

Stakeholder Comments Template

Subject: Commitment Cost Enhancements Phase 3 (CCE3)

Submitted by	Company	Date Submitted
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This template has been created for submission of stakeholder comments on the Commitment Cost Enhancements Phase 3 Technical Workshop that was held on July 20th, 2015. Upon completion of this template please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on **July 30th, 2015**.

1. Please provide feedback on input variables.

a. Comments on LMP stream used (FMM and/or DA)

Six Cities’ Comments: Based on the ISO’s representation that most use-limited resources are committed in the FMM, the Six Cities support the use of FMM prices for the purpose of modeling opportunity costs.

b. Comments on methodology used to

i. Estimate implied heat rate

Six Cities’ Comments: None at this time.

ii. Forecast LMPs

Six Cities’ Comments: None at this time.

iii. Should the ISO consider incorporating future power prices into the estimated LMPs?

1. What would be the optimal method of incorporating the future power prices into the estimated LMPs and/or model.

Six Cities' Comments: Because the ISO proposes to utilize forecasted LMPs based on estimated future gas prices and prices for greenhouse gas allowances, in a sense the approach proposed by the ISO incorporates future power prices. Beyond those inputs, the Cities currently do not have any additional suggestions for utilizing future power prices. As discussed below, however, the Cities support relatively frequent updates to the opportunity cost calculations, *i.e.*, monthly or even more frequently, to align the opportunity cost calculations with evolving market conditions to the maximum extent possible, as well as the opportunity for resource-specific re-runs on an impromptu basis.

c. Other comments

Six Cities' Comments: No additional comments at this time.

2. Please provide feedback on modeling.

Six Cities' Comments: As a general comment, the information provided regarding the modeling process in the Technical Workshop was not sufficient to allow a thorough evaluation of either of the suggested models or of the general validity of the modeling process. The Six Cities request that the ISO make available additional details concerning the test modeling conducted thus far, including the data sets (masked as necessary to preserve confidentiality of commercially sensitive information) and additional information concerning the attributes of the resources modeled in the tests, such as the type of resource, the general location (*e.g.*, in-state versus out-of-state), and the nature of the use limitations to which the resources are subject. Pending review and analysis of the additional information requested, the Six Cities are not able to support either of the suggested models or the modeling approach at this time.

a. Comments on how GAMS model calculates opportunity cost for each limitation

Six Cities' Comments: None at this time.

b. Comments on SAS model

i. How it determines dispatch

Six Cities' Comments: None at this time.

ii. How it calculates opportunity costs for each limitation

Six Cities' Comments: None at this time.

c. Comments on preference towards SAS model or optimization solver such as GAMS

Six Cities' Comments: The ISO reported during the Technical Workshop that the SAS and GAMS models produced very similar results. As a preliminary matter and subject to their review and analysis of the additional information concerning the modeling process requested above, if the results of the two models remain generally consistent in further testing, the Cities would prefer the SAS model based on the fact that it is likely to run more quickly and would be less expensive to use and easier to update.

d. Other Comments

Six Cities' Comments: No additional comments at this time.

3. Is there additional testing of the models that would be informative for the remaining stakeholder process?

Six Cities' Comments: See the general comment in response to Item 2 above. Review and analysis of the requested additional information concerning the test modeling conducted to date will be necessary to evaluate the need for additional testing.

4. Please provide feedback on future policy options.

- a. Comments on use limitation registration for emissions or fuel usage limits. Should the SC translate these into estimated starts/run/MWH limits?

Six Cities' Comments: It seems likely there will be a trade-off between comprehensiveness (in terms of being able to address as many types of use limitations as possible) and complexity. So long as Scheduling Coordinators for resources have the ability to propose a negotiated opportunity cost, the Six Cities encourage the ISO to develop and implement a calculation method covering the types of use limitations that have the broadest impact, leaving open the potential for further refinements as experience allows and future conditions require.

- b. Comments on how calculated opportunity costs will be incorporated into bid caps

Six Cities' Comments: The Six Cities support adding the calculated or negotiated opportunity cost for each use limitation (on an additive or cumulative basis) to the proxy start-up and minimum load costs or Default Energy Bid for a resource, as applicable, and to the overall energy bid cap as applied to that resource.

- c. Comments on scheduled re-runs to update opportunity costs

- i. General comments on scheduled re-runs

Six Cities' Comments: The Six Cities support scheduled re-runs of opportunity cost calculations on a monthly basis.

- ii. Preference and comments on three options presented to update limits

Six Cities' Comments: The Six Cities support the use of the Option 1 approach to conducting re-runs, *i.e.*, reflecting in each re-run process the actual limitations used up prior to the time of the re-run. The other two alternative approaches would be inconsistent with actual experience and would increase the risk of exhausting use limitations with potentially adverse impacts on reliability and efficiency.

d. Comments on necessity and triggers of impromptu re-runs

- i. What metrics or triggers should the ISO consider to initiate an impromptu re-run.

Six Cities' Comments: The ISO should conduct an impromptu re-run at the request of the Scheduling Coordinator for a use-limited resource at any time when actual dispatches of the use-limited resource exceed modeled dispatches of the resource by ten percent or more or when actual dispatches exceed sixty percent of the use limits allocable to the monthly period.

- ii. If re-runs are scheduled monthly, would that minimize need for impromptu re-runs

Six Cities' Comments: It seems likely that conducting scheduled re-runs on a monthly basis would reduce the need for impromptu re-runs, but unscheduled re-runs should be available on a resource-specific basis if actual dispatches exceed modeled dispatches by the thresholds discussed above.

- iii. If LMPs incorporate future power prices, would that minimize need for impromptu re-runs

Six Cities' Comments: There does not seem to be any predictable relationship between use of future power prices and the need for impromptu re-runs of the opportunity cost model. For example, if future power prices incorporated into an opportunity cost calculation turn out to have been underestimated, there may be a greater need for impromptu re-runs than if those underestimates had not been incorporated.

- iv. Other comments

Six Cities' Comments: No additional comments at this time.

- e. Comments on modeling MSG resources

Six Cities' Comments: The Six Cities agree with the ISO's view that negotiated opportunity costs are appropriate for MSG resources at least until there has been actual experience with the use of the selected opportunity cost model.

- 5. Any additional comments on CCE 3

Six Cities' Comments: The Six Cities strongly support the ISO's effort to develop and implement a model for calculating opportunity costs for use-limited resources. As experience with application of the model evolves, however, the ISO should be open to prompt modifications to the extent necessary to avoid premature exhaustion of use limitations.