BUSINESS PRACTICE MANUAL CHANGE MANAGEMENT
CAISO RESPONSE TO APPEALS

I. Introduction

The CAISO followed its business practice manual change management process[1] and submitted proposed revision request (PRR) 854 to its Reliability Requirements BPM on July 30, 2015 to clarify how the CAISO planners analyze resources in the CAISO's Local Capacity Technical Study.[2] After considering stakeholder comments, the CAISO added the following language to the Business Process Manual (BPM) for Reliability Requirements:

> Tariff Section 40.3.1.1, requires the CAISO, in performing the Local Capacity Technical Study, to apply the following reliability criterion:
>
> > Time Allowed for Manual Adjustment: This is the amount of time required for the Operator to take all actions necessary to prepare the system for the next Contingency. The time should not be more than thirty (30) minutes.
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> The CAISO Planning Standards also impose this manual readjustment requirement. As a parameter of the Local Capacity Technical Study, the CAISO must assume that as the system operator the CAISO will have sufficient time to: (1) make an informed assessment of system conditions after a contingency has occurred; (2) identify available resources and make prudent decisions about the most effective system redispatch; (3) manually readjust the system within safe operating limits after a first contingency to be prepared for the next contingency; and (4) allow sufficient time for resources to ramp and respond according to the operator's redispatch instructions. This all must be accomplished within 30 minutes.
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> Local capacity resources can meet this requirement by either (1) responding with sufficient speed, allowing the operator the necessary time to assess and redispatch resources to effectively reposition the system within 30 minutes after the first contingency, or (2) have sufficient energy available for frequent dispatch on a pre-contingency basis to ensure the operator can meet minimum online commitment constraints or reposition the system within 30 minutes after the first contingency occurs. Accordingly, when evaluating resources that satisfy the requirements of the CAISO Local Capacity Technical Study, the CAISO assumes that local capacity resources need to be available in no longer than 20 minutes so the CAISO and scheduling

[1] The CAISO follows a systematic and publicly transparent BPM Change Management process that ensures consideration of all relevant information when modifying BPMs. The change management process uses a system available through the ISO public website that provides a way for stakeholders or the CAISO to propose BPM changes, comment on open change requests, and track proposed change requests. The change management process begins when the CAISO or a stakeholder submits a web-based Proposed Revision Request (PRR). After an ISO review for completeness, PRRs are posted to the website, triggering a formal stakeholder review and comment period.

[2] Terms not otherwise defined herein are used as defined in the CAISO tariff.

coordinators have a reasonable opportunity to perform their respective and necessary tasks and enable the CAISO to reposition the system within the 30 minutes in accordance with applicable reliability criteria.

Several stakeholders appealed the adoption of the PRR.[3] The CAISO responds to these appeals below.

II. Background

The CAISO is the NERC-registered Transmission Operator and Planning Authority for its balancing authority area. As a result, the CAISO bears the compliance obligation to meet the real-time operational requirements in the NERC transmission operating standards. To meet these obligations, the CAISO must make reasonable planning assumptions regarding how it can effectively reposition system within the 30-minute time period after a contingency. The CAISO conducts its Local Capacity Technical Study[4] to ensure that the system is planned such that real-time operational constraints are met.

CAISO Tariff Section 40.3 provides that the CAISO will conduct an annual Local Capacity Technical Study to determine the amount of Local Capacity Area Resources needed to meet identified Contingencies.[5] The CAISO applies methods for resolving Contingencies consistent with NERC Reliability Standards and the CAISO Reliability Criteria.[6] NERC Standards TOP-004-2 and TOP-007-0 and the CAISO tariff specify a maximum manual adjustment time of 30 minutes after a first Contingency event occurs for the CAISO to prepare the system for a subsequent Contingency.[7] The CAISO has stated on numerous occasions that in order for the CAISO to reposition the system within the NERC-mandated 30-minute window, a reasonable amount of time must be reserved for operator action and re-dispatch.[8] Based on operational experience, it is reasonable and prudent to plan for CAISO operators to have a 10 minute readjustment

