## J.P. Morgan Comments

## Renewable Integration Market Vision & Roadmap

Submitted by	Company	Date Submitted
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- J.P. Morgan Ventures Energy Corporation and BE CA, LLC (collectively, "J.P. Morgan") appreciates this opportunity to provide comments on the California ISO's (CAISO's) October 11, 2011, paper entitled "Renewable Integration Market Vision and Roadmap" ("Market Vision & Roadmap"). J.P. Morgan offers the following comments.
- J.P. Morgan appreciates the CAISO issuing the Market Vision and Roadmap the document is well written and provides a helpful high-level synopsis of the CAISO's market enhancement efforts. In general, J.P. Morgan supports the CAISO's proposed approach and agrees with the identified high-priority mid-term enhancements: Development of a Flexi-Ramp Product; modified Intertie Pricing and Settlement, and the Forward Procurement of Flexible Capacity.
- J.P. Morgan supports the above-identified high priority efforts because they begin to address fundamental needs in the CAISO - and larger California - electricity market. At present, existing generation capacity is undervalued in the market. The existing Resource Adequacy program and related capacity procurement fails to establish a transparent, market-driven price for capacity. In addition, the CAISO market fails to transparently value and price the various services provided by the existing generation fleet. Development of a Flexi-Ramp product and the eventual establishment of a forward-procurement market mechanism for Flexible Capacity will help address these flaws. J.P. Morgan notes that while it strongly supports the development of a forward-procurement *market-based* mechanism for Flexible Capacity, J.P. Morgan cautions the CAISO not to rely on an interim administratively-determined procurement mechanism – such mechanisms have a way of becoming permanent and inevitably interfere with the development of markets. J.P. Morgan recommends that if the CAISO and stakeholders decide to establish an interim, administratively-determined, Flexible Capacity procurement mechanism that such a mechanism be utilized for only a defined period, i.e., terminated after a specified sunset date. J.P. Morgan suggests that, in general, the CAISO's and stakeholders' time is better spent focused on the development of a viable market-based mechanism.

In addition, and as stated in its previous comments, J.P. Morgan supports the immediate development of the services/products identified as needed by the CAISO for renewable integration. These include Inertia and Frequency Response-related products and voltage support services. J.P. Morgan does not agree with the CAISO that development of market-based products related to the provision of these services can be deferred because, as stated by the CAISO, "...there is no apparent near-term need." There is no apparent incremental "need" because these services are currently and effectively provided for free in the CAISO markets. Although not explicitly valued or priced in the CAISO's markets, these services are presently

provided by the existing conventional generation fleet. These services are critical to system stability, enable the CAISO to quickly respond to frequency events (Frequency Responsive Reserves), and support the import of less-expensive power from out of state (System Inertia is a key component of the Southern California Import Transmission or SCIT nomogram). Today, the CAISO avails itself of these services by relying on the fact that the generation will be either selfcommitted or committed by the CAISO to provide other products, e.g., energy or ancillary services. Once on-line and available, committed generation is automatically available to provide frequency responsive reserves and inertia. With respect to voltage support, the CAISO relies on either the purported market commitment of resources through enforcement of minimum on-line constraints ("MOCs") or through exceptional dispatch. Although the CAISO pays the commitment and related bid costs of these resources, since the resources are most often committed at minimum load, there is no means for the generation owner to "price" the value of that minimum load energy in the market. Rather than deferring consideration of the development of needed new products for frequency support, inertia, or voltage support, the CAISO should include these in its Market Vision and Roadmap. J.P. Morgan cautions the CAISO that in a system with a high degree of renewable resource penetration, the conventional generation fleet that it currently relies on to provide these critical services may not be on-line and available. As noted in the CAISO's renewable integration studies, under both a 20% and 33% RPS, renewable generation is likely to displace conventional generation in the CAISO's energy and ancillary services markets. To the extent displaced, and not otherwise compensated for providing other needed services, conventional generation resources may not be available.

With respect to Intertie Pricing and Settlement, and consistent with its earlier comments, J.P. Morgan supports efforts to align scheduling timeframes and practices across the West. J.P. Morgan understands that the CAISO cannot move forward alone on this effort and that development of sub-hourly scheduling in the West is a longer-term effort. However, J.P. Morgan recommends that the CAISO explicitly identify that effort as a long-term initiative in its Market Vision and Roadmap.

Finally, J.P. Morgan supports the CAISO's proposal to create a stakeholder working group to address, on a near-term basis, Intertie Pricing and Settlement. J.P. Morgan urges expedited resolution of this issue so that a new intertie pricing and settlement methodology can be implemented by summer 2012. Resolution of this issue is critical so that the CAISO can establish a viable long-term intertie pricing structure, a structure that provides the price certainty necessary to support a liquid interchange market. Moreover, resolution of the issue will enable the CAISO to re-implement convergence bidding at the interties, a functionality that J.P. Morgan views as critical as part of any market design.

J.P. Morgan appreciates the opportunity to provide these comments.