Brookfield Energy Marketing Inc. 480 de la Cité Blvd Gatineau, Quebec J8T 8R3

Tel 819 561-2722 Fax 819 561-7188 www.brookfieldpower.com

Stakeholder Comments 9/22/2011 – Revised Straw Proposal for Renewable Integration Market & Product Review – Phase 2

Submitted by: Margaret Miller, Director of Regulatory Affairs – West Coast Brookfield Energy Marketing LP (916) 673-3082

Brookfield Energy Marketing LP (Brookfield) appreciates the opportunity to provide comments to the following components of the Straw Proposal for the Renewable Integration Market & Product Review – Phase 2.

1) <u>Revisions to Intertie Pricing</u>

Brookfield supports the CAISO's efforts to evaluate solutions to address the HASP/RT pricing disconnect and we appreciate the complexity around arriving at a solution that will address the current market design inefficiencies without creating unintended consequences.

Due to the complexity of the issues that need to be evaluated and the CAISO's reliance on imported power, it is important that we get the modified design right the first time to assure some design certainty and avoid revisiting design again soon after implementation. All market design proposals to address this issue should be thoroughly vetted and evaluated in detail through the stakeholder process. We recommend the CAISO form a working group immediately charged with the tasks to thoroughly evaluate and propose a limited number of workable solutions that can be reported back to the larger stakeholder process for their consideration.

The CAISO proposes to consider the NYISO approach for settling energy on the intertie points. In our opinion, not enough due diligence has been done for Brookfield to support or oppose this proposal. The NYISO, although also, to a lesser extent, a net importer, has a number of significant market designs differences from CAISO that should be evaluated in order to determine whether this design is workable.

- 1) NYISO has only four interfaces, three of which are with other ISOs with one considered non-competitive by FERC (Hydro-Québec). How does that change the dynamics as compared to CAISO?
- 2) Different renewable penetration and integration standards. Therefore NYISO may not be facing over generation challenges to the degree California will. Are the incentives correct?
- 3) No nodal virtual bidding and therefore no virtual bidding on interties. Will this design support virtual bidding on the interties as mentioned in the CAISO's filing to FERC, Docket ER11-4580 on page 4?



In addition, the NYISO jointly with ISONE is currently designing a new mechanism to clear and settle bids at their interfaces. This new design is intended to facilitate price convergence between the two regions by increasing scheduling frequency and by eliminating all related transactions costs (e.g. up-lifts). This may be ultimately irrelevant to California but the reasons why the NYISO is modifying their existing design should be thoroughly evaluated. It would be beneficial to include a discussion with NYISO market design experts on the pros and cons of their existing design as part of the stakeholder/working group process.

2) Enhanced Contingent/Non Contingent Operating Reserves

Brookfield supports the CAISO's proposal to enhance the way it manages existing operating reserves. Today when incremental operating reserve is procured in real-time from a resource that has a day-ahead award for operating reserve that was designated as non-contingent, the CAISO designates the entire quantity of operating reserves procured from that resource as non-contingent. Now, under the same scenario, the CAISO proposes to designate only the incremental quantity of operating reserve procured in real-time as non-contingent. This enhancement makes perfect sense and will allow the CAISO to better utilize capacity that is already available to the market to address changes in real-time conditions. In addition the CAISO should consider whether allowing resources to designate contingency on an hourly basis versus daily would provide additional benefits.

While the flexi-ramp product is being developed, as an interim measure, the CAISO could utilize the procurement of additional non-contingent operating reserve to provide the market with additional upward ramping capacity.

Brookfield requests clarification from the CAISO under what conditions non-contingent reserves can be dispatched. Page 26 of the proposal seems to indicate that non-contingent reserves are dispatched still after a contingency event is called but before non-contingent reserves.

3) Flexible Ramping Product

We support the CAISO's general direction towards developing a bid based market product that will compensate resources for providing flexible ramping capacity and look forward to working with the CAISO to further develop the details of this new product through the stakeholder process.

A. IFM/RUC Coordination

It is not clear why the CAISO believes that procurement of the flexi-ramp product requires coordination between RUC procurement and the IFM and this topic requires further discussion. RUC has a very specific purpose which is to fill the gap between supply needed to serve the ISO's load forecast as compared to cleared load bid into the IFM. Another market participant described it well in the stakeholder meeting by saying that "RUC is a blunt instrument" It doesn't seem appropriate to expand the role of RUC to fill the need for flexible ramping capacity and it doesn't make sense how one can replace the need for the other as the CAISO stated in the proposal.

Brookfield is not necessarily opposed to a market enhancement that would allow the simultaneous procurement of IFM and RUC. Currently RUC is managed in a sequential run that clears against the ISO load forecast after the IFM. Simultaneous RUC and IFM would reflect the ISO's requirements to have sufficient capacity and import energy available to operate the system in real-time in the day-ahead price. Since the current RUC design doesn't allow the ISO to de-commit units, moving to a simultaneous run could help the CAISO better manage over-generation conditions which will be a bigger problem with more intermittent resources coming on-line. That being said, we believe the potential enhancement to run IFM and RUC simultaneously is not linked to the development of a flexible ramping product. RUC does not replace the need for any other ancillary services or vice versa and it is not clear why flexi-ramp should be procured in the Day-Ahead market similarly to other ancillary services and that RUC should continue to be procured in a sequential run.

B. Procurement and Pricing

Brookfield supports procurement of flexible ramping capacity based on the amount of ramping capable in 10 minutes consistent with other ancillary services. The notion described in the paper that the optimization should consider the cost of dispatching flexible ramping capacity based on its energy bids is worth further consideration especially if the flexible ramping capacity will be needed frequently which it appears based on market data that it will. Since this is ramping capacity, it is unclear to us how the actual marginal MW will be determined to set the real-time energy price and we would appreciate the CAISO providing more details on this.

C. Cost Allocation

The CAISO proposed several options for the allocation of costs resulting from the procurement of flexible ramping capacity. Either option could make sense depending on the outcome of more detailed design discussions. It seems appropriate to first finalize, at least on a conceptual level, how flexible ramp will be priced, procured and for what purpose it will be procured before making any decisions on cost allocation. If the purpose for the procurement of flexi-ramp is reliability than that could warrant a different cost allocation mechanism than if the purpose is to smooth out prices spikes in real-time or to manage unexpected real-time conditions due to resources not following dispatch or intermittency.

4) Decremental Bidding from PIRP Resources

Brookfield supports the proposal to allow decremental bids from resources participating in the PIRP program. It seems overly complex to require both a decremental bid and a self-schedule for each hour. The CAISO should consider either allowing the PIRP resources to submit<u>either</u> a decremental bid or a self-schedule for each hour or to have a standing decremental bid perhaps one for peak and another for off peak hours.

The proposed formulas appear to create the correct incentives for PIRP resources to follow dispatch instructions if decremental bids are dispatched by paying them the negative price as long as they are headed in the right direction towards following dispatch instructions but also by subjecting these resources to the maximum of either the deviation from their hour-ahead schedule or the instruction they received if they do not follow dispatch instructions. This proposal seems to strike a good balance as compared to prior proposals between addressing the biggest problem the CAISO is trying to solve which is to provide incentives for intermittent resources to provide decremental bids while at the same time retaining the PIRP program.

5) Forward Procurement

We support the CAISO's consideration, as described in the paper, of a forward market for capacity for resources that can provide balancing capacity. We agree with the CAISO that the development of such a market and coordination with the CPUC will be complicated and that work should begin sooner rather than later in order to achieve the goal of implementing something by 2015-2020.