California Public Utilities Commission Commitment Cost Enhancements Issue Paper and Straw Proposal April 30, 2014

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Summary of Comments:

We appreciate the opportunity to provide comments to the CAISO on the Commitment Cost Enhancement straw proposal. The minimum load and startup costs used in the commitment of generation units by the CAISO are important for insuring efficient commitment and dispatch decisions by the CAISO. In general CPUC Staff agree with the CAISO proposal to more accurately approximate actual costs used to make generation unit commitment decisions.

Specifically, CPUC staff supports elimination of the "registered cost" option, and the CAISO's proposal to allow the units to bid up to 125% of the GHG and fuel cost components of their commitment costs. CPUC staff believes the 25% premium should only be applied to a unit's index based GHG and fuel costs. CPUC staff recommends allowing the thermal fueled units to bid up to 125% of the GHG and fuel cost components of their commitment costs, because a premium on variable fuel related costs may be warranted to offset frequently fluctuating prices. On the other hand the CAISO should ensure that other non-fuel related costs, such as major maintenance, Grid Management Charge (GMC) and Operations and Maintenance (O&M) costs, are not

marked up by the 125% proxy cost calculation, as no such premium is warranted on these costs because they are not volatile like the fuel prices. The 125% of Proxy cost cap that includes all cost components is too generous and may incent generation units to structure their bids to run at minimum load rather than aiming at getting dispatched for energy.

Background:

During the winter season of 2013-2014, the ISO energy market experienced abnormally volatile and high natural gas price spikes. For example, on February 4, 2014 at 9:50 p.m., the natural gas index prices applicable to resources in the ISO markets ranged from \$7.63/MMBtu to \$8.62/MMBtu. In contrast, by February 5, 2014 at 10:01 a.m., those prices had increased to a range of \$12.29/MMBtu to \$23.53/MMBtu.

Because of the sudden increase in gas prices, the ISO was not able to reflect the gas price spike in its resource commitment decisions. The ISO calculates the start-up and minimum load costs for resources under either the "proxy cost" or "registered cost" option selected by the resource. For resources under the proxy cost option¹, the ISO is required to rely on at least two natural gas price indices published the day prior to running the day-ahead market. For the registered cost option, the gas price is based on a monthly forward projection and the total registered cost is limited to no more than 150% of the projected proxy costs. Resources selecting the registered cost option must remain under that option for 30 days, unless the proxy costs are higher than registered. Lastly, the ISO tariff specifies, that a registered cost option resource that switches to the proxy cost option must remain under the proxy cost option for the remainder of the 30-day period.

To address the potential for additional natural gas price spikes for the duration of the winter season, on March 6, 2014 the ISO filed with the Federal Energy Regulatory Commission (FERC) a proposed tariff waiver of the above referenced two sections until April 30, 2014. In the tariff waiver filing, the ISO also committed to commence a stakeholder process in April to address the issues raised by gas market conditions and to more comprehensively develop an interim solution that can be implemented in the fall

PB-EAC 2

¹ Proxy Costs are made up of a generation unit's heat rate times the fuel index cost (e.g., average of two natural gas indices) plus GHG, major maintenance, and variable O&M cost adders.

if such solution does not require substantial system changes. FERC granted the ISO's tariff waiver on March 21, 2014.

To capture extreme price spikes like those observed on February 6th, the ISO proposes to retain the manual operations as described in the tariff waiver to update the natural gas price index using the single ICE index, which is published at approximately 10 a.m. This would potentially delay the close of the day-ahead market. It follows that the manual operation could be triggered at a natural gas price increase lower than the 150% threshold discussed in the waiver. Ultimately, the ISO would prefer a non-manual solution but may not be able to implement one before the next winter season. The ISO continues to explore options to automate this process or implement a superior option. The proposed elimination of the registered cost option would obviate the manual process developed to implement the requirements under the tariff waiver obtained earlier this year to switch eligible resources from registered to proxy.

Comments:

CPUC supports elimination of the Registered Cost Option:

CPUC Staff supports the CAISO proposal to eliminate the registered cost option and only use the proxy cost option for commitment costs. With the changes proposed herein the proxy cost option would be a better approximation of the true start up and minimum load commitment costs used by the ISO market for optimal unit commitment.

The basis for the proxy cost calculation has been improved with the inclusion of major maintenance adder, and Green House Gas (GHG) costs. Including major maintenance in the commitment costs the generators are able to reflect the wear and tear on their units and provide the ISO with a measure of the opportunity costs in the commitment decision. The same holds for including GHG costs in commitment decisions. The proxy cost option follows the gas prices up and down which alleviates the primary risk that the registered cost option was designed to cover being able to more closely account for fuel costs in the commitment decision.

CAISO commitment costs should be limited to 125% of fuel related Proxy Costs:

The ISO should only allow a 125% premium on fuel costs used to calculate the proxy cost bid cap rather than all commitment costs included in proxy costs. Only the costs directly

PB-EAC 3

related to fuel cost that would be affected by day over day gas price fluctuations should be allowed to increase up to 125% for proxy cost bid cap calculations. The static and/or actual cost based commitment costs such as Grid Management Charge (GMC), major maintenance, and variable Operations and Maintenance (O&M) should not be increased by any factor in the base calculation for the proxy cost bid cap.

The CAISO shows in Table 1 of its proposal that in a 5 year period (April 2009-April 2014) day over day gas prices deviated only 7 times by more than 25% in California, which is less than 0.4% of the time. In other words 99.6% of the time gas prices do not increase more than 25% from the day before. Therefore, by allowing a 25% mark up on the proxy gas costs (which is based on current index prices) any day over day change should be covered 99.6% of the time. To include a 25% market up on all the other costs that remain static overly compensates generators and provides additional perverse incentives to only seek bid cost recovery revenues which increases market inefficiency.

By modifying the CAISO's proposal per CPUC staff recommendations here, the concern over fuel price risk would be adequately addressed and commitment costs would not be unnecessarily inflated thus avoiding market inefficiency and uplift.

Conclusion:

CPUC staff supports the CAISO's proposal to eliminate the registered cost option. CPUC staff recommends allowing thermal fueled units to bid up to 125% of the GHG and fuel cost components of their commitment costs, because a premium on variable fuel related costs may be warranted to offset frequently fluctuating prices. On the other hand the CAISO should ensure that other non-fuel related costs, such as major maintenance, GMC and O&M costs, are not marked up by the 125% proxy cost calculation. No such premium is warranted because these costs are not volatile like the fuel prices.

PB-EAC 4