Comments of J.P. Morgan Ventures Energy Corporation
Subject: CAISO's Standard Capacity Product Updated Straw Proposal

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Submitted by	Company	Date Submitted
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J.P. Morgan Ventures Energy Corporation (J.P. Morgan) appreciates this opportunity to comments on the California ISO's (CAISO's) December 4, 2008, Standard Resource Adequacy Capacity Product (SCP) Updated Straw Proposal, as discussed at the December 11, 2008, SCP stakeholder meeting. J.P. Morgan continues to support the development of a SCP and the objective of finalizing development of the SCP and submitting it for approval by FERC in early 2009. J.P. Morgan supports development and implementation of a SCP to facilitate the development of a viable and transparently-priced market for needed capacity. J.P. Morgan believes that development of a SCP, if done correctly, can be an important building block towards establishing a robust long-term resource adequacy program in California.

<u>Availability Standards</u>

- ***J.P. Morgan supports adoption of a single availability standard that is based on, and consistent with, the CAISO's operating requirements and that establishes incentives for resources to be available when needed by the CAISO.***

The CAISO's Draft Final Proposal proposes to establish a target availability requirement (percentage) for all SCP resources based on a historic resource adequacy resource fleet-wide availability assessment. Specifically, the CAISO Updated Straw Proposal states as follows:

> There will be one availability standard, an annual target availability, that will be applicable to all resources during the upcoming compliance year based on the historic performance of the RA resource fleet during the peak hours during the previous 12-month period.
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> The CAISO will use data from its SLiC system to calculate the target availability in the first year of the SCP. In subsequent years the CAISO will use both data from its SLiC system and the outage data that is submitted by resources that are less than 10 MW in size to calculate the annual target availability.

> Availability will be determined as follows: a resource is considered 100% available if it has no Forced Outage hours during the defined peak hours in a month. Any Forced Outage during peak hours during a month will decrease the availability value.
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> The CAISO proposes to define the RA peak hours based on the operating periods when high demand conditions are likely to occur and therefore resource performance is most critical to maintaining system reliability. The proposed RA peak-hours include the hour ending 14:00 Pacific Daylight Saving Time ("PDT") through the hour ending 18:00 PDT on any day during the calendar months of April through October that is not a Saturday, Sunday, or a federal holiday, and the hour ending 17:00 PDT through the hour ending 21 :00 PDT on any day during the calendar months of January through March, and November and December that is not a Saturday, Sunday, or a federal holiday.
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> The CAISO will use data from its SLiC system for outage data. In addition, RA resources that are less than 10 MW in size will submit outage data to the CAISO each month. This data will not need to be reported through the SLiC system. The outage data will be equivalent to the data submitted by resources that are greater than 10 MW so that comparable outage data is available for all resources.
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> The assessment of performance each month will be done with SLiC data and the data submitted separately by resources that are less than 10 MW in size.

J.P. Morgan appreciates the CAISO's acknowledgement of stakeholder comments and its efforts to conform its proposal to address the concerns raised by stakeholders. J.P. Morgan generally supports the CAISO's proposal to establish a standard target availability requirement that is based on an assessment of the historic availability of the resource adequacy resource fleet (rather than the historic availability of individual resources). J.P. Morgan also generally supports the CAISO's "peak hours" based assessment. While the CAISO's proposal is essentially an all peak hours proposal – rather than a critical peak (summer) hours proposal, J.P. Morgan agrees that resource adequacy capacity is needed and should be valued year round. In addition, J.P. Morgan agrees with the CAISO's proposal to measure availability based on the number of hours a resource is not on a forced outage.

However, rather that use a 12-month rolling period to assess historic availability, J .P. Morgan recommends that the CAISO consider using a rolling multi-year (2-3 years) historical average in order to reduce the impact of poor performance during one performance period. While use of a multi-year period may be less important when assessing fleet-wide averages (as opposed to resource-specific averages), J.P. Morgan believes that use of a multi-year period may reduce the impact of abnormal weather years of other factors that may impact fleet-wide availability statistics. J.P. Morgan acknowledges that for purposes of the initial implementation the CAISO may have to utilize a more limited data set.

With respect to the CAISO's use of and reliance on SLiC data to assess availability, J.P. Morgan can support the use of SLiC as an interim step. On a long-term basis, J.P. Morgan recommends that the CAISO transition to the use of NERC Generating Availability Data System (GADS) data. J.P. Morgan suggests that reliance on a generally-accepted and used data base such as GADS will facilitate collection and analysis of resource performance not only within California but across organized markets. J.P. Morgan notes that section 40.4.5 of the CAISO MRTU Tariff already contemplates use of NERC GADS data to implement a performance criteria program.

