



California ISO
Your Link to Power

Straw Proposal

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

July 15, 2010

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Table of Contents

1. Executive Summary	3
2. Introduction	4
3. Background.....	5
4. Stakeholder Process.....	6
5. Capacity Procurement Mechanism.....	7
5.1. Duration of Tariff Provisions.....	7
5.2. Treatment of Resources procured that later go on Planned Outage.....	8
5.3. Procurement of Generic Capacity	8
5.3.1. Modify Criteria for choosing among Eligible Resources	8
5.3.2. Three Additional Types of Procurement of Generic Capacity	9
5.3.3. Compensation/Pricing for Generic Capacity.....	9
5.4. Procurement of Non-Generic Capacity to meet Operational Needs	18
5.4.1. Additional Type of Procurement to meet Operational Needs.....	19
5.4.2. Establish Criteria for which Capacity would be“Non-Generic” Capacity.....	20
5.4.3. Compensation/Pricing for Non-Generic Capacity	20
6. Exceptional Dispatch	20
6.1. Compensation/Pricing.....	21
6.2. Bid Mitigation	21
7. Next Steps	23

1. Executive Summary

The ISO is required by FERC to file a successor mechanism to the current Interim Capacity Procurement Mechanism (“ICPM”) and updates to the price paid for and the bid mitigation applicable to Exceptional Dispatch at least 120 days prior to the March 31, 2011 sunset of the existing provisions. To this end the ISO initiated a stakeholder process with the posting of an issue paper on June 9, 2010¹, and is now presenting the ISO’s straw proposal.

The ICPM was designed to be an interim design with a definite sunset date as noted above. Although the proposed new Capacity Procurement Mechanism (CPM) will retain many features of the ICPM, the CPM is intended to be a permanent feature of the ISO’s market structure, with provisions for updating certain details as needed, such as the price paid for capacity and potentially some of the criteria for selecting the most effective available capacity. One salient commonality between the CPM and the ICPM is that both mechanisms are intended to procure supply capacity that is not already designated as Resource Adequacy (“RA”) capacity and that will, upon accepting an ISO CPM designation, have obligations to be available to the ISO for scheduling and dispatch comparable to the obligations on RA capacity. In this sense both the new CPM and the interim mechanism it will replace may be viewed as mechanisms to complement and supplement the capacity procured by load-serving entities (“LSEs”) under the RA program.

Under the proposed CPM the ISO may procure capacity for the following needs and purposes:

1. To “backstop” RA procurement in instances where the aggregate procurement of RA capacity by LSEs is insufficient, either at the system level or in a particular local capacity area;
2. To address unexpected conditions that arise and that could not have been anticipated at the time the RA procurement was done (referred to as “significant events” in the ICPM provisions);
3. To retain and compensate for 30 days any RA capacity that was issued an Exceptional Dispatch in the ISO’s day-ahead or real-time market (as required by the FERC-approved Exceptional Dispatch provisions); or
4. To obtain additional capacity to address specific reliability needs that are not addressed in the RA requirements, such as to (a) operate the grid reliably under a planned maintenance outage of a transmission facility or a generating plant, (b) supplement the capacity of intermittent renewable generation that may be less available than was expected, or (c) retain resources needed for reliability that are in danger of shutting down due to lack of sufficient revenues.

Categories 1 through 3 above are straightforward carry-overs from the ICPM design, whereas category 4 is new. In all categories the CPM procurement would be for at least 30 days, and in categories 1 and 4 it may be for up to 12 months. In all categories, the proposal is for the CPM to procure “generic” capacity, i.e., without regard to specific performance characteristics of the capacity, other than its ability to comply with the offer obligations applicable to RA capacity under section 40 of the ISO tariff. In addition the present initiative will consider adopting new ED and CPM procurement criteria based on resource performance characteristics, with corresponding differences in compensation, and this topic is raised for further stakeholder discussion in the present straw proposal.

The question of updating the price paid for Exceptional Dispatch capacity is a question for CPM capacity as well, as the current ICPM uses the same payment rate as Exceptional Dispatch and the ISO proposes to retain that consistency under the new provisions. The ISO proposes to

¹ <http://www.caiso.com/27b0/27b0eb0cf3e0.pdf>

update the pricing for Exceptional Dispatch and adopt a price for CPM based on one of two options which the ISO offers for further discussion with stakeholders. Option A is to phase in the use of the cost of new entry net of market revenues (“net CONE”) as a maximum price – either with or without a sloped demand curve whose parameters would include CONE as well as a minimum price that would be based on going-forward fixed costs. Both costs would be for a reference resource as described in the 2009 CEC Report.² The price under Option A with a demand curve would then be determined by the point of intersection between the demand curve and the amount of capacity available to meet the requirement. Option B is to continue with the current ICPM pricing approach, and use the going-forward fixed cost as the rate for all generic capacity procured under Exceptional Dispatch or the CPM.

With regard to bid mitigation for Exceptional Dispatch, the ISO proposes to permanently extend the current bid mitigation approach because it has been found to be appropriate to address market power in the fairly limited set of circumstances in which it needed to be applied.

One final issue addressed in this straw proposal is to remedy a gap in the current ICPM provisions, which pay ICPM capacity for the full 30 days of procurement even when the associated resource is unavailable due to a planned outage for part of that time. In the CPM the ISO proposes to calculate compensation on a pro rata basis to reflect the time that the Exceptional Dispatch or CPM capacity is available and not compensated under an RA contract.

2. Introduction

This straw proposal discusses design proposals and a few design options for the extension of the ISO’s tariff-based authority on backstop capacity procurement and the pricing and bid mitigation for Exceptional Dispatch. The straw proposal reviews stakeholder comments in response to the issue paper that was issued on June 9, 2010³ and both clarifies the ISO views on certain issues and raises topics for consideration.

This straw proposal attempts to advance an appropriate design for capacity procurement by the ISO to complement the ISO’s role in assisting the CPUC in setting Resource Adequacy capacity requirements and providing the appropriate incentives for capacity procurement and infrastructure investment. The California power market has benefited from the establishment and refinement of the Resource Adequacy program. The ISO participates in the implementation of that program, relies on its results through the participation of RA capacity in the day-ahead and real-time markets, and utilizes additional mechanisms under the ISO tariff when needed to support its effectiveness, including backstop capacity procurement and the Standard Capacity Product (SCP). The ISO’s views on the needed reform of the RA program were clearly and consistently expressed in the CPUC Resource Adequacy Phase 2 proceeding, where the ISO and other stakeholders envisioned substantial changes to the design for RA procurement and pricing, particularly a multi-year forward capacity procurement requirement facilitated by a central capacity market. Had such changes been adopted by the CPUC, the backstop function being considered here would have been straightforwardly integrated into such a design.

Given the CPUC’s decision not to proceed with RA design reforms, the ISO believes that it is important and possible to attain *some* of the benefits of a multi-year approach through its own market mechanisms as well as through its joint efforts with the State agencies under the CPUC’s long-term procurement planning (LTPP) and the inter-agency once-through cooling (OTC) initiative. Ultimately a crucial step toward achieving the desired benefits will be the development of an ongoing, comprehensive multi-year-forward process for defining resource

² www.energy.ca.gov/2010publications/CEC-500-2010-010/CEC-500-2010-010.PDF

³ The issue paper and comments are available at <http://www.caiso.com/27ae/27ae96bd2e00.html>.

needs – including specific resource characteristics – that are complementary to the RA program’s annual requirements. Although such a fully comprehensive process is beyond the scope of the present ISO initiative, some key elements of it exist today.⁴ One analytical dimension of the ISO’s role in this task is to develop multi-year-forward local capacity requirements; another, currently in progress, is to conduct a set of forward looking operational simulations and studies that consider high penetration of renewable resources to help define the needs for different resource characteristics over a time horizon leading to 33 percent renewable energy by 2020.

