, which would allow CAISO to identify CPM if there is insufficient system capacity across BAA.<sup>5</sup>

While not directly requested by the CPUC, it would also be reasonable for the CAISO to explore whether it wants to add a second sufficiency assessment in the month-ahead time frame to perform an energy sufficiency check, and if any deficiencies are identified then to cure the deficiency through CPM. The CAISO has already adopted an energy sufficiency check under the Extended Day-Ahead Market, called the Resource Sufficiency Evaluation (RSE). Vistra commented in the CISO BAA participation in EDAM initiative that it will be critical that the EDAM perform the RSE at least two days prior to operating day (T-2) as well as on the day prior (T-1) to identify an advisory RSE failure and use the appropriate capacity insufficiency cure – CPM designation.<sup>6</sup>

The RSE functionality planned for EDAM implementation can be leveraged to perform a secondary energy sufficiency check in the month-ahead, if the CAISO believes there are sufficient benefits. To perform a month-ahead RSE for the CISO BAA, the CAISO could insert bids for resources shown on the RA plan for that month available at T-30 using the CPUC's Slice of Day requirements for each month as the RSE hourly targets and insert the shown NQC for non-variable energy resources (VER) and insert the VER MW as the product of its percent contracted, installed capacity, and exceedance factor for each hour.<sup>7</sup> The changes to perform a month-ahead using the RSE on-demand tool for CISO BAA with the narrow changes to insert the RA resources' bids and to use the appropriate Slice of Day targets are narrow enhancements to the currently planned RSE that seem feasible for 2025.

Vistra recommends this discussion move to the CISO BAA participation in EDAM as an additional scope item informed by Slice of Day framework that introduces an opportunity to extend RSE to month-ahead for the CISO BAA. Similarly, to our requests in the BAA participation in EDAM initiative already submitted, Vistra expands its recommendation that it is through CPM that curing advisory failures is most appropriately performed. Any deficiency through a month-ahead, T-2, or T-1 RSE advisory failures could result in CAISO identifying a need to potentially issue a CPM designation in either month-ahead or intra-month timeframe as result of month-ahead, T-2 or T-1 RSE advisory runs.

Vistra appreciates the CAISO consideration of our comments and are happy to discuss further.

## Appendix – Slice of Day Decisions Summary and Citations

CPUC adopted Slice of Day, or hourly RA, framework across three separate decisions that initially adopted the concept of slice of day (D.21-07-014<sup>8</sup>), refined the concept to identify a specific framework

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<sup>5</sup> See slides 5-11 for the last details on the minimum system RA requirement that needs additional development, <http://www.caiso.com/InitiativeDocuments/Presentation-ResourceAdequacyEnhancementsSixthRevisedStrawProposal-Jan152021.pdf>.

<sup>6</sup> See Vistra's comments on the CISO BAA participation in EDAM workshop, April 24, 2023, focus on response to question #3, <https://stakeholdercenter.caiso.com/Comments/AllComments/b32fe181-4578-416d-9ddf-d52b756fa0d9#org-2b37d639-6d70-4f78-806d-c27429c66ef4>

<sup>7</sup> This is Vistra's current understanding of how the LSE showing tool adjusts the VER capacity across hours, where our intent is to recommend the showing tool's methodology be adopted as a bid insertion methodology.

<sup>8</sup> CPUC Decision 21-07-014, July 16, 2021, <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M393/K334/393334426.PDF>.

of 24-hourly slices leading to an hourly RA framework (D.22-06-050<sup>9</sup>), and finally it adopted the implementation details and processes effective for the 2025 RA year with a 2024 test year (D.23-04-010<sup>10</sup>). At a big picture, the combination of the three decisions reform the RA program to bundle under the system Resource Adequacy program both a capacity and energy requirement for the Load Serving Entities, but only a capacity requirement for suppliers. The Commission intended for counterparties to continue to contract for a single, monthly contract quantity with a 24x7 must offer obligation subject to availability that can meet a minimum of four-hour continuous availability to qualify as RA.

Per the CPUC decisions, both the Load Serving Entities' Resource Adequacy plans and Suppliers' Supply Plan should continue to have the same requirements as today because the decisions did not change that the contract quantity must be submitted for each resource by month to the CAISO. The contract quantity for each month will be a single MW amount for all resources. Resources will have a must offer obligation (MOO) to offer to the CAISO under this MOO the RA capacity sold in its executed contracts for all hours across the day that it is available, with exceptions for demand response and import resources.<sup>11</sup> There will be a change in some Net Qualifying Capacity approaches (e.g., variable energy resources) that will still remain a single monthly value. For variable energy resources, the single MW value selected will change from test year to binding years, but according to the CPUC decisions will need to remain a single value in 2025 and beyond. It will be important that both LSE and Suppliers fully understand this expectation, otherwise there may be issues with validating the plans.