[3] Appeals were filed by the Cities of Anaheim, Azusa, Banning, Colton, Pasadena and Riverside (Six Cities), the California Large Energy Consumers Association (CLECA), the Energy Division of the California Public Utilities Commission (CPUC), EnerNoc, Inc., Johnson Controls Inc., EnergyHub, Comverge, Inc., and CPower (Joint Demand Response Parties), and jointly by Pacific Gas & Electric Company (PG&E) and San Diego Gas & Electric Company (SDG&E). Six Cities, CLECA, Energy Division, the Joint Demand Response Parties, PG&E and SDG&E are jointly referred to herein as the Appellants.

[4] Terms not otherwise defined herein are used as defined in the CAISO tariff.

[5] CAISO Tariff Sections 40.3.1 and 40.3.1.1.

[6] CAISO Tariff Section 40.3.1.1

[7] CAISO Tariff Section 40.3.1.1(1).

[8] *See*, *for example*, CAISO 2014-2015 Transmission Plan, p. 90 (http://www.caiso.com/Documents/Board-Approved2014-2015TransmissionPlan.pdf); *See also*, Rulemaking 13-09-011, CPUC Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State's Resource Planning Needs and Operational Requirements, Testimony of Neil Millar (served May 6, 2014), p. 6, lines 1-9 ("After a contingency, system operators have 30 minutes total elapsed time to ready the system for the next contingency. There are two ways to address this requirement. The first way is to have resources that can respond sufficiently fast that the need for the dispatch is determined, the dispatch is communicated, and resources respond, all within 30 minutes. The other way is to develop demand response resources that have a slower response time, but that can be dispatched any time the ISO forecasts system conditions that would require the load reduction if the contingency were to occur.")

period to identify the nature of the Contingency, assess system conditions, re-dispatch the necessary resources and allow them sufficient time to ramp to address the Contingency and maintain reliability in accordance with the reliability standards within 30 minutes.

The CAISO sought to clarify for stakeholders its requirements under NERC standards and CAISO Reliability Criteria and the need to account for these requirements in the Local Capacity Technical Study, as required by the CAISO tariff. The CAISO issued PRR 854 to provide the necessary clarification.

III. Discussion

Appellants raise a variety of procedural, substantive, and miscellaneous issues regarding the proposed clarification. Section III of this response addresses all issues raised by Appellants.

A. Procedural Issues

Appellants argue that the 20-minute local response requirement should be addressed through a stakeholder process and/or a tariff amendment, not a BPM process. Several appellants also suggest that the CAISO's adoption of the PRR "undermines" or "infringes upon" the CPUC's authority to set resource adequacy requirements.

1. Neither a Stakeholder Process nor Tariff Amendment Is Required.

Appellants ignore the express language of the CAISO tariff, which contemplates that assumptions in the Local Capacity Technical Study, such as a 20-minute response requirement, are to be included in the BPM. In that regard, tariff section 40.3.1 provides that

> [t]he CAISO shall collaborate with the CPUC, Local Regulatory Authorities within the CAISO Balancing Authority Area, federal agencies, and Market Participants to ensure that the Local Capacity Technical Study is performed in accordance with this Section 40.3 *and* ***to establish for inclusion in the Business Practice Manual other parameters and assumptions applicable to the Local Capacity Technical Study***. (emphasis added)

The CAISO addressed the need for a 20-minute local response time in several forums, including its transmission planning process, CPUC proceedings and this PRR process. In the 2013-2014 transmission plan the CAISO noted that in determining the effectiveness of demand response in meeting local area needs the only resources considered were those with "fast response curtailment (20 minutes) and curtailment durations of 4 hours."[9] In the 2014-2015 transmission plan, the CAISO more explicitly addressed the resource characteristic needs for fast responding resources. The CAISO stated that to be locally dispatchable, demand response resources would need to "have the necessary characteristics to be applicable as transmission