In addition to multi-year forward assessment of needs, a second dimension of the present initiative, as raised in the comments on the issue paper, could be to support through price signals in the ISO’s capacity procurement mechanisms such multi-year investment decisions that might not otherwise be made through the existing mechanisms. Although the ISO’s preferred approach is a multi-year forward RA requirement with readily visible prices that signal the value of new investment, some of the benefits of such an RA design may be achieved through the establishment of the ISO’s annual backstop capacity procurement and pricing as a permanent mechanism, and its possible extension to consider operational needs, along with prospective wholesale market design reforms for energy and ancillary services.⁵ It is due to these considerations that the ISO has raised several design issues in this paper, including the procurement to support evolving operational requirements and whether to consider pricing backstop capacity on the basis of cost of new entry. The intention throughout this straw proposal is to maintain the role of this function as a backstop, such that if the existing RA market and other wholesale market mechanisms are functioning well, there will be no need to resort to much if any additional procurement.

3. Background

In the June 9, 2010 issue paper, the ISO reviewed some of the background to the prior rounds of market design decisions on backstop capacity procurement and Exceptional Dispatch. This paper will not again address that background, but will review some further policy and regulatory issues that have arisen through stakeholder comments and further ISO consideration of the alternatives presented.

One of the key challenges facing the ISO, the CPUC and market stakeholders over the 2010-2011 time period is the development of further policy for the integration of existing and new generation and non-generation resources that will play critical roles in ensuring reliable and sufficiently flexible operations of the power system under the 20 percent and 33 percent RPS. Such mechanisms include: Resource Adequacy requirements, LTPP,⁶ ISO market design enhancements including new products as a result of the ISO’s studies of operating requirements,⁷ and the schedule for replacement of OTC units now under development by the CPUC, CEC and the ISO (which is a subset of all the above).⁸ In combination, these efforts need to ensure that:

⁴ For example, see the CEC’s biannual IEPR.

⁵ See California ISO, Discussion Paper – Renewable Integration: Market and Product Review, available at <http://www.caiso.com/27cd/27cdeb8548450.pdf>.

⁶ http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/117903.pdf

⁷ Integration of Renewable Resources, <http://www.caiso.com/1ca5/1ca5a7a026270.pdf> and Renewable Integration Market and Product Review, <http://www.caiso.com/27cd/27cdeb8548450.pdf>

⁸ <http://docs.cpuc.ca.gov/EFILE/RULINGS/118671.pdf>

- Existing plants needed for operational requirements that might otherwise be mothballed or retired provide sufficient energy, ancillary services or capacity to obtain revenues necessary to remain in service;
- New, flexible generation or non-generation capacity needed for RA and to provide integration capabilities is also provided with the market signals to enter in the right locations (or in the alternative, potential transmission upgrades are provided with the right set of locational prices for energy and capacity); and.
- The ISO markets provide the resource capabilities for reliable system operations.

While the ISO's proposed capacity procurement mechanism is only a "backstop" component for addressing these requirements, prior design debates have shown that it can play a role in forward capacity pricing and thus possibly in affecting investment decisions.

4. Stakeholder Process

The ISO has initiated this stakeholder process to create tariff provisions for a Capacity Procurement Mechanism ("CPM") and to update the pricing and bid mitigation provisions for Exceptional Dispatch. The current ICPM tariff provisions expire on March 31, 2011. The pricing and bid mitigation tariff provisions for Exceptional Dispatch also expire on March 31, 2011.⁹ The FERC requires the ISO to make a tariff filing 120 days before the sunset date to prevent a lapse of these provisions. The ISO is planning to make the required FERC filing, based on the outcome of the stakeholder process, by December 1, 2010, for new tariff provisions that would become effective on April 1, 2011. The major milestones in the stakeholder process are listed below.

May 28	Issue market notice announcing start of initiative
June 9	Post issue paper
June 14	Post agenda and presentation for June 16 stakeholder conference call
June 16	Hold stakeholder conference call on issue paper
June 23	Receive stakeholder written comments on issue paper
July 15	Post straw proposal
July 20	Post agenda and presentation for July 22 conference call
July 22	Hold stakeholder conference call on straw proposal
July 30	Receive stakeholder written comments on straw proposal
Aug 16	Post final draft proposal
Aug 19	Post agenda and presentation for August 23 meeting
Aug 23	Hold stakeholder meeting on final draft proposal
Sep 9	Receive stakeholder written comments on final draft proposal
Oct & Nov	Work with stakeholders on tariff language (specific dates will be provided later in this process)
Nov 1-2	Present proposal to ISO Board of Governors
Dec 1	File tariff at FERC
Feb 1, 2011	Order issued by FERC (60 days after Dec 1 filing date)
Apr 1, 2011	Effective date of new tariff provisions

A stakeholder conference call was held on June 16 where the ISO discussed with stakeholders the issue paper that was posted on June 9. The ISO received input during the conference call

⁹ The ISO's authority to issue Exceptional Dispatches in accordance with Section 34.9 does not expire and therefore is not an issue in this initiative; only the Exceptional Dispatch pricing and bid mitigation tariff provisions are subject to sunset.

and in written comments submitted by 12 stakeholders after the call. The issue paper and written comments from stakeholders can be found at <http://www.caiso.com/27ae/27ae96bd2e00.html>.

5. Capacity Procurement Mechanism

For the CPM, the ISO proposes to extend the tariff provisions that are currently in effect for the ICPM, with the exception of the changes listed below. The ICPM provisions are contained in sections 39, 40 and 43 of the ISO tariff and can be found at <http://www.caiso.com/27c3/27c3ea753b1f0.html>. The proposed areas of change to develop the CPM are listed below and explained in the enumerated sub-sections of this section.

- 5.1 Duration of tariff provisions
- 5.2 Treatment of resources procured but which later go on planned outage
- 5.3 Procurement of generic capacity
 - 5.3.1 Modify criteria for choosing among eligible resources for generic capacity
 - 5.3.2 Three additional types of procurement of generic capacity (beyond what is currently authorized under ICPM)
 - 5.4.3 Compensation/pricing for generic capacity
- 5.4 Procurement of non-generic capacity to meet operational needs
 - 5.4.1 Additional type of procurement of non-generic capacity to meet operational needs (beyond what is currently authorized under ICPM, and different that the procurement described under the item 5.4.2 above)
 - 5.4.2 Establish criteria for which operational characteristics would be compensated/priced differently than generic capacity and criteria for choosing among eligible resources for non-generic capacity for operational needs
 - 5.4.3 Compensation/pricing for non-generic capacity for operational needs

5.1. Duration of Tariff Provisions

In the comment template the ISO asked if the CPM should be in effect for a limited period of time or be open-ended with no expiration date, and if there were any countervailing proposals.

Most stakeholders were supportive of a durable backstop mechanism that had in place a mechanism to adjust capacity prices to reflect changes in market conditions and requirements. The Six Cities¹⁰ recommend an open-ended term with an initial annual review period to determine the effectiveness of the program. Dynegy suggests the ISO re-visit the terms and conditions of the CPM every two years. SCE also notes the ISO should have the ability to update certain elements, such as price, on a periodic basis. Additionally, most stakeholders were supportive of the current market design and did not suggest major changes. TURN and Calpine state that unless significant market or regulatory changes occur there is no reason for new tariff provisions. Although Mirant supports the extension of the ICPM, it states only a sunset provision will ensure a regular review of the tariff and procedures.

