



SDG&E Comments on October 11, 2011 Renewable Integration Market Vision and Roadmap

Submitted by	Company	Date Submitted
Randy Nicholson RNicholson@SempraUtilities.com Jan Strack JStrack@SempraUtilities.com Tony Choi TChoi@SempraUtilities.com	San Diego Gas & Electric	October 21, 2011

SDG&E appreciates this initiative’s evolution from an assortment of ideas to a focused set of short and mid-term operational and market enhancements designed to help reliably manage the expected increase in variable energy resources (VERs). However, as explained below, SDG&E continues to question the CAISO’s prioritization of certain issues, in particular, the decision to delay implementation of intertie pricing and settlement revisions to late 2013. Additionally, SDG&E seeks clarity on several aspects of the CAISO’s interim and long-term forward procurement proposals. Beyond these criticisms and questions, SDG&E remains supportive of the CAISO’s efforts, and looks forward to participating in the continuing development of the identified market enhancements.

I. Forward Procurement of Flexible Capacity

Facing increasing VER penetration, and the mandated elimination of once-through cooling resources, the CAISO argues it is “imperative that a forward procurement mechanism be developed to ensure sufficient flexible capacity is available to maintain grid reliability in a more dynamic operating environment.”¹ To meet this imperative, the CAISO proposes a two-phased approach. In Phase 1, the CAISO proposes, on an interim basis, to administratively procure flexible capacity using a proxy of its current backstop procurement authority. This interim measure would be in place until the CAISO and stakeholders agree on and implement a long-term, market-based mechanism to procure non-generic capacity on a forward basis. This latter exercise is the subject of Phase 2.

SDG&E’s comments on each phase appear below. Preliminarily, SDG&E does not dispute that the CAISO faces a challenging operational reality, or that, as a general proposition, this new reality likely requires more operational flexibility. Beyond these

¹ Renewable Integration Market Vision and Roadmap, October 11, 2011 at p. 11.

generalities, however, SDG&E has specific questions about the quality and quantity of flexible capacity needed in the coming years. Before evaluating the CAISO's proposed interim and long-term solutions, SDG&E believes stakeholders would benefit from specific answers to the following:

- Beyond generically describing “Flexible Capacity” as capacity that provides ramping and balancing support, what are the specific operating characteristics of Flexible Capacity? How will need be assessed and what metric will the CAISO to measure Flexible Capacity?
- Of the resources currently available within the CAISO Balancing Authority area, how much capacity currently meets the definition of Flexible Capacity?
- How much Flexible Capacity *outside* the CAISO Balancing Authority does the CAISO believe will be made available to the CAISO (e.g., dynamically scheduled into the CAISO)?
- What correlation, if any, will there be between the CAISO's going forward Flexible Capacity product definition, and the ancillary service requirements identified in the CAISO's 20 and 33 percent renewable integration studies?
- How does the phased retirement of once through cooling units specifically impact the need for Flexible Capacity?

SDG&E believes the CAISO should take the opportunity to address these threshold issues in its forthcoming Issue Paper on forward procurement.

a. Comments on Interim Flexible Capacity Procurement Mechanism (Phase 1)

Using its current Capacity Procurement Mechanism (CPM) authority as a starting point, the CAISO proposes to create an interim mechanism to administratively procure flexible capacity resources. The CAISO posits that using the CPM as a starting point will enable stakeholders to quickly agree on interim solutions, ensuring that the CAISO has access to necessary capacity in the near term. The CAISO envisions policy development and Board approval to occur in the late 2011 and early 2012 timeframe. The interim measure would go live in January 2013.

SDG&E realizes that policy development regarding this interim proposal has not yet begun, and does not wish here to prejudge the outcome. However, SDG&E wishes to note at the outset that it has serious concerns with the framework as currently outlined.

First, SDG&E has a foundational disagreement with using the CAISO's current backstop procurement authority (CPM) as a starting point for forward procurement. The CAISO's limited back-stop procurement role should be just that – a backstop. It should be

triggered to address major *unforeseen* events arising during the RA compliance year. Using backstop authority to engage in forward procurement turns the CPM program on its head. If the CAISO can forecast future capacity needs accurately beyond the next RA compliance year – both from a quantity and quality standpoint – then it should make this information public, including offering these assessments in the CPUC’s RA proceedings, so that load-serving entities can procure the necessary resources. If the needs are known in advance, as they clearly must be in a forward procurement setting, then SDG&E sees no market or reliability benefit in authorizing the CAISO to engage in administrative procurement at administrative prices. LSEs are better equipped to handle forward procurement; to the extent possible the CAISO should rely on market solutions, not administrative solutions.

Second, SDG&E cautions both the CAISO and stakeholders against viewing this administrative procurement measure as “interim” and therefore, likely to be quickly replaced. SDG&E notes that termination of this interim solution is predicated on stakeholders agreeing to a long-term, forward capacity market structure – something that has proved both difficult and ultimately unsuccessful in the recent past. As outlined below, SDG&E and others have long supported a capacity market structure for California. That said, SDG&E does not confuse stakeholder support for a concept as an indicator of a concept’s likelihood of implementation. As the CAISO is well aware, the capacity market debate in California is rife with the jurisdictional, market-design, and cost allocation issues that are not easily resolved in isolation, let alone in combination. In light of these hurdles, adopting a market-based forward capacity solution is, at best, a question mark. SDG&E cautions against moving forward with an interim solution as if the long-term market-based mechanism that will ultimately replace is a lock. It is not. And therefore any interim solution is likely to become more permanent than originally intended, and should be developed accordingly.