[9] CAISO 2013-2014 Transmission Plan, p. 94 (http://www.caiso.com/Documents/Board-Approved2013-2014TransmissionPlan_July162014.pdf).

mitigation resources – ***in particular, a fast-enough response to dispatch instructions from the ISO (not exceeding 20 minutes).***"[10]

In response stakeholder comments in the 2014-2015 transmission planning process, the CAISO specifically discussed the ongoing efforts to consider preferred resources, including demand response, in meeting local capacity requirements. The CAISO stated:

> The experience to date has highlighted the broader range of issues that need to be considered in applying preferred resources – especially use-limited resources such as energy storage and demand response – in order to provide effective alternatives to conventional solutions. These include, for example, consideration of the various uses preferred resources may be put to, and to what extent, if any, those uses conflict with the preferred resources also functioning as a local capacity resource.[11]

This PRR process provided another stakeholder forum for Appellants to provide input regarding the application of NERC reliability requirements to CAISO planning studies. The CAISO originally introduced this PRR on July 30, 2015. The CAISO received initial stakeholder comments on August 8, 2015. The CAISO responded to these comments on August 31, 2015. The CAISO held a stakeholder meeting on its PRR recommendation on September 22, 2015. The CAISO then temporarily suspended the PRR process to further consider stakeholder comments. On October 28, 2015, the CAISO re-started the stakeholder process and significantly amended the PRR to address stakeholder concerns. Stakeholders submitted a second round of comments on November 13, 2015. The CAISO held another stakeholder call on the PRR on November 17, 2015. The CAISO again responded in detail to stakeholder comments on November 23, 2015. This thorough stakeholder process resulted in significant improvements to the final PRR.

FERC's adoption of the CAISO tariff sections outlining the Local Capacity Technical Study further reinforce the CAISO's position that a tariff amendment is not required. In approving the CAISO tariff sections dealing with the Local Capacity Technical Study, FERC rejected a request to provide detailed information regarding study parameters in the tariff. FERC noted as follows:

> We reject [the] request for the CAISO to include a detailed schedule and description of the process by which the Local Capacity Technical Study will be conducted ***because we find the CAISO's proposal appropriately balances the need for detail with the need for some level of flexibility***. Given that the process by which the Local Capacity Technical Study will be conducted is not complete, requiring insertion of such specific detail into the tariff would be premature. ***Furthermore, we also agree with the CAISO that the BPM, rather than the***

[10] CAISO 2014-2015 Transmission Plan, p. 90 (http://www.caiso.com/Documents/Board-Approved2014-2015TransmissionPlan.pdf).
[11] 2014-2015 Stakeholder Meeting #2, CAISO Response to Stakeholder Comments, p. 12.

> ***tariff, is a more appropriate place for specific information regarding the Local Capacity Technical Study because the study will not have a material effect on rates, terms and conditions of service***. Therefore, the Commission will not require additional detail.[12] (Emphasis added.)

The 20-minute response requirement is a parameter of the Local Capacity Technical Study that supports the 30-minute repositioning requirement in tariff section 40.3.1.1 and, in accordance with FERC guidance and the CAISO tariff, properly belongs in a BPM. Including this parameter in the PRR clarifies an existing CAISO planning practice that affords the CAISO a reasonable opportunity to meet both NERC reliability standards and CAISO tariff requirements. The PRR does not modify existing requirements for *any* resource or resource type and does not require a tariff amendment preceded by a stakeholder initiative. The CAISO's systematic and transparent BPM change management process is the appropriate and FERC anticipated stakeholder process for the CAISO to make such clarifications to its BPMs.