Finally, with respect to the interim use of SLiC, J.P. Morgan once again requests that the CAISO carefully select and identify the SLiC outage information on which it proposes to rely. J.P. Morgan is concerned that resources may be inappropriately classified as on an outage when in fact the SLiC outage tag was submitted in order to manage around a resource's identified and known operating constraints (e.g., Forbidden Regions) – constraints that cannot accurately modeled in the current MRTU software.

Performance Penalties

- ***J.P. Morgan supports the development and application of financial penalties, rather than a adjustment to NQC, to those resources that fail satisfy established availability standards.***
- ***J.P. Morgan supports use of penalty revenues to reward capacity resources that exceed established availability requirements.***

The CAISO's Updated Straw Proposal provides as follows:

> A financial penalty will be applied each month to the SCs of resources that do not meet the target availability, as part of the first feasible settlement statement after the conclusion of the applicable month. A potential bonus payment will be made each month (to the extent that penalty funds are available) to resources that exceed the target availability. The payment will be made as part of the first feasible settlement statement after the ISO has received payment on the assessed penalties. Because the bonus payment program is to be self-financing, the CAISO will wait until it has received the penalty funds before paying out those funds to eligible resources (to the extent such funds are available).
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> A dead band of 5% will be used around the target availability (2.5% on either side of the target availability value) to limit the amount of penalty and bonus payment assessments. The dead band provides for penalties and bonus payments to only be assessed when resources perform significantly better or worse compared to the established availability standard.

The "price" value in the penalty formula will be the replacement cost of capacity, which is the $41/kW-year in ICPM tariff. The penalty formula will work as shown below. It will be a monthly charge (and will recognize the dead band).

- For resources with availability of 50% and up to the target availability percent: (% of hours of unavailability) x (RA capacity) x ($3. 33/kW-month).
- For resources with availability less than 50%: (RA capacity) x ($3. 33/kW-month).

The funds collected from the application of penalty charges will be allocated to resources that exceed the dead band for target availability. The funds will be distributed by calculating a monthly bonus rate and applying it to the amount of capacity that exceeded dead band above the target availability standard (i.e., a 90% target and with 5% dead band will provide a potential bonus to those resources that exceeded a 92.5% availability rate). The monthly bonus rate will be determined by dividing the total monthly penalty dollars by the sum of MW of all resources that exceeded the target plus dead band. Resource bonus payments would equal the monthly bonus rate times the MW availability above the target plus dead band level and calculated as shown below.

- Monthly Bonus Rate = Total Penalty $/L((availability - target)*MW)
- Resource Bonus Payment = (availability - target)*MW*Monthly Bonus Rate

For example, a 500 MW resource that was available for 100% of the time during a particular month would receive a bonus payment = Monthly Bonus Rate *(100%-92.5%)*500.

J.P. Morgan supports the application of performance penalties to those resources that fail to satisfy applicable available standards. J.P. Morgan supports the CAISO's proposal to adopt and impose *financial* penalties on those resources that fail to satisfy adopted availability standards. J.P. Morgan supports implementation of a financial penalty based system and believes that a financial penalty based program is workable under today's resource adequacy construct and is preferable to a NQC-adjustment based system.

J.P. Morgan supports the CAISO's proposed financial penalty system, including the application of the penalty rate to a resource's entire resource adequacy capacity if it fails to maintain at least a 50% availability rate. In addition, J.P. Morgan supports the CAISO's proposed 5% dead band.

Finally, as stated in its previously submitted comments, J.P. Morgan supports the CAISO's proposal to use the FERC-approved, Interim Capacity Procurement Mechanism (ICPM) rate of $41/kW-year as the initial financial penalty under the SCP program. In addition, J.P. Morgan supports the CAISO's proposal to use penalty revenues to reward capacity resources that exceed the established availability metrics during the compliance period. J.P. Morgan also agrees that the bonus payment program be structured so that the per MW value of bonus payments not exceed the $/MW value of potential penalties (i.e., not be structured as a "lottery", as discussed at the December 11, 2008, meeting).

