

Stakeholder Comments Template

Subject: Capacity Procurement Mechanism, and Compensation and Bid Mitigation for Exceptional Dispatch

Submitted by	Company	Date Submitted
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Calpine appreciates the opportunity to comment on the CPM and ExD straw proposal. We particularly appreciate the reflections of our earlier comments on the issue paper in the straw proposal.

As an initial matter, Calpine offers several principles for the CAISO's consideration in perfecting its policy on backstop procurement.

Policies Can Be Complementary Without Being the Same.

In earlier comments, many parties recommend that the CAISO policies and systems be "complementary" with those of the CPUC – apparently meaning that the CAISO should not design a backstop, however infrequently used, that could compensate a generator at a rate higher than that of the capped RA market.

However, "complementary" does not mean identical nor does it mean deferential. Rather, complementary policies can be developed that encourage different solutions to common challenges. Indeed, one definition of complementary is "combining in such a way as to enhance or emphasize each other's qualities." The CAISO should, as it does with its net CONE option, design policies that induce forward contracting for RA, obviating the need for backstop procurement, and provide price signals that support at least limited investment in existing capacity if not investment in new capacity.

The CAISO Should Base Its Backstop Procurement Policy, In Part, on Creating Investment Signals.

Calpine believes that the CAISO has an important and unique responsibility to obtain, or encourage the development of the resources, or resource attributes, necessary to meet the challenges it perceives in the future. With that obligation comes the responsibility to

first, and foremost, define the needs that it sees from its unique position as grid operator.

Once defined, the CAISO should evaluate and chose among competing policies in part based on the how well they encourage investments to meet those needs in CAISO, or related markets. Calpine believes this principle is under-emphasized in the straw proposal and further believes that changed circumstances may create a stronger interest in using ICPM to encourage forward contracting and investment.

In approving ICPM in 2008, FERC considered, but at the time rejected the use of cost of new entry as a basis for ICPM. However, it did so in part under the presumption that the CPUC would address long-term investment issues in the then-pending Resource Adequacy proceedings.

Although we agree with commenters that if resource adequacy procurements were sufficient there would be little need for the ICPM, we find that many of the concerns raised in the instant proceeding regarding long-term incentives are best addressed in the CPUC's ongoing resource adequacy proceeding and, therefore, decline to modify the ICPM in anticipation of the outcome of that proceeding¹.

FERC's anticipation should be over. The CPUC RA decision rejects any multi-year forward mechanism to price capacity in a way which might otherwise encourage investment. FERC's receptivity to a renewed proposal for a cost-of-new-entry-based ICPM as a means of reducing existing vs new resource price discrimination, encouraging forward contracting and encouraging investment may have greatly improved.

Without Investment Signals, "No-Brainer" Investments Will Not be Made "Going Forward".

Load Serving Entities recommend no change to the current backstop compensation formula – one that was loosely based on the “going forward” costs of a reference generation plant. This level of compensation was intended to ensure availability of marginal resources without compensating them for fixed costs, and certainly provides no return of, or on, incremental investment costs.

Unfortunately, as indicated in the straw proposal, this compensation level – when combined with the similar RA penalty price at the CPUC -- effectively a price cap on RA – may not cover going forward costs and may forestall modest investment in intuitive and simple generation investments. Capital which could be deployed in California to provide incremental generation flexibility services will sit idle or will be used in other regions where the prospects of recovery are greater. Compound this compensation dilemma with the fact that existing resources are often excluded from long-term utility

¹ FERC Order on ICPM, October 16, 2008 at paragraph 42

RFOs, and entities like Calpine are left with no revenue stream to cover these “no brainer” investments.

For Calpine’s fleet of modern, highly-efficient, low-GHG machines, these stalled investments could provide substantial benefit at a fraction of the cost of new resources, and more particularly new technologies such as storage. Investment in turbine hardware, plant-wide control software, permitting, and incremental interconnection could expose incremental capacity and latent flexibility that is unattainable with “going forward” costs.

Turbine-rotor replacement provides a simple example. Our primary vendors, Siemens and General Electric, have each redesigned rotors for the gas turbines used in our combined-cycle plants. These new rotors offer higher MW output, lower heat rates and lower GHG emissions per MWh. In addition, metallurgical advances allow optionally higher firing temperatures and possible benefits beyond those provided only by the rotor redesign. The output of a turbine can be increased by 5 to 10 percent and the rotor (and ancillaries) can be substituted during routine major maintenance outages.

Intuitive investments such as a turbine-rotor replacement will compete favorably for limited Calpine discretionary capital if the revenue expectation supports the investment – that is, if it is higher than merely the “going forward” costs of a reference plant.