2. **The PRR does not Infringe on CPUC Authority.**

The PRR clarifies how the CAISO fulfills Tariff Section 40.3.1.1, which requires the CAISO, in performing its Local Capacity Technical Study, to apply certain reliability criteria. Several Appellants state that the CAISO should or must wait until the CPUC has issued a decision on this issue before it adopts the PRR. These Appellants fail to cite any relevant authority that would require the CAISO, as the NERC designated Planning Authority for the balancing area, to defer to a CPUC decision prior to meeting its NERC-mandated reliability requirements or the requirements of the CAISO tariff.

Contrary to the Appellants' assertions, the CAISO does not have any statutory or regulatory obligation to wait until the CPUC or other local regulatory authority acts to meet its mandatory NERC requirements. As noted below, FERC has found that the CAISO has an obligation to "determine the minimum amount of capacity that must be available to the CAISO within each local capacity area."[13] Further, Appellants ignore the plain language of the tariff that requires the CAISO to collaborate with stakeholders, including the CPUC, in establishing assumptions and parameters for the Local Capacity Technical Study, but does not require the CPUC or a local regulatory authority's approval before the CAISO can include such assumptions and parameters in its BPM. As outlined above, the 20-minute response requirement was discussed in the transmission planning process, CPUC proceedings and extensively in the PRR stakeholder process.

In written comments, Energy Division points to language in FERC's order conditionally accepting the CAISO's Market Redesign and Technology Upgrade (MRTU Order) tariff,[14] but in so doing, Energy Division staff both (1) inappropriately redacts key portions of the quoted statements

[12] California Indep. Sys. Operator Corp., 122 FERC ¶ 61017, 61057-58 (Jan. 9, 2008).
[13] California Indep. Sys. Operator Corp., 116 FERC ¶ 61,274 at P 1119 (Sept. 21, 2006).
[14] *See* Appeal of Energy Division Staff, p. 4.

and (2) fails to consider the important distinction between system and local capacity requirements.

Energy Division quotes the MRTU Order in which FERC states that "RA requirements are triggered only when state and Local Regulatory Authorities have failed to act in order to ensure resource adequacy."[15] However, this passage of the MRTU Order applies only to "*system* RA requirements."[16] (emphasis in the original). Nothing in the PRR conflicts with this understanding. This quoted section pertains solely to the CAISO's proposal for a default planning reserve margin for purposes of determining system resource adequacy requirements. That matter is wholly unrelated to the instant proposal which merely clarifies existing tariff provisions related to the CAISO's Local Capacity Technical Study. In any event, the BPM clarification, which pertains to *local* capacity needs, is consistent with FERC's statements regarding *system* resource adequacy capacity because it adheres to FERC's approved construct that the CAISO ensure resource adequacy only when procured resources are inadequate to resolve local contingencies.

Although the language cited by the Energy Division does not contradict, but is irrelevant to, the PRR, it is worth noting that Energy Division's Appeal redacts the word "*system*"[17] in the excerpted quote, which FERC emphasized in the MRTU Order. FERC very specifically differentiated the CAISO's role in setting *system* resource adequacy requirements versus *local* capacity requirements, which are at issue here. In the paragraph subsequent to the excerpt provided in the Energy Division Appeal, FERC notes:

> We find, however, that the CAISO must play a greater role in setting *local* RA requirements because it is uniquely situated to assess capacity needs in constrained areas and load pockets. In this manner, the CAISO's role is similar to the role it plays today in assessing RMR requirements. The CAISO will perform an annual technical study to determine the minimum amount of capacity that must be available to the CAISO within each local capacity area. The CAISO will then work with Local Regulatory Authorities to set local capacity area requirements. While the CAISO has a larger role in setting *local* capacity area requirements than in setting *system* RA requirements, we find that the MRTU proposal, with certain modifications, strikes an appropriate balance between recognizing the authority of state and local entities to establish reliability assurance requirements and the CAISO's responsibility to maintain the reliable operation of the transmission grid

[15] Energy Division Appeal, p. 4 (quoting California Indep. Sys. Operator Corp., 116 FERC ¶ 61,274 at P 1118.)
[16] California Indep. Sys. Operator Corp., 116 FERC ¶ 61,274 at P 1118.
[17] *Id*. (The Energy Division Appeal provides the quoted sentence as follows: "We note that the default…RA requirements are triggered only when state and Local Regulatory Authorities have failed to act in order to ensure resource adequacy.")

and administer wholesale markets that produce just and reasonable rates.[18] (Emphasis in the original.)