Vistra finds that the CPUC decisions are clear and consistent that seller's obligations are not meaningfully changing under the adopted hourly RA framework. The system RA contract will procure a minimum of four-hour availability to qualify as RA, keep all hours within a month bundled, and require a single monthly Net Qualifying Capacity value for all resources including variable energy resources. The following discussion and orders from the decisions make clear the CPUC direction in implementing the hourly RA framework:

- “No Unbundling of Attributes: Resource attributes and capabilities remain bundled across each compliance month and the existing full-capability/all-hour must-offer obligation is retained. Bundling resource attributes (i.e., system, local, flexible) and capabilities across each compliance month aligns with the existing must-offer obligation because it ensures resources that have sold capacity also have a must-offer obligation equal to the sold amount for all hours they can produce. Resources can continue to sell portions of their capacity to different LSEs (e.g., 70% of capacity sold to LSE 1 and 30% of capacity sold to LSE 2), but they cannot sell separate hourly products because that would effectively sell the same RA capacity multiple times.”<sup>12,13</sup>

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<sup>9</sup> CPUC Decision 22-06-050, June 24, 2022,

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M488/K540/488540633.PDF>.

<sup>10</sup> CPUC Decision 23-04-010, April 7, 2023,

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M505/K753/505753716.PDF>.

<sup>11</sup> While non-resource specific imports and demand response are not required to meet the 24x7 must offer to the CAISO the decision does adopt measures to manage overreliance on these resource types through keeping the demand response maximum cumulative capacity limit (D.23-04-010 Ordering Paragraph 10) and adopting additional requirements for imports (D.23-04-010 Ordering Paragraph 17).

<sup>12</sup> D.23-04-010 Appendix A, Section B.1 and Section D definitions for existing contracts and transactability.

<sup>13</sup> “Moreover, a key aspect of the 24-hour proposal is that capacity values remain bundled across the 24-hour compliance period. The bundled aspect ensures that LSEs and suppliers continue to transact for a monthly product that meets the 24-hour requirement, as is done today.” (D.22-06-050, Page 75); “The Commission agrees that a key component of SCE’s 24-hour

- “Profiles and Net Qualifying Capacity (NQC): All resources will still have a single monthly NQC value representing the deliverability adjusted peak-hour contribution. Most resource types will continue to utilize this NQC for their hourly showing while solar and wind will utilize hourly profiles. The Commission will provide three values to CAISO for each resource type whose counting methodology will change to hourly profiles under the SOD framework: (1) the maximum showing value, (2) the peak showing value, and (3) the greater of the peak hour value and a very small non-zero QC value if the peak hour value is zero. During the test year, the non-zero QC values will continue to be based on current QC methodologies as those will be the compliance values for 2024. Beyond the test year, the greater of the peak hour value and a very small non-zero QC value if the peak hour value is zero will be provided to CAISO for the non-zero QC value.”<sup>14</sup>
  - CPUC affirmed that the Net Qualifying Capacity for both dispatchable thermal and dispatchable energy storage resources under 24-hour framework would remain the existing Net Qualifying Capacity methodology using Pmax.<sup>15</sup>
- “The Commission agrees with SCE and PG&E that all use-limited resources should continue to be subject to the minimum four-hour availability requirement to qualify as RA.”<sup>16</sup>
- “It is also important to align the Commission’s and CAISO’s compliance processes at the coincident peak hour to the extent possible.”<sup>17</sup>

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framework is that all RA resource attributes (i.e., system, local RA) and capabilities are bundled across the month. The bundling component ensures alignment with CAISO’s existing monthly 24 x 7 must-offer obligation (up to the resource’s use-limitations). Bundling also preserves the value of existing contracts by alleviating the need for contract amendments and provides a simpler product to transact than an hourly product.” (D.22-06-050, Page 96-97); “Existing contracts are expected to continue without modification or with minor changes under the 24-hour framework. RA attributes must continue to be bundled and contracted resources continue to have a must-offer requirement based on their operational capability and the amount of monthly RA capacity sold.” (D.23-04-010, Appendix A, Section D)

<sup>14</sup> D.23-04-010 Appendix A, Section B.1.

<sup>15</sup> D.22-06-050 Ordering Paragraphs 18 and 20 and affirmed in D.23-04-010 Ordering Paragraphs 8 and 10.

<sup>16</sup> D.22-06-050, Page 90 and Ordering Paragraph 24.

<sup>17</sup> D.23-04-010, Page 76-77.