

## Reliability Services Initiative - Phase 2 Draft Final Proposal

Submitted by	Company	Date Submitted
Alan Wecker (415) 973-7292	Pacific Gas and Electric	March 2, 2016

Pacific Gas and Electric Company (PG&E) offers the following comments on the California Independent System Operator's (CAISO) Reliability Services Initiative (RSI) Phase 2 Second Revised Straw Proposal based on the template provided by the CAISO.

1. Separate local and system RA for purpose of forced outage substitution

PG&E continues to have significant concerns with this aspect of the RSI2 Proposal. The CAISO proposes to create a new filing in order to allow Local RA resources to designate themselves as System-only RA resources. If the CAISO believes it necessary to mitigate this risk, the CAISO should continue its work from RSI Phase 1A by investigating the possibility of loosening substitution eligibility to allow resources outside of Local Areas to substitute for resources within the Local Area based on the characteristics of the system and reserve margins within the area.

PG&E would like to reiterate its concerns outlined in previous comments and list two new concerns.<sup>1</sup> These concerns include:

1. Adding a new RA showing adds unnecessary complexity and increases the probability of reliability concerns.
2. The change does not add value as the standard Resource Adequacy Confirmation Agreement compensates the seller for its Local RA attributes.
3. The status quo allows suppliers to reflect their costs in contractual negotiations to address the identified cost risk borne by suppliers.
4. The CAISO does not appear to have a clear understanding of the costs and implementation difficulties this change will lead to by creating a need to track whether local resources are purchased and/or shown for System RA or Local RA.
5. This change could result in an increase in CPM designations, resulting in unnecessarily increasing costs to Load.
6. The current CPM under development does not consider whether local resources are shown as System RA or Local RA, and the current proposal does not suggest changes to the CPM to accommodate this change.

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<sup>1</sup> Further detail on each of the previous six concerns can be found in Appendix A.

7. Local market power concerns
8. The CAISO will not represent the needs of the system the same for market participants as the CAISO intends to study the system for its review of collective deficiencies.

One of the primary issues PG&E would like the CAISO to recognize is the impact of this change on the local market power dynamics in the bilateral RA market. By allowing suppliers the ability to show their Local RA resource as System RA or Local RA, suppliers are given a strong incentive to sell a portion of their resources as system and withhold Local RA attributes. This may lead to increased costs for LSEs in procuring the residual resources in that same Local Capacity Area. We request that the CAISO consult with the Department of Market Monitoring to discuss potential gaming opportunities that this proposed change could cause. PG&E currently manages the local market power issues in numerous ways, and it appears that this change could have a negative impact in allowing PG&E to find a least cost method to comply with Local RA requirements. Based on this information, the CAISO should re-evaluate whether this solution is in fact an improvement to the status quo.

Another issue that the CAISO should give weight in deliberating this change is the inconsistency between the opportunities and costs for suppliers to substitute for Local RA forced outages and how the CAISO resolves or recognizes Local RA deficiencies. The CAISO states in its Draft Final Proposal:

While the ISO will assess the adequacy of individual LSEs using only designated resources, the collective deficiencies in a local area would still be determined using all RA resource that impact the given local area, as is done today. This is necessary due to the need to accurately model the topology of the local area and capture all resources impact (positive or negative) on the local area.

This statement indicates that in its own assessments, the CAISO will ignore whether resources in Local Capacity Areas are shown as System RA or not. However, when a Scheduling Coordinator has a Local RA resource that has a forced outage during the month, it will have a completely different view of the system. The Scheduling Coordinator will have to take into account whether a resource in a local area is shown as System RA to determine whether the Scheduling Coordinator will be able to use this resource for Substitute RA.

Additionally, if a resource in a Local Capacity Area that is shown as System RA goes on outage and uses a resource outside of the local area for substitution, then during the delivery month, the CAISO's initial study would not represent a realistic picture of the reliability provided by the RA fleet. This inconsistency could lead to reliability issues or Exceptional Dispatch CPMs, which would be allocated to Load. Fundamentally, the structure of providing market participants with one view of the needs of the system that are divorced from the way that the CAISO will study it for collective deficiencies does not make sense.

## 2. Process to update EFC list during the year

PG&E would like to reiterate its request that CAISO collaboratively set a deadline by which final EFC and NQC lists would be published. This deadline should be set through a discussion between LSEs, LRAs, and the CAISO, as each has a role to play in adhering to the deadline.