The ISO, like most stakeholders, believes that a durable backstop mechanism is appropriate at this time. The ISO proposes to create a CPM that retains the major design elements of the ICPM and update the compensation/pricing every two years. Should the need arise, the ISO would also consider updating design elements based on regulatory or market changes.

¹⁰ Cities of Anaheim, Azusa, Banning, Colton, Pasadena and Riverside, CA ("Six Cities")

5.2. Treatment of Resources procured that later go on Planned Outage

The ISO asked whether a resource that receives a CPM designation for a month and then takes a planned outage for part of that month should be paid the CPM capacity payment for the full month.

All stakeholders were supportive of the ISO limiting payment in this circumstance and were also supportive of either partial compensation or the ability of the designated CPM resource to replace capacity with a like facility.

The ISO proposes for the CPM that such a resource be paid the CPM compensation for 30-days minus the number of days within the 30-day period that the resource is on its planned outage. The ISO also proposes to allow the resource to provide equivalent substitute capacity from another resource for the days when it is out of service, in which case the resource would still receive the CPM compensation for days when the substitute was available. The reduction in compensation would apply for outages previously approved or approved after a CPM designation.

5.3. Procurement of Generic Capacity

This section discusses the procurement of generic capacity under the CPM. In this straw proposal, the ISO proposes that the ISO would be authorized to procure generic capacity to address the following situations:

1. Procure to backstop the RA program (currently authorized under the ICPM provisions)
2. Procure to address a Significant Event (currently authorized under the ICPM provisions)
3. Provide a capacity payment for an Exceptional Dispatch of non-RA capacity (currently authorized under the ICPM provisions)
4. Procure to address three additional operational situations where generic capacity is needed for reliability (this would be procurement authority beyond what is currently authorized under ICPM).

This section discusses the following three elements that the ISO proposes to add to the ISO tariff to improve the ISO backstop mechanism:

- Modify criteria for choosing among eligible resources (section 5.4.1);
- Three additional types of procurement of generic capacity (section 5.4.2); and
- Compensation/pricing for generic capacity (section 5.4.3).

5.3.1. Modify Criteria for choosing among Eligible Resources

In the template posted on June 15 to assist stakeholders in providing written comments to the ISO, the ISO asked stakeholders to comment on the ISO's suggestion that the criteria the ISO currently uses to select from eligible capacity the specific capacity to procure under the ICPM (i.e., non-RA, non-ICPM, and non-RMR capacity) be expanded to include additional operational attributes to better meet reliability needs.

Overall, stakeholders were supportive of the ISO differentiating operating attributes to better match capacity selected and procured with operational needs. The Six Cities support procurement of operational needs at the lowest possible costs. PG&E states that ancillary services capability and ramp rates are the types of criteria that should be included in the selection process. WPTF supports the need to procure resources by resource characteristic and also states each criterion should be compensated appropriately.

The ISO proposes to expand the selection criteria beyond what is currently in section 43.2 of the ISO tariff to include allowing the ISO to select eligible capacity from a resource that is not use-limited over the eligible capacity from a resource that is use-limited.

5.3.2. Three Additional Types of Procurement of Generic Capacity

As discussed with stakeholders during the June 16 conference call, the ISO believes that it is appropriate under the CPM for the ISO to have the authority to procure additional capacity (backstop capacity) to meet certain operational situations that are not currently considered under the ICPM. The three additional types of backstop procurement of generic capacity are listed below and discussed in this section of the straw proposal:

- Procurement of generic capacity to allow planned maintenance to occur (it is anticipated that this procurement would be for a 30-day term per instance). In these instances, the ISO would procure additional capacity in advance of the planned maintenance for a short period - expected to be 30 days. The ISO believes this approach is preferred to waiting until the maintenance activity begins and the facility is taken out of service and then issuing an Exceptional Dispatch, as is done today. This type of procurement would be much more transparent than an Exceptional Dispatch. Also, an Exceptional Dispatch is ideally suited to situations where the ISO systems cannot model certain grid needs, or when there is an unexpected change in grid conditions; whereas in this instance there is neither a modeling issue nor an unplanned occurrence driving the need for additional capacity.
- Procurement of generic capacity to backstop observed less-than-planned output from intermittent resources, i.e., the ISO notices that intermittent resources are not performing up to their RA value (it is anticipated that this procurement would be for a 30-day term per instance); and
- Procurement of generic capacity of resources that are needed for reliability that are in danger of shutting down due to lack of sufficient revenues (these resources would be eligible for capacity payment up to 12 months in a year).

The ISO proposes that all of these additional types of backstop procurement will have a robust and visible process and reporting to stakeholders and the ISO would be highly transparent about how and why this capacity has been procured. The ISO believes that this type of procurement warrants the ISO having flexibility and discretion on procuring this type of capacity to allow the ISO to reliably operate the system, which will become increasingly challenging in the coming years as more intermittent resources are added to the resource fleet.

5.3.3. Compensation/Pricing for Generic Capacity

This section addresses compensation for generic capacity (MW) – i.e., capacity that meets the current definitions in the ISO tariff (and the Resource Adequacy program), which do not consider specific operating characteristics of each resource. Compensation for capacity procured based on its operational characteristics may or may not require a different compensation method, as discussed in the next section.

The ISO emphasizes that a decision has not been made at this time on a compensation/pricing methodology for either generic capacity or non-generic capacity. This straw proposal discusses options for the design of an appropriate methodology. The ISO is interested in stakeholder comments on options and will propose a methodology in the draft final proposal that will be issued in the next iteration of the stakeholder process (see stakeholder process schedule in section 4 of this straw proposal)

In developing the proposed compensation rules in this straw proposal, the ISO reviewed the prior record and considered the stakeholder comments on several design options. As noted in the issues paper, the options fall largely into two categories:

- Alternative market-based and administrative methods for establishing a backstop price that could be referenced to cost of new entry and capacity conditions in particular locations; and
- Administrative methods for establishing a backstop price that was intended to cover the going forward costs of existing generation.

In their comments, stakeholders were largely split between these options, depending on whether they were buyers or sellers of capacity. As several stakeholders observed, the decision on whether the ISO capacity procurement function is intended in the future to provide price signals consistent with entry into the California market is fundamental and would affect the design of the CPM as well as have implications for the Resource Adequacy program. Calpine, JP Morgan, RRI Energy and Mirant, and WPTF suggest either basing compensation on the cost of new entry or re-visiting the issue to ensure generators are fairly paid for the service they offer. NCPA, SCE, PG&E and Six Cities all argue to continue the going-forward methodology. TURN states any change to the current design will conflict with the CPUC Resource Adequacy program. PG&E notes that due to the infrequent use and because the issue has already been examined design changes are unneeded. RRI Energy states the ISO should develop a proposal to support the policy objectives of ISO and to reliably operate the grid.

In this section, the ISO proposes two options for stakeholder consideration, both using administrative pricing but one based on cost of new entry (Option A) and the other based on going forward costs (Option B). The ISO believes that there are pros and cons to both approaches and that either could ultimately be justified as an adjunct to the State's Resource Adequacy program. Both will result in prices that the ISO believes are within the range FERC will consider to be "just and reasonable", but will have different effects on RA contracting decisions. Neither option is as a well-designed vehicle for eliciting new investment, which in the current market environment, including consideration of substantial renewable energy potentially coming on line over the next decade, would require further guarantees of revenues over multiple years. However, the approach based on cost of new entry is clearly more aligned with investment price signals.