The PRR pertains to the annual technical study to determine local capacity requirements, and as FERC clearly found in the MRTU order, the CAISO is ultimately responsible under the tariff for performing that study and establishing any study assumptions and parameters.

Importantly, the CAISO tariff reflects the CAISO's role and authority in this process and does not require the CAISO to first obtain CPUC or other local regulatory authority approval before it can take such actions. Section 40.3.1.1 provides that the Local Capacity Technical Study will "determine the minimum amount of Local Capacity Area Resources needed to address the Contingencies identified in Section 40.3.1.2." The same section goes on to state that "the CAISO will apply those methods for resolving Contingencies considered appropriate for the performance level that corresponds to a particular studied Contingency."[19] To resolve an N-1 contingency, the CAISO operator "must take ***all actions necessary*** to prepare the system for the next Contingency" within 30 minutes after a first contingency.[20] (Emphasis added.) Based on the CAISO's operational knowledge, it is prudent to plan for CAISO operators to have a minimum of 10 minutes to reassess and redispatch the system. This leaves a maximum of 20 minutes for a resource to respond to the dispatch instruction and for the CAISO to ensure that the system is fully repositioned within 30 minutes of the first contingency.

The PRR codifies existing Local Capacity Technical Study parameters in the BPM to clarify for stakeholders how the CAISO must resolve Contingencies. The CPUC may adopt local resource adequacy requirements that differ from the CAISO's Local Capacity Technical Study. In fact, it appears that the CPUC's requirements have differed for several years, and the CAISO has not found it necessary to procure supplemental resources to meet local capacity needs. Further, the PRR does not change the CPUC's existing resource adequacy framework and it does not require that the CPUC or any other local regulatory authority direct its jurisdictional load serving entities to procure specified resources.

B. Substantive Issues

Substantive concerns expressed by Appellants generally fall into one of the following categories: (1) a 20-minute response requirement is inappropriate based on the 30-minute repositioning requirement; (2) the 20-minute local response requirement unduly discriminates against demand response resources; (3) the frequency of pre-contingency dispatch necessary to qualify as a Local Capacity Area Resource is not well-defined; and (4) rejecting the 20-minute requirement will not affect reliability.

[18] California Indep. Sys. Operator Corp., 116 FERC ¶ 61,274 at P 1119.
[19] CAISO Tariff, Sec. 40.3.1.1.
[20] *Id*.

1. **The 20-Minute Local Response Requirement Is Based on Mandatory Real-Time Operations Standards, Planning Standards and CAISO Experience as the Transmission Operator.**

Some Appellants understand that NERC Standards TOP-004 and TOP-007 require the CAISO to reposition the system within 30 minutes after a first Contingency and that any resources that cannot be repositioned in that time period (or frequently dispatched before the first contingency to prepare the system in advance) cannot be counted to meet these standards. However, several parties take issue with the requirement that a resource be able to respond within 20 minutes post-contingency, as opposed to some length of time between 20 and 30 minutes. As discussed above, the 20-minute requirement is based on CAISO experience actually operating the transmission system. Based on its actual experience as a NERC designated Transmission Operator, the CAISO has determined that for planning purposes a 10-minute window for the CAISO real-time operator to identify the contingency, assess the situation, and redispatch the system is a reasonable and prudent planning assumption.