Must Offer Requirement

- ***J.P. Morgan supports a generally applicable SCP requirement to offer all available energy and ancillary services into the CAISO's markets.***
- ***J.P. Morgan does not support any exemptions to the must offer obligation.***

As part of the SCP Updated Straw Proposal, the CAISO proposes to expand the current resource adequacy must-offer obligation to include a requirement to offer both all available energy and *ancillary services*. Specifically, the CAISO states that:

> An RA Resource must offer all their energy and ancillary services (for the services for which they are certified) into the DA market and real-time for tags that have been purchased by an LSE for their RA showing (with the exceptions described below). There are two key reasons why this enhancement is being applied. First, upon MRTU start up the FERC MOO will no longer apply and the pool of resources that must offer into the market will be limited to RA resources. Second, in the IFM the ISO optimizes energy and ancillary services to meet 100 percent of its forecast requirement and there will need to be enough bids to perform this optimization. This enhancement helps ensure supply sufficiency and market liquidity.

The CAISO continues:

> There has been considerable discussion regarding the AS MOO in the ISO's reserve scarcity pricing stakeholder process. In the final proposal for the reserve scarcity pricing design posted on ISO website on July 15, 2008, the following revisions were proposed:
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> 1) All RA resources must submit AS bids for 100% of their AS certified RA capacity into the DAM, even if the RA capacity has been self-scheduled for energy. Otherwise, a zero *($O/MW)* bid will be inserted;
> 2) All RA resources with AS certified capacity, with the exceptions as discussed below, will always be considered for energy and AS in the DAM IFM energy and AS co-optimization;
> 3) The CAISO will honor RA capacity energy self-schedules unless it is unable to procure 100% of its AS requirements in the DAM. In

such case, the CAISO would curtail the energy self-schedule, or portion thereof, to allow certified AS capacity to be used for AS.

4) Due to various restrictions of operating conditions, hydro RA resources should submit AS bids, together with their energy bids, in the day ahead market for all their available AS capacity based on the expected available energy. Hydro RA units submitting energy self-schedules will not be required to offer AS in the DAM.

5) Non-Dispatchable Use Limited RA Resources will be exempted from the DAM AS must-offer requirement.

J.P. Morgan presumes that the CAISO is proposing to establish an expanded must-offer obligation along the lines explained above in the context of Scarcity Pricing.

Subject to the clarifications requested below, J.P. Morgan is not opposed to an obligation for resource adequacy capacity resources to offer all available energy and ancillary services into the CAISO day-ahead market and Residual Unit Commitment (RUC) process. However, J.P. Morgan requests that the CAISO clarify in its Draft Final Proposal that:

1) The ancillary services must offer obligation will only be subject to the existing applicable bid cap restrictions and will not be subject to further mitigation (e.g., a requirement to bid $0);

2) In addition to hydro-electric resources, the CAISO will honor the energy limitations of other types of resources, including but not limited to emissions limitations.

<u>Exemptions for Certain Resource Types</u>

The CAISO states that all resource adequacy capacity resources will be subject to the proposed must-offer obligation. However, the CAISO states that certain resources subject to existing contractual or tariff/regulatory restrictions such as non-dispatchable demand response, Metered Subsystems, and Qualifying Facilities may be exempt from the offer obligation.

As provided in its previous comments, J.P. Morgan believes that the CAISO's proposed availability standard and related obligations are appropriately applied to *all capacity* (resource adequacy) resources. Existing resource adequacy qualifying or counting conventions already – or should – account for and reflect the capacity values of different resource types (e.g., intermittent and energy limited resources should have a lower capacity value that a gas turbine peaker or gas-fired steam resource). Once their capacity value is established, all capacity resources should be required to be available to the CAISO on a comparable basis. However, J.P. Morgan agrees that resources that are not currently classified as a capacity resources (e.g., non-dispatchable demand response such as that under interruptible load programs that is subtracted from a load-serving entity's load forecast and not treated as a resource adequacy resource), or that are subject to pre-existing tariff (e.g., MSS) or regulatory (e.g., QFs) use restrictions should be exempt from the proposed offer obligation.

As previously stated, J.P. Morgan does not agree that hydroelectric resources – be they run of the river, pumped storage, or otherwise – or other use-limited resources should be entitled to exemption from the CAISO's must-offer obligation. The CAISO already accommodates the usage requirements of energy-limited resources by permitting such resources to submit annual resource plans that enable the owners of such resources to manage their energy limitations. At a minimum, such resources should be capable of offering ancillary services capacity on a basis consistent with, and at a level up to, the energy bids they submit into the CAISO markets (and presumably their related resource plans). In addition, absent any evidence to the contrary, it is not obvious that such resource owners cannot submit energy and ancillary service bids at a level consistent with their desired use or use limitations. In other words, the energy and ancillary service offer caps should provide these resources with the flexibility they need to manage their use limitations (e.g., submission of $250 ancillary service bid indicates a desire not to be selected to provide ancillary services). However, as noted above, J.P. Morgan requests that the CAISO clarify that the CAISO will honor the use limitations of such resources and will not restrict (beyond the existing bid cap restrictions) the ability of such resources to appropriately price/bid the resources into the CAISO's markets.