With these principles in mind, Calpine turns to the specific questions of the CAISO template.

Your comments will be most useful if you provide the reasons and the business case for your preferred approaches to these topics.

CPM

1. The appropriate duration of the tariff provisions associated with the CPM: should they be permanent or terminate on a certain date or under certain conditions? If the CPM should terminate, please be specific about the date or conditions upon which it would terminate and indicate the reasons for your proposal.

As stated in our issue paper comments, Calpine supports a CPM with no explicit sunset date. Pricing, however, should be revisited routinely.

2. The appropriate treatment of resources that may be procured through CPM or Exceptional Dispatch but then go out on Planned Outage during the period for which the resource has been procured. What are your views on the proposed formula in the straw proposal for compensating such resources?

Calpine agrees with the straw proposal to pro-rate payments during planned outages, but also offer the opportunity for “equivalent substitute capacity.” The requirements of this capacity should be included in the draft final proposal.

For the sake of clarity, the CAISO should also state that as with SCP RA, Forced Outages of CPM capacity do not result in a payment pro-ration, but will affect availability metrics.

3. Modification of the criteria for choosing a resource to procure under CPM (section 43.3) to provide the ISO with the ability to procure non-use limited capacity over use-limited capacity.

Calpine supports the CAISO proposal to create a preference for non-use-limited resources, particularly when the need for the resource could exceed the use limitation (either in terms of total offer-hours or time-of-day needs.)

4. The three new types of procurement authority for generic backstop capacity the ISO is proposing.

Planned Maintenance Capacity

Calpine cannot yet support this proposal. Both the network model and the LMP software should be designed to accommodate transmission and generation outages. In the straw proposal, the CAISO concludes that Exceptional Dispatch is appropriate where constraints cannot be modeled, but in regards to the CAISO proposal here, “there is neither a modeling issue nor an unplanned occurrence driving this need.” Calpine does not understand the need to interfere with the operation of the functioning market in this circumstance. Calpine fears that this discretion could result in less transparency and unwarranted price suppression.

Intermittent Resource Shortfalls

This proposal seems to imply that capacity valuations of intermittent resources are in question. If the RA value of these resources is too high, then the appropriate solution is to revisit the NQC counting rules, not backstop procurement. Calpine could support limited instances of backstop procurement to address shortfalls in the capacity provided by intermittent resources during the resolution or updating of the NQC counting for such resources.

Uneconomic or Uncontracted Capacity

Calpine cannot yet support this extension of discretion. This proposal seeks to designate and pay CPM rates for uncontracted capacity that is needed for reliability. To Calpine, this sounds very much like RMR. If so, CPM pricing may or may not be sufficient to ensure that the unit remains economically viable, and

more importantly, Calpine believes that CPM designation might suppress price signals for new investment.

5. The compensation that should be paid for generic capacity procured under CPM and Exceptional Dispatch. Which method do you support: Option A – CONE net of peak energy rent; or Option B – going forward costs? Are there further modifications needed to either of these pricing options? If you have a specific alternative pricing proposal, please provide it and indicate the reasons for your proposal.

See Calpine's introductory principles and our previous comments on the issues paper. In those comments we strongly endorse capacity pricing that allows for compensation for both going forward and fixed costs. We also strongly endorse a backstop mechanism that discourages its own use, and encourages forward contracting. We support any proposal that creates meaningful price signals for investment.

In our earlier comments we suggested a phased-in approach to a backstop price based on net-CONE that would be administratively simple and economically-principled. In this proposal, the infrequently used backstop eventually would be based solely on net CONE. A phased and gradual transition would allow LSEs to hedge exposure to CONE-based backstop procurement through forward contracting and portfolio rebalancing.

In this light, Option A – Net CONE, is the closest approximation to Calpine's simple and principled proposal. A location-differentiated, administratively-determined, demand curve may provide some incremental transparency, but with it, significant technical and implementation detail. The resolution of these details would challenge the CAISO's aggressive schedule to bring this issue in front of the Board by November 1.

Nonetheless, Calpine will pledge to work diligently with the CAISO, should it choose to pursue Option A to establish all of the parameters of the demand curves such as – net-CONE estimates, inflection points, demand curve slopes, the conditions under which the price is evaluated (based on LCR studies or based on the circumstances present at the time of CPM designation), etc. If the CAISO pursues Option A, Calpine encourages the CAISO to immediately begin scheduling substantial meeting time over the next three months to resolve these technical matters.