Design Criteria

The ISO begins its evaluation with consideration of the following criteria:

- Improve definition of the backstop capacity product;
- Provide the correct incentives for suppliers to make units available for designation;
- Provide transparent procurement prices;
- Ensure that pricing rules for CPM support efficient forward (bilateral) markets for RA;
- Minimize reliance on backstop procurement where possible by allowing LSEs to procure capacity through bilateral transactions;
- Mitigate local market power when procuring backstop capacity (if needed);
- Minimize administrative costs and implementation issues.

As a further starting point for consideration of appropriate pricing, the ISO assumes that in any design for the CPM, the ISO will not (at this time) be providing multi-year contracts for backstop capacity and will not attempt generally to construct a type of proxy centralized capacity market. Hence, if the backstop pricing methodology ultimately attempts to reflect underlying capacity market conditions, it will be a step removed from the bilateral transactions that will ultimately compose the vast majority of RA contracts. Nevertheless, as the several years of debate over

backstop capacity pricing have shown, there is a case to be made that even under these assumptions, the CPM could facilitate more transparent and accurate capacity prices simply by providing sellers with a pricing reference point in the event of LSE RA deficiency.

Market-based versus administrative pricing criteria

A market-based approach to CPM procurement and pricing would hold an auction or conduct a solicitation for backstop capacity. The ISO evaluated several market-based options in its prior ICPM design process and concluded although they had the advantage of potentially reflecting market conditions more accurately, they were impractical on the time-frames that backstop capacity procurement can take place.¹¹

In contrast, administrative pricing approaches are imperfect because they can never fully capture market conditions; nevertheless, they are straightforward to implement and can be designed to reflect market conditions to some degree. In addition, most capacity markets are heavily engineered through administrative pricing mechanisms – demand curves, price floors – to constrain the range of outcomes. Hence, both of the options that the ISO has set forth adopt an administrative pricing approach:

- An administrative pricing method that is based on cost of new entry; and
- An administrative pricing method that is based on going forward costs of a new entrant/high priced unit.

Option A: Capacity pricing based on cost of new entry

The purpose of backstop capacity pricing based on cost of new entry (CONE), and adjusted for peak energy revenues (“net CONE”), is to provide additional price signals for capacity development in locations that are in RA supply shortage or close to being in shortage. If the ISO were to adopt such an approach, depending on the design, it would provide the RA market with a more transparent locational price. The pricing method adopted should also control for market power. The impact of a well-designed backstop pricing mechanism would be to support efficient forward–procurement of resource adequacy capacity, meaning that the effect of market power (if any) in the forward RA market would be reduced and that market supply conditions (i.e., scarcity/surplus) and forward prices would be positively correlated.

Setting a backstop price cap at net CONE does not mean that such a price will clear the marginal MW in a competitive market. When there is a surplus of capacity, the ISO anticipates that bilateral contracts for RA will clear well below net CONE. The LCR study results discussed below provide some indication of where current capacity conditions may cause this pricing rule to raise RA prices.

Definition of CONE and Net CONE

Stakeholders and state agencies have suggested a number of methods for calculating net CONE. Of the studies that the ISO has reviewed to date, the most robust data-set is found in the semi-annual CEC study of costs of new generation.¹² The typical “new entrant” in the pricing models that use cost of new entry is a 50-100 MW combustion turbine. The following table summarizes the average of the total fixed cost estimates for a small simple cycle CT (50 MW) by type of power plant developer based on a survey of 15 such plants that came into

¹¹ See discussion on pages ___ of the ISO’s Draft Final Proposal...., available at ___

¹² CEC, *Comparative Costs of California Central Station Electricity Generation*, January 2010.

operation between 2007 and 2009.¹³ The ISO proposes to base its annual capacity target price on a simple average of these estimates, which results in a CONE value of approximately \$229/kW-year.¹⁴

CEC 2009 Estimates of Fixed Costs of Simple Cycle CTs in \$/kW-year

In-Service Year = 2009 (Nominal 2009 \$)	Size MW	\$/kW-Yr (Nominal \$)					Total Fixed Cost
		Capital & Financing	Insurance	Ad Valorem	Fixed O&M	Taxes	
Small Simple Cycle (Merchant)	49.9	198.11	9.63	13.09	27.45	55.13	303.42
Small Simple Cycle (IOU)	49.9	152.53	5.54	10.14	27.88	28.09	224.18
Small Simple Cycle (POU)	49.9	111.14	9.72	9.39	28.4	0.00	158.64

The average estimates of fixed costs presented in the CEC study do not offer insight into local area variation in such costs. Hence, while CONE could be different in each local area, for purposes of administrative simplicity, and in the absence of empirical data, the ISO would propose to use the value of approximately \$229/kW-year as a target capacity price for all locations.

The ISO recognizes that rapidly moving to a backstop capacity price based on CONE could lead to rapid changes in RA prices prior to allowing LSEs to adjust their portfolios or make other investments. A further modification to this pricing rule would be to phase in CONE over several years. For example, in year 1, the target price could be set at 60% of CONE and in year 2 at 80% of CONE. This would establish the principle that the backstop procurement is based on capacity pricing principles, while giving parties time to adapt to the pricing regime. This approach was followed by NYISO when it introduced capacity demand curves.

The peak energy rent deduction could be determined on an ex ante or an ex post basis. Under the ex ante approach it is necessary to develop an estimate of expected market peak energy rents for the procurement period and subtract it from CONE to determine the actual price to be paid for the capacity. Under the ex post approach, the actual peak energy rent earnings, either for the reference resource or for the procured resource itself, are subtracted from CONE to determine the price paid. In the past, the ISO has calculated the peak energy rent deduction on an ex post basis.

Whether to include a Demand Curve

If the ISO simply sets the backstop capacity price to net CONE, then locational RA prices will be affected primarily in the event of a true RA capacity constraint or in the event that the suppliers in the location have market power. In addition, market prices could be volatile even if supply conditions change only slightly year to year. To address the market power issue and possibly smooth some of the price volatility requires further market rules, notably a demand curve.

Purpose of Proposed Demand Curve and Market Clearing Methodology. The ISO proposes to use a sloped demand curve as a means to establish market-based pricing for backstop

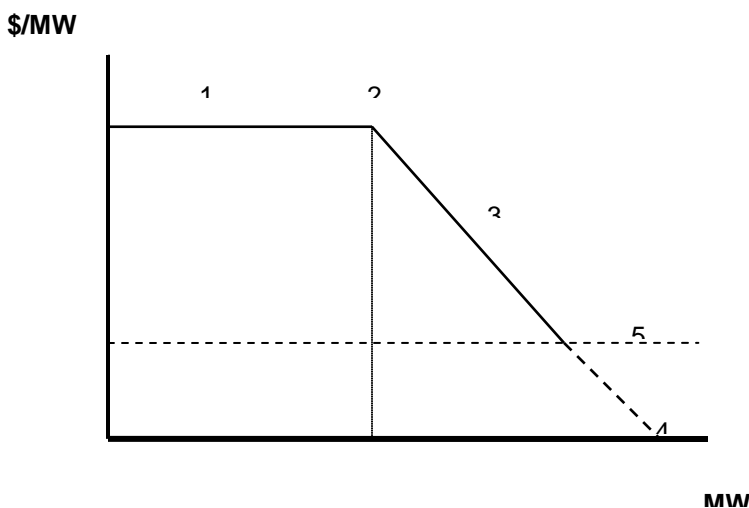
¹³ This table, provided by the CEC January 2010 report, converts data on fixed costs in the CEC study that was presented in \$/MWh to \$/kW-year. The plants surveyed are listed in CEC, "Comparative Costs of California Central Station Electricity Generation Technologies," pg. B-5, Table B-4

¹⁴ The average of the three costs listed in the "Total Fixed Cost" column of the table.

capacity. There will not be an auction to clear this demand curve, but rather, the ISO will clear the market with existing actual MW available in the local area or for system RA procurement, as described below. This pricing method has the property that although it does not clear an auction for capacity, it does offer a reasonable approximation of the upper bound on a clearing price in the absence of physical or economic withholding (i.e., market power). The cleared price is then used as a proxy for a market price. These features of the proposed pricing mechanism are based on elements of capacity market designs that have been adopted or proposed in other ISO markets.