3. OtherRAAIM Exemption Inconsistencies

While implementing RSI Phase 1A, PG&E has realized that certain hydro resources will face similar challenges responding to incentives under the RA availability incentive mechanism (RAAIM) as the CAISO described for wind and solar resources in its RSI Phase 1 Draft Final Proposal.<sup>2</sup> Consistent with the treatment of wind and solar resources, PG&E proposes that the CAISO exempt hydro resources from the RA availability incentive mechanism (RAAIM) if the resource design or regulatory requirements result in variability beyond the control of the Scheduling Coordinator and/or operator of the resource.

Specifically, if a hydro resource meets any of the following criteria PG&E recommends that the resource be exempt from the generic RAAIM:

- *Design Limitations.* Hydro resources with no storage capacity or switching center limitations that prevent the resource from increasing or decreasing output;
- *Flow Restrictions.* Hydro resources where the Scheduling Coordinator lacks control over stream flow due to water rights, regulatory requirements (e.g., flow requirements for fish, reservoir level requirements for recreation, etc.); or
- *Spill Considerations.* Hydro resources that have inadequate storage capacity.

Similar to the existing resource categories that are already exempt from the generic RAAIM (Wind and Solar), this subcategory of hydro resources are incapable of responding to RAAIM incentives and should not be counted as unavailable to the extent environmental conditions prevent them from providing the MW amount of their RA capacity to the market. The proposed exemptions reflect the reality that the MW amount that these types of hydro resources will be able to count towards RA capacity varies and is highly dependent on the hydrological conditions and weather patterns, making it difficult to accurately forecast their capacity. As the CAISO has identified in its Commitment Cost Enhancements Phase 3 Draft Final Proposal, these types of hydro resources operate similar to wind and solar in that there is no ability to store the water and create the ability to optimally choose when to generate.<sup>3</sup>

PG&E proposes that the Scheduling Coordinator for a hydro resource that meets the specified criteria would register the resource for the RAAIM exemption by submitting a one-time affidavit executed by an executive officer or member of senior management of the generator owner or of the Scheduling Coordinator itself. PG&E recommends that there be a clause in the affidavit that would state an obligation to update the status of the resource if any major construction changes or resource design changes lead to the resource no longer qualifying based on the specified criteria. Additionally, there

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<sup>2</sup> Reliability Services Addendum to the Draft Final Proposal, February 27, 2015, p. 53.

<sup>3</sup> CAISO Commitment Cost Enhancements Phase 3 Draft Final Proposal, February 17, 2016, p.23.

are conditions (e.g. water levels) that could change the dispatchable capability of a hydro resource. If such changes occur, the resource should be required to update its status. PG&E recommends that establishing exemptions or any updates could happen in conjunction with the submittal of use plans and use-limit updates.

The CAISO's tariff includes definitions for Hydro Spill Generation<sup>4</sup> and Regulatory Must-Run Generation<sup>5</sup> that could be utilized for developing criteria for RAAIM-exempt hydro resources. While these definitions generally capture the limitations, there are several changes to the Hydro Spill Generation definition that would be necessary to expand the focus beyond spilling and capture all of PG&E's concerns.

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<sup>4</sup> **Hydro Spill Generation:** Hydroelectric Generation in existence prior to the CAISO Operations Date that: i) has no storage capacity and that, if backed down, would spill; ii) has exceeded its storage capacity and is spilling even though the generators are at full output; iii) has inadequate storage capacity to prevent loss of hydroelectric Energy either immediately or during the forecast period, if hydroelectric Generation is reduced; or iv) has increased regulated water output to avoid an impending spill.

<sup>5</sup> **Regulatory Must-Run Generation:** Hydro Spill Generation and Generation which is required to run by applicable federal or California laws, regulations, or other governing jurisdictional authority. Such requirements include but are not limited to hydrological flow requirements, environmental requirements, such as minimum fish releases, fish pulse releases and water quality requirements, irrigation and water supply requirements, or the requirements of solid waste Generation, or other Generation contracts specified or designated by the jurisdictional regulatory authority as it existed on December 20, 1995, or as revised by federal or California law or Local Regulatory Authority.