Notwithstanding our qualified support for Option A, Calpine has several concerns about its implementation: First, the demand curves appear inconsistent with many of the operational requirements that engender the need for backstop procurement and exceptional dispatch in the first place. For example, while a broadly defined local area may have excess capacity, backstop procurement of

resources in a sub-area or with particular effectiveness factors suggests that the CAISO may have more granular requirements that can only be filled by a more limited range of resources that may be scarce. This problem might be fixed by developing demand curves that reflect the granularity of the CAISO's capacity requirements.

Second, while certain local areas may have excess capacity in the year-ahead time frame in which the CAISO proposes to calculate CPM prices, the very contingencies that lead to backstop procurement may result in scarcity. For example, if a local area with a 1,000 MW surplus in the year-ahead time frame experiences the forced outage of 1,000 MW of generation, capacity in the local area will no longer be scarce if backstop procurement is deemed necessary to replace generation that is forced out. Further, if a local area has excess capacity because, ex post, the capacity values of intermittent resources in the area are sufficiently inflated to require the procurement of backstop capacity, is capacity in the area really in surplus? This problem might be rectified by recalculating CPM prices to reflect relevant contingencies when ICPM designations are made.

In the absence of such refinements, as the CAISO's own analysis indicates, most commercially relevant local areas are likely to clear at the floor price. Consequently, Calpine believes that it is critically important that the floor price is sufficiently high to support the policy objectives articulated above.

6. The need for the ISO to procure non-generic capacity under CPM and Exceptional Dispatch to meet operational needs.

Calpine does not believe that the need for non-generic capacity has been sufficiently demonstrated in the straw proposal to garner Calpine's support. The need is alternatively described as required to meet "operational needs", as needed to replace "ineffective" capacity, as necessary to procure "operational characteristics", such as fast ramping and load following.

We encourage the CAISO to continue to define its needs, to differentiate those needs from attributes that it obtains in current products (A/S and AGC), and to design markets, only as necessary, to obtain newly defined attributes. If the CAISO deems it necessary to procure resources capable of providing specific operating characteristics or AS on a forward basis, then it should establish explicit, forward requirements and markets for those characteristics/products. In addition, we encourage the CAISO and CPUC to refine the RA program so that capacity with the appropriate operational characteristics is procured on a forward bilateral basis through the RA program.

7. The operational criteria the ISO is proposing to distinguish certain operational characteristics as non-generic capacity (fast ramping and load following). Are these two characteristics enough, or do you propose additional criteria for operating characteristics that would qualify for non-generic capacity?

See 6. We believe that the CAISO is in the best position to describe the required attributes and will not substitute our judgment for that of the CAISO. Further, we encourage to the CAISO to procure such characteristics through markets rather than on an ad hoc basis through CPM.

8. How should non-generic capacity be compensated? What are your views on the proposal to compensate non-generic capacity by applying an adder to the price paid for generic capacity?

Calpine believes that it is premature to analyze or discuss the reasonable compensation of an undefined product. However, as a principle, Calpine believes that the CAISO should define needs, expose demand for products and allow markets to price them, and most particularly, to do so without technology bias.

Exceptional Dispatch

Calpine appreciates the CAISO's efforts to reduce exceptional dispatch. Now that exceptional dispatch has been reduced significantly, Calpine encourages the CAISO to transparently describe the level and effects of the emerging evil twin of Exceptional Dispatch, Minimum Online Commitments. We look forward to ongoing discussions regarding the impacts of MOC on price formation.

1. Should energy bids for resources dispatched under Exceptional Dispatch continue to be mitigated under certain circumstances? Should such mitigation continue the current practices of bid mitigation as outlined in the straw proposal?

Calpine believes that abuses of market power should be prevented or stemmed. However, Calpine believes that elimination of ExD mitigation in all but demonstrable cases of market power creates beneficial incentives.

We do not object to ExD mitigation of Delta Dispatch or on appropriately determined non-competitive paths. Unfortunately, with thousands of transmission elements being deemed non-competitive by default, we cannot conclude whether the current mitigation is reasonable.

The elimination of ExD bid mitigation in all but verifiable instances of market power (like Delta Dispatch) would create strong incentives to avoid ExD whenever possible, and to encourage proper evaluation of all paths and transmission elements for the presence and possible abuse of market power.

2. Should the ISO change the categories of bids subject to mitigation under Exceptional Dispatch (Targeted, Limited and FERC Approved) and extend the bid mitigation for the existing categories?

See 1.

3. What is the appropriate compensation for non-RA, non-RMR and non-CPM capacity that is Exceptionally Dispatched? Should the current compensation methodology be extended, updated to agree with what is put in place for CPM for generic capacity procurement?

The compensation should be the same as the CPM capacity price.

Other

1. Do you have any additional comments that you would like to provide?