Finally, J.P. Morgan does not support an exemption for imported resources. All resource adequacy resources, including imports, should be offered in to the CAISO's markets as available energy, ancillary services or capacity. J.P. Morgan acknowledges the CAISO's difficulty in assessing the "availability" (not on forced outage) of an imported resource. Therefore, J.P. Morgan recommends that the availability of such imported resources be determined by whether or not they have offered into the CAISO's markets, further emphasizing the need to apply the must-offer obligation to all imported resources.

Capacity Tags

- ***J.P. Morgan generally agrees with the CAISO's capacity "tag" construct***

The CAISO proposes to create a standard capacity "tag" that is to be submitted to the CAISO to demonstrate compliance with the resource adequacy obligations. The tag will include a unique "resource id" to identify the capacity resource, the Net Qualifying Capacity (NQC) in MW of the resource, and the term of the tag.

J.P. Morgan supports the development of a standard capacity "tag", as proposed by the CAISO, understanding that the "tag" is essentially a new term for the three pieces of information (Resource ID, NQC, term) that comprise the tag and that are collected by the CAISO today. J.P. Morgan recommends that the CAISO consider including, as part of the tag, information regarding any capacity that is currently subject to an existing resource adequacy contract (MW, term) so that the CAISO can ensure that such capacity is not subject to the availability and performance provisions of the SCP program.

J.P. Morgan also supports the statements made at the November 18, 2008, stakeholder meeting that the CAISO should establish a more rigorous resource testing regime so as to further validate NQC values.

Unit Substitution

As explained in the CAISO's Updated Straw Proposal:

> The CAISO is considering adopting a provision to allow a supplier of RA capacity that is tied to a specific generating resource to be able to substitute an alternative resource in the event the RA resource is on an outage, and by means of such substitution to avoid counting the outage of the RA resource toward the monthly availability assessment. The CAISO believes that such a provision would offer reliability benefits by encouraging the availability of otherwise non-RA capacity when RA resource outages occur, provided the substitute is comparable to the original RA resource with respect to, for example, its location on the grid to meet local area operating needs. In order to utilize the substitution provision, the supplier would need to submit the replacement unit to a pre-approval process as a substitute for a specific RA resource so that the ISO would not need to assess the acceptability of the substitute in real time. In addition, the CAISO is considering to allow such substitution only in the day-ahead time frame. As such the supplier would need to submit a request for substitution before the close of the IFM. The ISO would have the discretion of approving this request. Details of this process are still being developed.

J.P. Morgan supports the concept of unit substitution. Consistent with the discussion at the December 11, 2008, stakeholder meeting, J.P. Morgan recommends that the CAISO further consider whether it is necessary and appropriate to, as stated above, require that the substitute resource be comparable to the unit on outage. While such a requirement may make sense with respect to a Local Capacity Resource, J.P. Morgan believes that any capacity resource on the system should be able to substitute for a system resource adequacy resource. J.P. Morgan suggests that appropriate qualification criteria can be developed as part of the CAISO's proposed pre-approval process.

Credit Requirements

- ***J.P. Morgan supports the consideration of a Scheduling Coordinator's exposure to all CAISO administered penalties (including SCP performance penalties) when assessing its Estimated Aggregate Liability (EAL).***

J.P. Morgan reserves judgment of the CAISO's credit proposal until further details are provided. While the CAISO's Updated Straw Proposal concluded that no additional credit requirements are required, at the December 11, 2008, stakeholder meeting the

CAISO proposed to consider performance penalties as part of the CAISO's credit process to determine a Scheduling Coordinator's Estimated Aggregate Liability. J.P. Morgan agrees that the CAISO should consider all facets of a Scheduling Coordinator's market participation, including exposure to all CAISO penalties, as part of its EAL process. However, J.P. Morgan believes that the CAISO must apply its policy on a non-discriminatory basis and therefore the CAISO must also consider a Scheduling Coordinator's exposure to load under-scheduling penalties and any other CAISO administered penalties when determining a Scheduling Coordinator's Estimated Aggregate Liability.

Conclusion

J.P. Morgan very much appreciates the opportunity to submit these comments on the CAISO's Standard Capacity Product Updated Straw Proposal. J.P. Morgan recommends that the CAISO and stakeholders continue to work towards a January 2009 CAISO Governing Board approval of the SCP proposal and that the CAISO reserve judgment on the viability of that schedule until early in January.