The CAISO notes that system repositioning must occur in real-time, but the Local Capacity Technical Study is a planning analysis. As a result, the Local Capacity Technical Study must build in an adequate amount of time for the real-time operator to assess and resolve contingencies within the NERC-mandated 30 minutes after a Contingency event. There is no one series of events that an operator must undertake to address a given Contingency. Operator actions vary based on the nature of the contingency and the topology of the electric system at the time. Activities that may be required include a gathering data related to the contingency event and system reaction, expedited power flow studies, contacting on-call operations engineers and allowing time for market software to update and run an optimized solution.

The CAISO is the NERC-registered Transmission Operator and Planning Authority for its balancing authority area. As a result, the CAISO alone bears the compliance obligation to meet the real-time operational requirements in TOP-004 and TOP-007. To meet these obligations, the CAISO must make reasonable planning assumptions regarding how it can effectively reposition system within the 30-minute time period after a contingency. The LSEs, local regulatory authorities, and other stakeholders have no corresponding obligations to operate the transmission system and therefore cannot dictate how real-time operations translate into planning analysis. A 10-minute period for identification, reassessment and redispatch is reasonable assessment period based on CAISO operator experience. None of the Appellants have presented evidence otherwise.

2. **The 20-Minute Local Response Requirement Is Not Unduly Discriminatory to Demand Response Resources.**

Appellants argue that the 20-minute response requirement discriminates against demand response resources. Energy Division states that many current CAISO resource adequacy resources cannot be dispatched within 20 minutes, therefore [long-start] demand response

resources "are equally able to respond to a contingency event."[21] These criticisms misunderstand the purpose of the Local Capacity Technical Study and the clarification provided in the PRR. As discussed in detail above, the Local Capacity Technical Study ensures that planned for resources are effective at resolving identified Contingencies, including N-1 contingencies, within the NERC mandated and CAISO planning standards timeframe. The PRR clarifies that in the planning process there are two ways in which a resource can effectively resolve such contingencies (1) by responding to a CAISO dispatch instruction post-contingency within 20 minutes or (2) by having sufficient energy available for frequent dispatch on a pre-contingency basis.

Neither of these methods for resolving contingencies differ based on the resource type. Any resources that meet one of these requirements can qualify as local capacity for purposes of the technical study. Importantly, demand response resources can qualify as a Local Capacity Area Resource by meeting either requirement, just as any other resource can. However, because demand response resources are typically very energy limited and often curtail loads that serve comfort, service, and process needs, they are generally not well suited to be curtailed frequently on a pre-contingency basis as a preparatory measure to reduce loads and position the local area to within system operating limits should a contingency occur. As a result, to resolve the Contingencies identified and studied in the Local Capacity Technical Study, such resources must typically qualify as fast-acting resources capable of responding within 20 minutes after a first contingency event. Individual resource characteristics determine whether or not that resource can meet the Contingencies studied in the Local Capacity Technical Study.

Energy Division's Appeal notes that a significant portion of current Local Capacity Area Resources are not capable of responding to a Contingency from a cold start within 20 minutes. This is true, but such resources have hundreds if not thousands of hours of availability and are fully capable of frequent dispatch on a pre-contingency basis. In other words, the CAISO can dispatch these units under normal system conditions (N-0) at a level (up to the unit Pmax) to ensure that the system as sufficient ramping capability and will not exceed system operating limits after a first Contingency event. To the extent demand response resources can be similarly dispatched pre-contingency with load interrupted more frequently, they too can qualify as Local Capacity Area Resources under the technical study.

