

**Sempra Generation Stakeholder Comments:
CAISO Market and Product Review Phase 2 Scope
April 29, 2011**

Submitted by	Company	Date Submitted
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Sempra Generation appreciates this opportunity to provide the following comments regarding the “Discussion and Scoping Paper on Renewable Integration Phase 2” issued by the CAISO on April 5, 2011. Pursuant to the Market Notice issued on April 6, 2011, which requested stakeholder input by April 29, 2011, the following comments address the scope and priority of topics in the Discussion and Scoping Paper.

- Market Design Principals for Renewable Integration

Sempra Generation believes that a primary focus for market development to facilitate the integration of renewable resources in Phase 2 should be to internalize operating constraints in pricing of the energy and ancillary services (AS) markets, as discussed in Section 2.3.5 of the paper. “Getting the markets right” will provide both the most efficient commitment and dispatch of resources to reliably meet integration needs, as well as provide the appropriate price signals needed to guide long term investments in the grid and integration resources. The CAISO has already embarked on efforts to implement certain operating constraints (i.e. minimum online constraint and flexible ramping constraints). What remains is incorporating such constraints into CAISO market pricing based on the marginal unit, to achieve a fully functional design capable of sending appropriate price signals to support the efficient integration of significant amounts of renewable generation. The CAISO should pursue pricing reforms associated with these constraints during the balance of 2011. Other topics from the paper should be included in the category of internalizing constraints are the procurement of additional reserves for load following, and constraints related to inertia and frequency response. Internalizing these constraints in market pricing should be pursued following the successful internalization of the flexible ramping constraint.

A topic not discussed in the paper, but also relevant to achieving correct integration price signals in the energy and ancillary services markets, is minimizing uplifts. In the comprehensive

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effort to develop market processes that enhance the development of generator flexibility and facilitate renewable integration, incorporating such costs in market price formation should be a priority within the CAISO's roadmap.

- Cost Causation and Cost Allocation

Sempra Generation believes that once efficient market designs are implemented internalizing constraint pricing in the markets and minimizing uplifts, the necessary integration price signals will be created to effectively guide the forward market assessments used in the long term procurement process. With actual spot market prices to inform the long term contracting efforts of the LSE's, complex and subjective decomposition and assignment of spot market costs will be of lesser significance. To the degree that the ultimate objective of cost allocation associated with renewable mandates is to ensure that efficient long term decisions are made with regard to renewable technology and location, the greatest contribution from the CAISO will come from the development of efficient accurate price signals for the spot markets, and careful reasoned analysis of reliability needs and future integration costs associated with potential renewable scenarios.

The most consequential point in the process to consider all relevant costs associated with alternative investment options is in the long term procurement process (LTPP). The LTPP is the venue to consider the transmission, capital, and operating costs of available resource options, as well as the value of energy and capacity. To the degree that additional incentives are needed in guiding LSE procurement decisions, an appropriate share of integration services costs may be assigned to LSEs on an ongoing basis based on cost causation principles and the LSE's procurement decisions. The CAISO and CPUC should continue their collaboration to develop joint and consistent policies in this area.

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- Renewable Integration Alternatives and Other Issues

In the scoping paper, the CAISO considers the option of assigning integration costs directly to renewable generators, and poses a number of questions related to potential mechanisms¹. The CAISO's frame of reference for this section is for RPS generators to design new renewable resources to simply "manage" their variability and reduce their impact on the grid. Sempra Generation submits that it is neither efficient nor desirable from a societal perspective, for each RPS generator to reduce its variability regardless of the cost and the alternative options available in the market. Further, the allocation of unknown and speculative integration costs after the investment decision has been made does nothing but create procurement and contractual uncertainty for the participants, and threatens to upset the California's progress toward meeting the 33% RPS goal. However, if it is determined that certain integration costs should be assigned to renewable resources, these costs should not be allocated to existing contracts or contracts under negotiations or awaiting approval, and only considered on a prospective basis with substantial advance consideration to allow contracting structures to adapt without disrupting the procurement process. In addition, any allocation should not be implemented in a way that presents an unlevel competitive playing field between independent and utility-owned resources, or between renewable and other resource types.

One of the questions on which the CAISO seeks input from stakeholders is whether dynamic transfers exhibit differences from internal resources that warrant special consideration in allocation of integration costs. These resources do not impose any greater impact on CAISO integration needs than equivalent internal renewable resources. The CAISO is responsible for procuring sufficient services to integrate internal renewable resources and dynamic transfers on the same basis and in the same markets.

A substantial record evaluating a centralized forward capacity market has been developed in proceedings at the CPUC. This market design concept has numerous positive elements for

¹ CAISO Discussion and Scoping Paper on Renewable Integration Phase 2, 4/15/2011, at page 15.

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efficient forward procurement of needed integration capacity, and should be considered as a longer term option in the CAISO roadmap.