Furthermore, even assuming the stars align and a functional forward market emerges in 2014, the interim measure would likely remain in place for several more years beyond that date. A 2014 market-based auction would ostensibly identify *new* flexible capacity to be built and come on-line sometime in the following three to five years. Accordingly, best case scenario would retire the interim measures sometime in 2017, and likely beyond that.

Given that the interim approach may, in fact, prove long lasting, SDG&E believes that care must be exercised in designing its parameters. This includes addressing the threshold justification for the increased forward procurement authority, and providing a persuasive explanation addressing why the CAISO is better equipped than LSEs to undertake that procurement. SDG&E looks forward to engaging the CAISO and stakeholders on these issues when policy development begins later this year.

b. Comments on Long-term, Market-based Forward Capacity Procurement (Phase 2)

The second phase of the CAISO's forward procurement proposal creates a permanent market-based mechanism to meet flexible capacity needs three to five years in the future. The CAISO will begin policy development in the spring of 2012, and hopes to have Board approval in the spring of 2013. As currently envisioned, a market-based auction for capacity would occur in the spring of 2014.

As stated above, SDG&E in the past openly supported the capacity market concept for California, and remains open to the notion of a well designed forward capacity market for flexible capacity. The design will need to account for the fact that flexible capacity will also qualify for local and system Resource Adequacy, but not all capacity qualifying for local and system Resource Adequacy is flexible; minimizing the cost of meeting all of these long-term requirements must be an objective. SDG&E notes that a well designed forward capacity market would adhere to the seven guiding principles outlined the CAISO's Renewable Integration Market Vision and Roadmap, particularly the guiding principles centered on cost-causation and cost allocation. SDG&E looks forward to working with the CAISO and other stakeholders on these and other design issues during the upcoming policy development phase of this initiative.

II. Priority of Initiatives

SDG&E questions the decision to delay solving the current intertie pricing and settlement issues. The stated mid-term priority of this initiative, with resolution occurring in the 2014 timeframe, is blind to the magnitude and urgency of the problem, which burdens load with millions of dollars of allocated charges each month, and totals nearly \$100M annually. According to the current timeline, the CAISO would begin policy development in late 2011, and expects board approval of a solution in spring 2012. Unfortunately, the CAISO does not envision implementing that solution until the fall of 2013, or some 18 months *after* a solution is developed. Given the economic impact caused by current price differences between the HASP and real-time markets, SDG&E believes the implementation can't wait.

The CAISO previously proposed two mid-term solutions that may provide some relief from RTIEO costs. The NYISO approach would settle imports and exports at the real-time price, with a bid cost guarantee for imports but not exports. Another CAISO proposal is to price the interties on the same basis as internal nodes in the real-time market, but only for off-peak hours to minimize risks to imports during peak hours. The CAISO points out that most RTIEO costs occur during off-peak periods. Further, if the approach is implemented, the CAISO maintains that it may be possible to reinstate convergence bidding at the interties in the off peak hours, since interties and internal nodes would be priced consistently.

Both approaches take a significant step toward eliminating RTIEO costs, and neither appears to necessitate an 18 month implementation period. SDG&E supports the second option of settling intertie transactions at the real-time price because it more closely aligns with a permanent solution for the dual settlement issue, but with two improvements. First, rather than excluding on-peak hours, the CAISO should initiate this market change after the summer load season and apply real-time pricing to all hours, both on- and off-peak. Secondly, CAISO could implement the NYISO settlement principle of real-time pricing with bid cost guarantee for on-peak imports only. SDG&E believes the market will quickly adapt by fixing hourly prices at the trading hubs outside the CAISO so that suppliers avoid the risk of accepting uneconomic real-time pricing from the CAISO. Specifically, load-serving entities within the CAISO could directly mitigate exposure to real-time prices via imports and exports that settle at real-time prices.

SDG&E reiterates that the timing of this initiative is tone-deaf to the magnitude and urgency of the problem, which burdens load with millions of dollars of allocated charges each month. SDG&E urges the CAISO pursue development and implementation of the solution outlined above as quickly as possible.

III. Decremental Bidding from PIRP Resources

According to the CAISO's paper, the revised allocation of the PIRP settlement uplift costs is going to the CAISO Board for approval in December, 2011. Assuming that the CAISO is unwilling to terminate PIRP on a date certain, SDG&E believes the revised allocation is an improvement and would support CAISO Board approval. However, SDG&E notes that by not eliminating PIRP, the CAISO actually creates the need to change its internal systems to allow decremental bidding from PIRP resources. If PIRP were eliminated, the current restriction on submitting decremental bids would also be eliminated and intermittent resources would have strong incentives to submit decremental bids – especially if the bid floor is lowered as proposed. The revised allocation of PIRP settlement uplift costs is a decidedly imperfect solution since there is no way to know what the uplift costs will be until long after the intermittent resources have operated. Intermittent resources should be subject to the same real-time price signals for imbalances as all other generators.