3. Frequency of Pre-Contingency Dispatch Warrants Additional Study.

Several parties, including PG&E and SDG&E, raised concerns about better defining how often resources would have to be dispatched pre-contingency over a RA compliance year to qualify as a Local Capacity Area Resource. With the help from the utilities, the CAISO has committed to undertaking a special study in its 2016-2017 transmission plan to review this issue further. As

[21] Energy Division Appeal, p. 11.

noted in the CAISO's Draft 2016-2017 Transmission Planning Process Unified Planning Assumptions and Study Plan:

> In order to be effective, local capacity resources either need to be capable of assisting the system in preparing for a second contingency within 30 minutes of an initial contingency, or being sufficiently unconstrained that the resources may be dispatched whenever certain loading conditions exist and in anticipation of the first contingency actually occurring – allowing a "slower" response time in responding to a dispatch. The number of dispatches in the latter case is anticipated to be orders of magnitude higher than in the former case.[22]

The CAISO notes that the exact level of energy necessary for pre-contingency dispatch will vary by local area. Although the CAISO agrees that this study may be helpful in designing future resource adequacy programs, it does not change the fact that any resource counting toward Local Capacity Area requirements must have the attributes to resolve the studied Contingencies.

The Joint Demand Response Parties point out that demand response resource adequacy resources have a "daily must-offer obligation already" and submits that this should be sufficient to qualify such resources as Local Capacity Area Resources.[23] As discussed above, the CAISO needs resources that can effectively solve the studied Contingencies in the Local Capacity Area. The daily must-offer obligation, by itself, is not sufficient to resolve these Contingencies if a resource has a limited amount of energy it can provide over the course of the resource adequacy compliance period and cannot be frequently curtailed to re-position the system prior to a first Contingency event. The CAISO notes that the CPUC has special rules that allow demand response resource adequacy resources to count toward requirements provided they are available as little as 24 hours per month.[24]

4. Rejecting the 20-Minute Local Response Requirement Will Affect Reliability.

The Energy Division Appeal states that rejecting the 20-minute local response requirement will not affect reliability because (1) NERC requirements do not require that every resource be able to respond within 30 minutes of contingency event and (2) significant time may elapse between a first contingency and second event such that such that there is sufficient time to notify resources that cannot respond within 30 minutes that they need to balance the system before a second contingency. The Joint Demand Response Parties make a similar point, asking why resources need to be dispatched frequently to meet address "very infrequent" N-1-1 contingencies. These assertions are based on an inaccurate understanding of the CAISO's NERC requirements and the need to keep the system within operating limits at all times.

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[22] http://www.caiso.com/Documents/Draft20162017StudyPlan.pdf, p. 51.

[23] Joint Demand Response Parties Appeal, p. 13.

[24] See 2016 CPUC RA Guide (https://www.google.com/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=cpuc%20ra%20manual).

With respect to the first point, Energy Division states that NERC reliability requirements provide "only that sufficient resources can respond during a contingency event."[25] This statement is incorrect. NERC TOP-004 and TOP-007 require the CAISO to restore system operations to within proven reliable system limits within 30 minutes. The standards do not state that only a subset of resources are necessary to accomplish the return to system operating limits. Additionally, allowing resources to qualify as local resource adequacy capacity that cannot meet the reliability standards discriminates against those that can. Operationally, the CAISO could only rely on those resources that are capable of meeting the standards when a contingency occurs, placing an undue burden on the capable resources, while providing the same local resource adequacy capacity value to the incapable resources.

To ensure that the CAISO can return the system to within system operating limits in 30 minutes after a first contingency, ***all*** Local Capacity Area Resources must provide the CAISO either the ability to adjust the system quickly after the first contingency or to adjust the system before the first contingency occurs to assure that the system operating limits are not exceeded in the event of a contingency. Based on this understanding, the CAISO's authority to use its Capacity Procurement Mechanism (CPM) is explicitly tied to finding that each Local Capacity Area "has Local Capacity Area Resources in the amounts and locations necessary to comply with the Local Capacity Technical Study criteria provided in Section 40.3.1.1."[26]

The actual time elapse between a first and second contingency is irrelevant to whether the CAISO has planned the system to allow real-time operators to effectively reposition the system. NERC standards and the CAISO tariff require the system to be repositioned within 30 minutes after the first contingency ***whether or not a second contingency ever occurs***. The CAISO would violate NERC reliability requirements if it failed to reposition the system in 30 minutes because it determined that a second contingency was unlikely to actually occur in the 30 minute period following a first contingency.

