

Comments on Commitment Cost Enhancements Phase 3 Straw Proposal Department of Market Monitoring September 14, 2015

The Department of Market Monitoring (DMM) appreciates this opportunity to comment on the ISO's proposal for Commitment Cost Enhancements Phase 3. DMM supports the ISO's effort to develop an opportunity costs adder, as we have done through three sets of initiatives over the last three years.

However, we also continue to caution that the methodology used to calculate the opportunity cost adders should be clearly specified as part of the stakeholder process. The straw proposal provides a strong basis for a more complete specification in the next phase of the policy process. In particular, DMM recommends that the ISO commit to using an optimization rather than the heuristic approach presented as a second alternative in the workshop. This would facilitate calculating the opportunity cost for resources with multiple binding use-limitations or use-limitations which may be modeled as a combination of constraints on starts, run hours, and energy, including some emissions limitations.

DMM will continue to work with the ISO to clearly specify the calculation that will generate opportunity costs and to establish an opportunity cost calculation methodology that generates unbiased estimated opportunity cost adders for both commitment costs and generated and default energy bids. The opportunity cost will not be an effective tool if it is not calculated accurately.

Additional input on specific issues is provided in the following sections of these comments.

Forward Price Adjustments

DMM supports the adjustment of projected prices by a forward price adjustment. The ISO is proposing to limit future price adjustments to 100% or above. This adjustment appears arbitrary and will not necessarily lead to over-estimated opportunity costs. For example, a resource with a start limit might run out of starts if projected LMPs range across a profitable and unprofitable range, but incur no opportunity cost if LMPs are high enough to support continuous operation. As stated above, the opportunity cost will not be an effective tool if it is not calculated accurately. Forward price adjustments to projected electricity prices for the opportunity cost calculation should not be constrained to be positive.

DMM/AHB Page 1

Daily Use Limitations

The ISO's proposal would assign daily use limitations the maximum of calculated opportunity costs over the month. DMM requests that the ISO reassess whether assigning the maximum provides excessive headroom. As an example, sustained high real-time prices at or near the \$1,000 bid cap occurred during peak hours ending 16 through 20 on June 8 of this year because of higher than anticipated loads throughout the ISO system. Should a pricing node experience sustained prices for a series of multiple consecutive intervals on a single day as many did on this date, the proposed calculation of daily start opportunity costs could exceed reasonable estimates for an entire month the following year (June 2016) due to the combination of forward price adjustments being limited to increases and the calculation of the daily limit as the maximum of an estimated distribution of daily values.

Resources with true daily start limits would reflect those limits in submitted master file data and thus will not be dispatched beyond their use limitation. DMM suggests evaluating an alternative methodology. One alternative would calculate the opportunity cost at a lower point in the distribution of monthly estimated daily values (e.g., median). Another option might be to adjust opportunity costs for daily use limits over the month (e.g. on a daily basis) based on an index of actual recent daily gas or electric prices.

DMM supports the ISO's extension of the opportunity cost modeling to include the optimization of daily start limitations that meet the three use-limit restriction criteria listed in the straw proposal, but suggests that both daily start limit opportunity costs and registrations of low daily start limitations in master file be limited to resources which meet the listed criteria as well as the existing tariff restrictions on registration of the daily start limit as a resource characteristic under tariff section 4.6.4 (Identification of Generating Units). The three use-limit restriction criteria listed in the straw proposal are that use limit restrictions: (1) are based on design or regulatory restrictions (i.e. rather than contractual limitations or limits designed to reduce wear-and-tear or maintenance costs); (2) are not already optimized within the ISO's market optimization (such as daily energy use limits in the day-ahead market); and (3) are capable of being calculated within the ISO's opportunity cost model.

Finally, DMM recommends that approved daily start limitations be included in the calculation of other opportunity costs for resources with both daily and longer-term opportunity costs. Using an optimization that includes multiple resource constraints simultaneously would allow the ISO to solve the nested limitation problem discussed in the straw proposal without adding additional post processing steps. For example, a resource with daily, monthly and an annual start limit in addition to an annual limit on run hours would have a minimum load opportunity cost calculated by taking the difference between a base run with all limitations applied and a run with the annual limit on run hours reduced by one. The same resource would have a start opportunity cost adder taken as the difference between the base run and a run with each of the three start limitations (annual, monthly and daily) reduced by one.

DMM/AHB Page 2

Transition Costs

A resource that has a limited number of transitions does incur an opportunity cost for transitioning if the limitations or restrictions on its operation established cannot be optimized by the appropriate ISO commitment process without allowance for opportunity costs. This is currently the case for at least one MSG resource in the ISO and could be the case for others. Adding an opportunity cost to the transition would allow the optimization to commit the configuration appropriately. The CCE2 transition cost calculation methodology accommodates the addition of incremental transition opportunity costs. The opportunity cost for transitioning would be added to the start cost (or indicative start cost) of the To configuration and not the From configuration so the transition cost, which is calculated as the difference, would include the opportunity cost of the transition. DMM suggests that an MSG transition opportunity cost model could be developed as a customization of the generic model and that the ISO invest in the development of such a model. Doing so would reduce the number of resources receiving a negotiated opportunity cost. DMM recommends that the use of negotiated opportunity costs be minimized.

Use of fifteen minute prices for resources committed in the day-ahead

DMM recommends that if the ISO calculates an opportunity cost for a long-start resource committed in the day-ahead market, that opportunity cost should be estimated based on forecast day-ahead prices, rather than real-time fifteen minute prices. Given the need to forecast resource-specific prices, forecasting prices for the market in which the resource is committed should not be overly burdensome and would be more robust than relying on the assumption that prices in the day-ahead market have permanently converged with prices in the fifteen minute real-time market.

DMM/AHB Page 3