Definition of Demand Curve. A sloped demand curve would be defined for each local area as well as for system purchases. As shown in Figure 1, the demand curve under consideration has four key parameters: (1) a price cap for purchases when the market is short on capacity; (2) an inflection point that determines when the market is provided with a scarcity price signal; (3) a slope that provides buyers with a proxy willingness to pay for capacity up to some maximum MW; and (4) a zero price intercept, where the price of capacity is set to \$0/kW-year. As an alternative to (4), the ISO proposes that the curve can also include (5) a price floor that sets a minimum payment.

Figure 1: Demand Curve for Capacity



The ISO proposes the following parameters for the locational demand curves:

- (1) Cap will be set at CONE.¹⁵
- (2) Inflection point will be at 100% of local or system RA requirements.

¹⁵ Other demand curves for capacity, such as those used by the New York ISO, set the cap at a multiple of CONE if the market clears sufficiently below the capacity requirement. However, the ISO will not propose a price cap greater than CONE for purposes of deriving a backstop price under this mechanism.

(3,4) Zero price intercept will be set at 112% of RA requirements for system areas and 118% of RA requirements for local areas. The slope of the demand curve at each location will be determined by the line between the zero price intercept and the point defined by the RA MW requirement and the price estimate of CONE. As discussed above, setting prices by using demand curves for procurement greater than the requirement does not in this instance imply purchases over and above the requirement. The purpose of defining those curves is simply to reflect in a reasonable fashion the impact of market conditions on procurement. The ISO proposes a steeper slope for the demand curve in system areas than for the demand curve in local areas. This sends a slightly higher price signal for surplus capacity on the sloped part of the demand curve in the local areas, consistent with reliability needs.

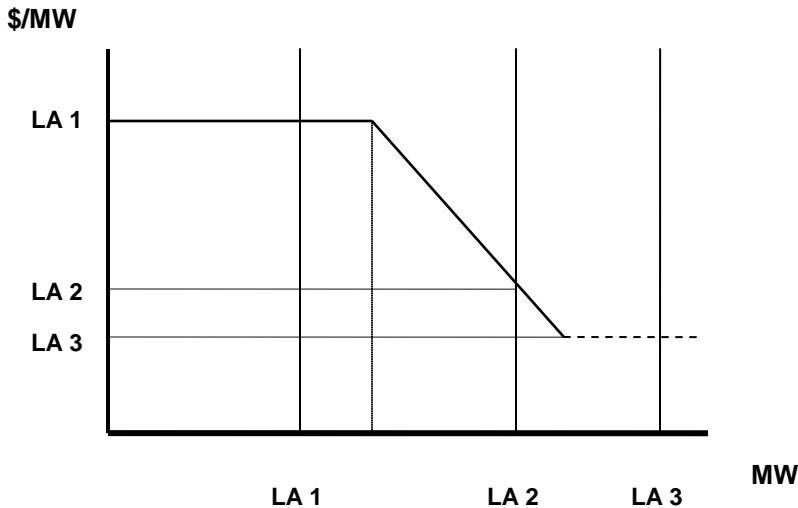
A final issue is whether in a location that has sufficient surplus, the procurement price for backstop capacity should ever be \$0/kW-year. In capacity auction designs with demand curves and without price floors, the capacity price could approach \$0/kW-year in conditions of sufficient surplus capacity. However, under the CPM, the ISO is not actually purchasing capacity in excess of the CPUC resource adequacy requirements, so while there is economic rationale for having the price drop in locations with a surplus, there is also rationale for a price floor. The ISO thus proposes that:

(5) the price floor will be a payment based on going forward costs, using the same pricing rule proposed in Option B. Payments at the price floor will not be subject to ex post adjustments.

Setting the Capacity Target Price. The total capacity MW used to clear the demand curve for each local area and for system areas will be determined by the ISO based on annual reliability assessments. For each local area, the total capacity MW is evaluated annually in the Local Capacity Requirements (LCR) Study, using methods largely similar to those used by the CPUC in its determining its resource adequacy requirements.¹⁶ Essentially, in any local area that is determined to be deficient in the LCR study, the Type 1 capacity target price would be at the demand curve cap (assuming that there is additional non-RA capacity available to procure). For any local area that has surplus capacity, the price would be read from the sloped section of the demand curve or would be set at the price floor. Figure 2 illustrates the price determination for three hypothetical local areas (LA).

¹⁶ California Independent System Operator, 2008 Local Capacity Technical Analysis Report And Study Results, Updated April 3, 2007. Available at <http://www.caiso.com/1bb5/1bb5ed3d46430.pdf>.

Figure 2: Local Area (LA) Target Capacity Price Determination



Preliminary analysis shown in the table below suggests that if the proposed zero price intercepts are used for these demand curves, effectively four of the local areas will have a capacity backstop price at or close to net CONE and the remainder will have sufficient surplus capacity that the backstop price will be the price floor.

Comparison of 2010 Locational Capacity Requirement Need and Qualifying Capacity

Local Area Name ^{1/}	Total 2010 LCR Need based on Category C with Operating Procedure (MW) ^{1/}	Total Qualifying Capacity (MW) ^{1/}	Surplus or (Deficit) (MW)	Surplus or (Deficit) (%)
Humbolt	176	183	7	4%
North Coast/North Bay	790	885	95	11%
Sierra	2102	1835	(267) ^{2/}	(15%) ^{2/}
Stockton	681	495	(186) ^{2/}	(38%) ^{2/}
Greater Bay	4651	6704	2053	31%
Greater Fresno	2640	2941	301	10%
Kern	404	665	261	39%
LA Basin	9735	12130	2395	20%

Big Creek/Ventura	3334	5093	1759	35%
San Diego	3093	3051	(42) ^{2/}	(1%) ^{2/}
Total	27606	33982		

^{1/} Source: California ISO "2010 Local Capacity Technical Analysis Report and Study Results," Updated December 31, 2009, table on page 1 of 99 pages. Data for San Diego local area is from "Report and Study Results Update for San Diego, Updated September 30 19, 2008, which was filed with the CPUC.

^{2/} Generation deficient Local Capacity Area (or with sub-area that are deficient) – deficiency included in LCR. Generator deficient area implies that in order to comply with the criteria, at summer peak, load must be shed immediately after the first contingency.

Issues with the proposed demand curve method. The sloped demand curve and the market clearing method proposed here solve certain problems currently faced in capacity procurement, notably the use of a fixed price for procurement in all areas, but raise other issues. Some of those issues are discussed here. The ISO argues that on balance the demand curve method has sufficient attractive properties for consideration in the CPM.

As already noted, one concern about using a sloped demand curve is that the mechanism is intended to procure capacity up to the MW that clear the demand. This raises concerns about procuring excess capacity. However, in this instance, the ISO will not be using the demand curve to purchase capacity MW greater than the CPUC resource adequacy requirements. Rather, the ISO will be using the demand curve solely to procure backstop capacity up to the resource adequacy target. The demand curve in this case is used to address local market power concerns and to estimate a market-based price when procuring capacity in areas with surplus capacity available.

Another difficulty raised when proposing sloped demand curves is the choice of parameters, which will take time to evaluate fully and finalize with stakeholders.