Some appellants note that use of the CPM to ensure sufficient Local Capacity Area Resources could impose additional costs on ratepayers. This may be true, but the risk of a CPM designation already exists. The CAISO tariff provides the CAISO with authority to designate CPM capacity when the Local Capacity Area Resources specified in resource adequacy plans fail to ensure compliance in one or more Local Capacity Areas with the Local Capacity Technical Study Criteria. As discussed above, the 30-minute repositioning requirement already exists in the CAISO tariff, and the PRR merely clarifies that requirement. Additional capacity required to meet NERC requirements is not optional, and the consequences of having insufficient capacity will also have negative impacts on ratepayers. Failure to return the system to within proven system operating limits under TOP-004 constitutes a "severe violation severity level" under

[25] Energy Division Appeal, p. 12.
[26] CAISO Tariff, Section 43.2.1.1.

NERC standards.[27] Violation severity levels under TOP-007 range from lower to severe based on the length and magnitude of the violation.[28] Failure to meet these requirements can lead to significant financial penalties that will be borne by ratepayers.

C. Miscellaneous Issues

Appellants raise several miscellaneous issues or questions that do not appear to address whether the PRR should be approved. Although not directly relevant to the PRR, the CAISO addresses these miscellaneous issues below.

1. Past CAISO Local Capacity Technical Studies

Several parties state that although the CAISO applied the 20-minute local response time requirement, previous Local Capacity Technical Studies did not expressly specify the 20-minute local response requirement; although such studies referenced the CAISO's need to reposition the within 30 minutes following a first contingency event. This is true and is a reason why the CAISO submitted the PRR to clarify the Local Capacity Technical Study. Delaying approval of the PRR does not change the CAISO's planning standards but will lead to continued confusion regarding what resources are capable of resolving the studied Contingencies.

2. Clarification regarding application of 20-minute response requirement

The Joint Demand Response parties ask for clarification that the "20-minute notification would be limited to this defined N-1-1 contingency event for SCE and SDG&E."[29] This understanding is incorrect in numerous ways. First, the Local Capacity Technical Study reviews the need for resources to meet ***all*** tariff-defined contingencies in ***all*** Local Capacity Areas. Limiting review to a specific contingency event in a specific area fails to meet NERC requirements. Also, the requirement is for a 20-minute local resource ***response*** time. The Joint Demand Response Parties reference to a "notification" time is imprecise terminology in this context. It is properly characterized as a 20-minute response time. In other words, the resource would have received a CAISO dispatch and fully responded to its dispatch instruction within 20 minutes.

3. The location of the PRR in the Reliability Requirements BPM

Several parties take issue with the PRR being "buried" in a footnote of a large BPM. The CAISO notes that it has provided a redlined copy of changes at every stage in this proceeding. The PRR was the only change in the entire document and, as a result, was very easy to find.

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[27] NERC Complete Violation Severity Levels Matrix, p. 575 (http://www.nerc.com/pa/Stand/VSL%20Matrix/VSL_Matrix_Complete_2016_02_11.docx.)
[28] *Id*.
[29] Joint Demand Response Parties Appeal, p. 10.

IV. Conclusion

The CAISO will continue to conduct its Local Capacity Technical Study in accordance with its tariff and in a manner that identifies Local Capacity Area Resources capable of resolving the Contingencies identified. The PRR appropriately clarifies the resource characteristics necessary to meet the identified contingencies. It does not impose new resource requirements, nor does it require the CPUC to change its local resource adequacy rules. The PRR must be maintained to ensure the CAISO complies with mandatory NERC requirements in a manner that provides greater transparency to stakeholders.

The CAISO looks forward to addressing this issue further with the BPM Appeals Committee and, if necessary, the Board of Governors.