## Appendix A: PG&amp;E’s Previous Concerns with Adding a Separate Local RA Showing

1. Adding a new RA showing adds unnecessary complexity and increases the probability of reliability concerns.

In PG&E’s comments on the RSI2 Straw Proposal, PG&E states,

The CAISO also considered two alternate options that would allow for a system resource to provide substitute capacity for an RA resource in a local area that goes on a forced outage. The CAISO considered removing system resources from the local capacity study process. It also considered leaving the resource in the local capacity study process, but allowing the CAISO discretion regarding whether system or local capacity is needed if the resource goes on forced outages. Neither option appears to improve the current CAISO assessment process. Additionally, it is unclear how these changes would impact compliance with local reliability standards. The CAISO indicates that either option 2 or 3 would require an additional RA showing in LSE and supply plans for resources demonstrating what capacity is local versus system. PG&E notes that adding a new showing adds unnecessary complications and recommends keeping the process simplified.<sup>6</sup>

2. The change does not add value as the standard Resource Adequacy Confirmation Agreement compensates the seller for its Local RA attributes.

In PG&E’s comments on the RSI2 Revised Straw Proposal, PG&E argues,

While PG&E might be motivated to purchase the resource for the System RA requirement, this fact alone does not indicate that the Local RA attributes associated with the Local RA resource have not been purchased. All the market participants that PG&E has worked with on RA transactions use a RA confirmation agreement that specifies that all attributes associated with the procured unit, unless otherwise specified, are purchased. This includes Local RA attributes.<sup>7</sup>

3. The status quo allows suppliers to reflect their costs in contractual negotiations to address the identified cost risk borne by suppliers.

In PG&E’s comments on the RSI2 Revised Straw Proposal, PG&E asserts,

If the resource has provided a bid lower than its forecasted risk associated with Local RA substitution in order to ensure that it will be contracted, this situation clearly indicates that the Local RA premium associated with that capacity is not significant. Therefore, by providing that

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<sup>6</sup> PG&E Comments on RSI2 Straw Proposal, pg. 3

<sup>7</sup> PG&E Comments on RSI2 Revised Straw Proposal, pg. 1

bid, the resource is taking any inherent risks associated with it, including Local RA substitution.<sup>8</sup>

In PG&E's comments on the RSI2 Second Revised Straw Proposal, PG&E notes,

Counterparties that own local capacity resources do not sell their resource as system-only, and if they are exposed to cost risk associated with selling their facilities at a different time than when forced outages occur, they should include those cost risks into their initial bids.<sup>9</sup>

4. The CAISO does not appear to have a clear understanding of the costs and implementation difficulties this change will lead to by creating a need to track whether local resources are purchased and/or shown for System RA or Local RA.

In PG&E's comments on the RSI2 Revised Straw Proposal, PG&E claims,

In order to indicate whether a Local RA resource is being shown for system and local, the LSE would need to track at least two new details: 1) whether the resource is contracted as a Local RA resource, and 2) whether resources have been shown as Local RA or System RA on an RA filing. These items will be necessary for an LSE to understand its RA position for substitution for planned outages in the T-11 filing and for forced outages during the showing month if it also serves as a Scheduling Coordinator. These changes are not insignificant and increase the likelihood of errors and delays in submitting accurate LSE and supply plans.<sup>10</sup>

5. This change could result in an increase in CPM designations, resulting in unnecessarily increasing costs to Load.

In PG&E's comments on the RSI2 Revised Straw Proposal, PG&E argues,

PG&E is concerned that allowing resources located within a local area to be shown as system resources and substituted for with system resources could result in an increase in CPM designations, resulting in increased costs to its customers. PG&E requests that CAISO provide additional information demonstrating that there will be no adverse impact that results from creating a distinction in the RA showing that is not reflected in CAISO's reliability studies.<sup>11</sup>

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<sup>8</sup> PG&E Comments on RSI2 Revised Straw Proposal, pg. 1-2

<sup>9</sup> PG&E Comments on RSI2 Second Revised Straw Proposal, pg. 2

<sup>10</sup> PG&E Comments on RSI2 Revised Straw Proposal, pg. 2

<sup>11</sup> PG&E Comments on RSI2 Revised Straw Proposal, pg. 2

6. The current CPM under development does not consider whether local resources are shown as System RA or Local RA, and the current proposal does not suggest changes to the CPM to accommodate this change.

In PG&E’s comments on the RSI2 Second Revised Straw Proposal, PG&E states,

The Competitive Solicitation Process currently in development has not considered the need for local-only backstop. Furthermore, it is unclear if a resource that is only contracted and shown in a RA filing to provide system RA even though the resource is in a local area will be capable of participating in a local CPM.<sup>12</sup>

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<sup>12</sup> PG&E Comments on RSI2 Second Revised Straw Proposal, pg. 2