Another concern that the ISO has evaluated is the interaction between the CPM pricing mechanism, CPUC penalties for RA deficiency, and forward bilateral markets for RA. With respect to CPUC penalties, historically, the local waiver has been applied by the CPUC a total of two times. It has been approved one of those two times. The rejection of the other application was due to the LSE not meeting the established criteria. Due to the limited instances of the CPUC granting a waiver or issuing a penalty, the interaction between the ISO pricing proposal and CPUC penalties in affecting forward prices is ambiguous.¹⁷ However, due

¹⁷ The CPUC sets penalties for RA deficiencies. The table below shows the penalty structure that will be in effect for compliance year 2011 for violations.

	Small Procurement Deficiency	System Procurement Deficiency	Local Procurement Deficiency
Replaced within five business days of the date of notification	\$1,500 first incident in calendar year; \$3,000 for each Incident thereafter in a calendar year	\$3.33/kW-month	\$3.33/kW-month

to the CPUC penalties the ISO anticipates that buyers and sellers will have different incentives in response to the pricing mechanism. Since LSEs face CPUC penalties for deficiency, LSEs may have less incentive to influence forward prices through the threat of shifting procurement to the backstop mechanism, in locations where prices might appear lower through that mechanism. On the other hand, sellers could, in some circumstances, use the backstop price to negotiate a higher forward RA price, particularly in locations where capacity is tight. Obviously, the ability of sellers to raise capacity prices would depend on the market structure, including existing contracts, in each local area.

Option B: Administrative Pricing based on going forward costs

The alternative approach to administrative pricing is to retain the same pricing rule adopted for the ICPM, based on going forward costs. The justification for this approach remains as before, that the backstop procurement is not supportable as a mechanism for incenting investment and that providing such prices would interfere with the CPUC’s jurisdiction over capacity prices. Payments for going forward costs guarantee that a resource is not having its capacity confiscated, and hence are also “just and reasonable.” If it was to continue with this pricing approach, the ISO would concede that the backstop function is limited to procurement from existing resources and should play no further role in price setting.

This pricing scheme would compensate resources based on a resource’s actual going forward costs plus a 10 percent adder (which must be supported in a cost justification filing with the Commission), without any peak energy rent deductions, *i.e.*, resources will be able to keep all of the revenues they earn in energy and ancillary service markets. Going forward costs are defined for purposes of this proposal as the sum of fixed operations and maintenance, *ad valorem* costs, and administrative and general costs, which include insurance. Going forward costs are generally understood as the minimum fixed costs needed to keep a generator available for operation. As before, the 10% adder is intended to account for any measurement error in the CEC study (described below), hard to quantify costs, or additional costs. In addition, the minimum price as established in the CEC Levelized Cost report will serve as a further incentive for LSEs to meet their RA requirements and not rely on the ISO backstop.

The minimum price is derived from the going forward costs, plus 10%, of a new 50 MW Simple Cycle CT. As indicated above, the CEC studied three types of new combined cycle units and three types of new simple cycle units, which are the most common units being built in California. The small simple cycle unit (constructed by a merchant generator) had the highest going forward costs of all these units. For these reasons, the ISO based its ICPM capacity price on the going forward costs of the simple cycle unit.

Thus, the ISO has proposed to base the CPM capacity price for Option A on the small simple cycle gas unit (as previously used under ICPM), evaluated by the CEC in 2007-2009. To reach a minimum capacity payment of approximately \$55/kW-year, the ISO incorporated a 10 percent

Replaced after five business days from the date of notification or not replaced	LSE pays the applicable System or Local RA penalty for the deficiency	\$6.66/kW-month	\$3.33/kW-month
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In the event that an LSE is deficient both in System and Local RAR, penalties are not additive. The CPUC has also adopted a price of \$40/kW-year as a trigger for granting a waiver for Local RA Requirements. The most recent CPUC Decision that addressed penalties is available at http://docs.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/119856.htm.

adder¹⁸ to the going-forward costs of the small simple cycle unit, *i.e.*, approximately \$50/kW-year.. To the extent a resource owner believes that it's going forward costs, plus 10%, exceed ~\$55/kW-year, it may make a cost justification filing with the Commission to obtain a higher capacity payment.

There are several reasons why the ISO would again propose the highest cost unit as the basis for the minimum payment. First, this cost level should cover the going-forward costs of the vast majority of eligible resources, thereby limiting the number of resource-specific cost justification filings that will have to be made with the Commission. Second, it will also provide most existing resources that have lower going-forward costs with some contribution toward recovery of their capital costs and return. Third, using this cost level rather than a lower one will be a further incentive for LSEs to enter into bilateral contracts and not rely on backstop capacity procurement by the ISO. Finally, the voluntary nature of the CPM designation will permit a resource to decline designation if it believes that its opportunity costs through other means are greater than the CPM price along with retention of energy and ancillary service market revenues.

These two backstop capacity pricing options – A and B -- are different enough to warrant an explanation of the determinations used to select the preferred option. The ISO will base its decision on comments filed, ease of integration into ISO software and market systems, support for “just and reasonable” compensation to generators, benefits to rate payers and meeting the operational and capacity needs of the ISO with a 20-33 percent RPS.

5.4. Procurement of Non-Generic Capacity to meet Operational Needs

This section addresses compensation for non-generic capacity (MW) that would be procured to meet certain defined operational needs. The type of capacity that would qualify as “non-generic” capacity would need to be defined and placed in the ISO tariff. Compensation for capacity procured for these types of operational needs would be paid using a different compensation method.

Corresponding to the proposed CPM, the operational assessment could take place in both the forward and real-time (*i.e.*, significant events) timeframes. In the forward timeframe, one possibility is that the ISO's operational studies could be coupled with the ISO's determination of locational capacity requirements in future years to evaluate RA portfolios for their operational capabilities. For example, backstop capacity procurement can be invoked when an load serving entity's LCR showing is considered “ineffective”, and this requires the load serving entity or in its absence the ISO to make the determinations of how to modify the RA procurement. A similar approach could be used in expanding backstop procurement to examine operational characteristics. In the timeframe of significant events, the ISO's protocols are likely to be simpler and involve operator discretion to select units that in addition to having a capacity obligation would also be preferred if they had certain operational characteristics.

¹⁸ The 10 percent adder is in-line with adders that the Commission has approved in the past. *San Diego Gas & Electric Company v. Sellers of Energy and Ancillary Services into Markets Operated by the California Independent System Operator Corporation and the California Power Exchange*, 96 FERC ¶61,120 at 61,519 (2001); *Public Service Co. of New Mexico*, 95 FERC ¶ 61,481 at 62,714 (2001); *Niagara Mohawk Power Corporation*, 86 FERC ¶ 61,009 at 61,025 (1999); *Terra Comfort Corporation, et al.* 52 FERC ¶ 61,241 at 61,841 (1990). The 10% adder can account for other potential going-forward costs, costs that are difficult to quantify, or a margin for error in the CEC's study. The adder will also serve as a further incentive for load serving entities to enter into contracts to meet their RA requirements and not rely on backstop capacity procurement by the ISO.

The ISO recognizes that this type of backstop procurement is likely to be more complicated than the procurement of generic backstop capacity and therefore it may not be possible to complete this aspect of the CPM in time for consideration of it at the November 1-2, 2010 Board of Governors meeting (the ISO intends to present the generic backstop capacity proposal to the Board of Governors for consideration at its meeting in November 2010 in order to allow sufficient time to make a tariff filing, obtain a FERC order, and have the CPM tariff provisions in effect on April 1, 2011 so there is no lapse in the tariff authority for backstop procurement or Exceptional Dispatch). The ISO intends to work with stakeholders now to develop this additional type of procurement to meet operational needs and will press forward as quickly as possible. The ISO will assess whether a phased approach for filings may be warranted after it has engaged with stakeholders over the next three months. .

5.4.1. Additional Type of Procurement to meet Operational Needs

The ISO asked stakeholders to comment on the creation of a new procurement category to provide certain operational characteristics to support the integration of variable energy resources throughout the month, particularly as the systems aim to achieve the 20-33 percent RPS.

In response to this question, stakeholders were generally supportive as long as the ISO clearly articulates the procurement criteria and procurement is consistent with operational needs. Mirant supports the expansion to 12 months and a new category to provide better signals to generators. JP Morgan agrees that procuring to meet operational needs to maintain grid reliability will help in renewable integration efforts. JP Morgan supports a new category but with sunset provisions. PG&E notes that ramp rates and ancillary services capability are appropriate criteria for capacity selection, but does not support procurement greater than 30 days. SCE is concerned that procurement out to 12 months will change the current RA structure. They also note issues such as resource qualification and triggering mechanisms need to be fully vetted. The CPUC supports the effort and current monthly procurement period, but is concerned a 12-month product would expand into CPUC procurement efforts. NCPA states backstop procurement should be reliability based and its use limited. The ISO is anticipating this new category will become an important foundation to this initiative.

In an October 20, 2009 report¹⁹ the ISO noted the need for additional amounts of regulation and fast ramping resources to compensate for events such as over-generation and wind/solar ramp variability. A November 2007 report²⁰ cites the need for additional transmission, fast ramping resources, load following and regulation resources to increase the reliable operation of the grid. Most recently, KEMA issued a report outlining the need for additional fast ramping and load following capability to ensure grid reliability for a 33% Renewable Portfolio Standard in California.²¹

The ISO proposes to include a new procurement category in the CPM which would be distinct from the existing and proposed triggers of ISO backstop generic capacity procurement. This category would be used in instances where the ISO identifies a need for a resource's specific operating characteristics, which may not be captured in the local capacity requirements for RA procurement of local capacity and are not associated with any identifiable potential significant event.

¹⁹ IRRP Stakeholder Meeting on Renewable Integration Requirement, <http://www.caiso.com/2449/2449ea32303a0.pdf>

²⁰ Integration of Renewable Resources, <http://www.caiso.com/1ca5/1ca5a7a026270.pdf>

²¹ www.energy.ca.gov/2010publications/CEC-500-2010-010/CEC-500-2010-010.PDF

5.4.2. Establish Criteria for which Capacity would be “Non-Generic” Capacity

In the template, the ISO asked stakeholders to comment on the ability for the ISO to distinguish between the operational characteristics of eligible resources in these situations to better meet reliability needs. The ISO will also need to establish definitions and criteria for which capacity can qualify to be considered non-generic capacity.

Overall, stakeholders were supportive of the ISO differentiating unit characteristics to better match those resources with system needs. The Six Cities support procurement of operational needs at the lowest possible costs. PG&E states that ancillary services capability and ramp rates are the types of criteria that should be included in the selection process. WPTF supports the need to procure resources by unit characteristic and also states each criterion should be compensated appropriately.

The ISO proposes to include consideration of the operational characteristics of resources as explicit criteria for making such selections to ensure that the ISO can select the resource that best meets the identified need. Operational characteristics beyond what are currently included in section 43.2 of the ISO tariff that may need to be added to the ISO tariff to implement paying for non-generic capacity under CPM may include regulation and load following..

5.4.3. Compensation/Pricing for Non-Generic Capacity

The ISO proposes to compensate the operational characteristics it will need to maintain reliability with increasing amounts of supply from variable energy resources, and therefore will allow operators to select generators with higher costs with the needed operational characteristics.

For resources procured under this new category the ISO proposes to compensate the units for (1) the monthly CPM capacity payment plus (2) a possible adder based on analysis of revenues that a unit could need to provide the capabilities it is selected for in the month that it is selected. As with the current ICPM must-offer requirement for energy and ancillary services, these units would be expected to bid those capabilities into the wholesale energy and ancillary service markets for which they are eligible, and be compensated through the prices in those markets. One possible approach to the additional compensation would be to calculate the difference between a unit's capabilities in ancillary services and its cleared MW over the month in which it is designated. If there was a difference, then the adder could make up payments for the full capability, under the assumption that this capacity was reserved by the ISO through the CPM designation. The ISO seeks stakeholder input on other payment options in this category, including not providing any such payment through the capacity procurement mechanism.

The ISO proposes to compensate eligible capacity for a one-month period, and would have the ability to procure in consecutive months.

6. Exceptional Dispatch

The ISO proposes to extend the tariff provisions that are currently in effect for Exceptional Dispatch, including the choice to elect either capacity compensation or the supplemental revenues payment option, with the exception of the changes listed below. The Exceptional Dispatch provisions are contained in sections 43.15, 34.9.1 – 34.9.3 of the ISO tariff and can be found at <http://www.caiso.com/27c3/27c3ea753b1f0.html>. The proposed changes to the Exceptional Dispatch provisions are listed below and explained in the remainder of this section.

- Revise the compensation paid to resources dispatched for an Exceptional Dispatch.

This section discusses two topics: the proposal for compensation of Exceptional Dispatches that trigger a capacity payment or supplemental revenues, depending on the resource's election, and the bid mitigation that would be used for certain types of exceptional dispatches.

6.1. Compensation/Pricing

The ISO asked stakeholders to comment on the appropriate compensation for capacity not under an RA contract that is exceptionally dispatched.

Stakeholders were supportive of the linkage between the Exceptional Dispatch price and ICPM pricing, and that the price paid for non-RA capacity that is exceptionally dispatched should be the same as for a CPM designation, as is done today. Calpine states this mechanism allows compensation for units that generally do not receive other forms of compensation. The CPUC supports the current system and recommends the ISO to continue efforts to reduce the number of Exceptional Dispatches.

SCE is supportive of the current system and also recommends a payment structure that considers RUC revenue. Dynegy suggests resources should be paid for a longer period than one month to more accurately determine a resource's fixed costs. Six Cities on the other hand, suggests the ISO analyze historical payments to ensure resources have not been excessively compensated.

As stated in the issue paper, the ISO has implemented many new operational procedures and software solutions to reduce the number of Exceptional Dispatches. With the advent of substantial intermittent generation the ISO expects the need for Exceptional Dispatch to continue. It is thus important for the pricing mechanism in these instances to fairly compensate resources for the services they provide.

The ISO proposes to continue compensating resources based on the final approach to the pricing of capacity under the CPM.

6.2. Bid Mitigation

The ISO asked for stakeholder comments on whether resources dispatched under Exceptional Dispatch should continue to be mitigated under these limited circumstances.

Although Stakeholders were generally in agreement that bid mitigation should continue, some stakeholders stated the competitive path assessment should be re-visited or mitigation discontinued.

Calpine argued that constraints should be more fully captured in the integrated forward market and real-time market, eliminating the need for exceptional dispatches and mitigating them. JP Morgan, WPTF, RRI and Dynegy argued the ISO should modify the competitive path analysis to test all paths, because under the current analysis approach units can be mitigated to resolve constraints on paths that have not been tested for competitiveness.

The CPUC states bid mitigation should be continued and cites a lack of documented abuse of market power as evidence mitigation rules are working. SCE, PG&E and the Six Cities favor the current design and bid mitigation

The ISO proposes to continue mitigating exceptionally dispatched bids, in the fairly limited set of circumstances currently allowed under the tariff, because it is appropriate to address market

power in these instances. Bids are currently only mitigated in the following two circumstances:²²

- **Dispatches to Mitigate Congestion on Non-Competitive Paths.** A non-competitive transmission path is defined as a path for which one or more market participants have the ability to exercise market power. As such, market participants clearly have the potential to exercise market power in the case of Exceptional Dispatches to relieve congestion on non-competitive transmission paths and mitigation is appropriate.
- **Dispatches Made Under “Delta-Dispatch.”** Similarly, because only certain resources can be dispatched under the delta dispatch procedures, supply under this circumstance is not competitive and it is appropriate to continue to mitigate bids dispatched under Exceptional Dispatch under the delta dispatch procedures.

For context, exceptional dispatch subject to bid mitigation has been a relatively low portion of all exceptional dispatches. The following chart summarizes average hourly Exceptional Dispatch

²² The specific methodology currently used to mitigate bids that are dispatched under Exceptional Dispatch depends on the payment option the market participant has chosen for the resource for additional revenues, if the resource is partial or non-RA. (Market participants can elect to either receive an ICPM payment or receive “supplemental revenues” for a resource dispatched under Exceptional Dispatch.) These resources are provided with additional revenues if their bid is mitigated when being dispatched through Exceptional Dispatch. The method through which a resource receives these additional revenues depends on whether the market participant has chosen to receive “supplemental revenues” or ICPM compensation for the resource in the event the resource is dispatched through Exceptional Dispatch.

If the supplemental revenues option is chosen, then the resource’s bid price in individual hours is not mitigated and exceptional dispatches generally are settled at the higher of the resource’s bid price, default energy bid or the locational marginal price at that location. The amount of supplemental revenues the resource can earn in any 30-day period is capped; however, at the amount of what it could have earned through an ICPM capacity payment (if the market participant had elected ICPM rather than supplemental revenues for the resource).

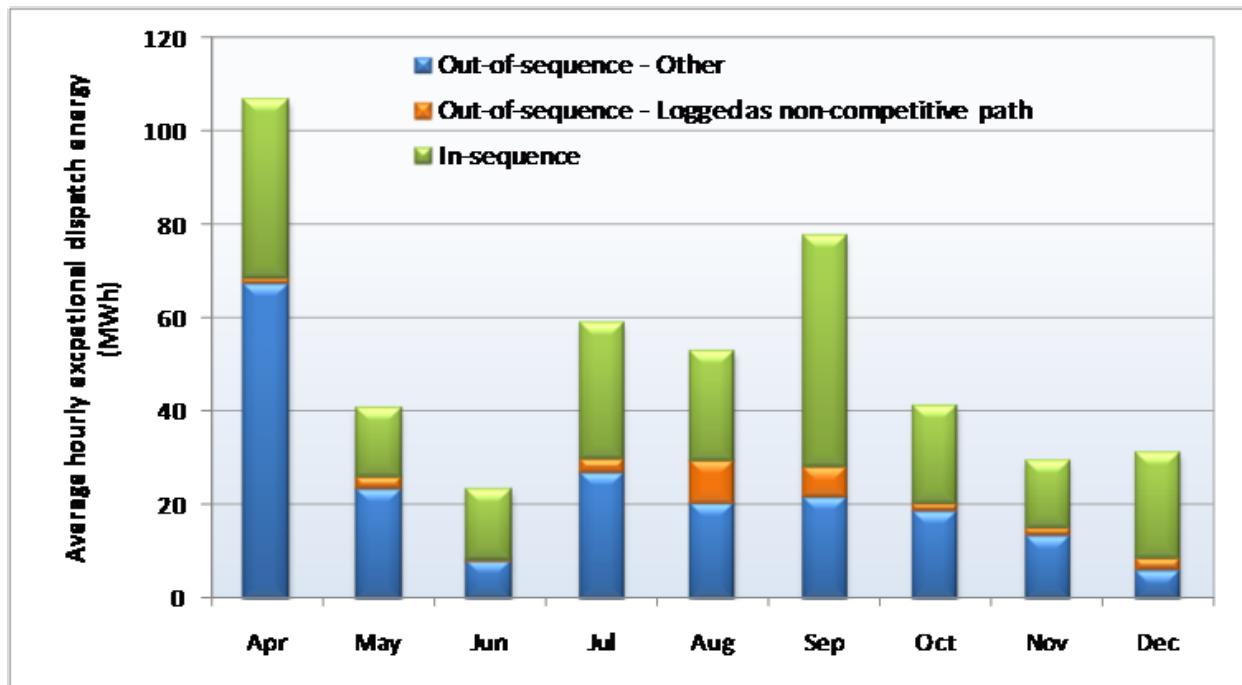
If a resource does not choose supplemental revenues, then exceptional dispatches are generally paid the higher of the resource’s default energy bid or the locational marginal price. If the bid for the resource is less than the resource’s default energy bid; however, the resource is paid the higher of the bid for the resource or the locational marginal price.

²³ The specific methodology currently used to mitigate bids that are dispatched under Exceptional Dispatch depends on the payment option the market participant has chosen for the resource for additional revenues, if the resource is partial or non-RA. Market participants can elect to receive either an ICPM payment or “supplemental revenues” for a resource dispatched under Exceptional Dispatch. These resources are provided with additional revenues if their bid is mitigated when being dispatched through Exceptional Dispatch. The method through which a resource receives these additional revenues depends on whether the market participant has chosen to receive “supplemental revenues” or ICPM compensation for the resource in the event the resource is dispatched through Exceptional Dispatch.

If the supplemental revenues option is chosen, then the resource’s bid price in individual hours is not mitigated and exceptional dispatches generally are settled at the higher of the resource’s bid price, default energy bid or the locational marginal price at that location. The amount of supplemental revenues the resource can earn in any 30-day period is capped, however, at the amount of what it could have earned through an ICPM capacity payment (if the market participant had elected ICPM rather than supplemental revenues for the resource).

If a resource does not choose supplemental revenues, then exceptional dispatches are generally paid the higher of the resource’s default energy bid or the locational marginal price. If the bid for the resource is less than the resource’s default energy bid; however, the resource is paid the higher of the bid for the resource or the locational marginal price.

energy during 2009.²⁴ As shown by the chart, the vast amount of energy dispatched through Exceptional Dispatch has been for reasons other than to mitigate congestion on non-competitive transmission paths (“Out-of-sequence – Other” on the chart), or has been dispatched from resources with a bid price less than the locational marginal price (“In-sequence” on the chart). These categories are not subject to mitigation. Only a very small portion was dispatched from bids above the locational marginal price to resolve congestion on non-competitive transmission paths (and consequently subject to bid mitigation). These amounts are shown as “Out-of-sequence – Logged as non-competitive path” on the chart.



While the ISO agrees that enhancements to local market power mitigation provisions and the competitive path analysis may potentially be appropriate, we believe this is more appropriately addressed as part of a separate stakeholder initiative anticipated to begin in September. This initiative is anticipated to address enhancements to local market power mitigation and may also consider potential enhancements to the competitive path analysis. Consequently, the ISO does not plan to include changes to the competitive path analysis methodology as part of this capacity procurement mechanism initiative.

7. Next Steps

The ISO will hold a stakeholder conference call on July 22, 2010 to review and discuss this Straw Proposal. Stakeholders are encouraged to submit written comments by July 30, 2010. The ISO will post the stakeholder comments to the following web address <http://www.caiso.com/27ae/27ae96bd2e00.html> and consider stakeholder input and comments as it develops a draft final proposal to be posted on August 16, 2010.

²⁴ From ISO Department of Market Monitoring Annual Report on Market Issues and Performance 2009, page 4.16, <http://www.caiso.com/2777/277789c42ac70.html>