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**Issues Paper:
Tariff Filing for
Interim Capacity Procurement Mechanism**

**California Independent System Operator
Market & Product Development Group
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Tariff Filing for Interim Capacity Procurement Mechanism

The Issue

Apart from resources procured by the California Independent System Operator (“CAISO”) under its Reliability Must-Run (“RMR”) authority, capacity is currently committed under the CAISO Tariff through two sequential and complementary mechanisms. First, the CAISO may commit capacity procured under resource adequacy (“RA”) programs by Load Serving Entities (“LSEs”). Second, to the extent RA resources are insufficient to satisfy system and other reliability needs, the CAISO may commit “backstop” capacity on both a daily and forward basis pursuant to the Reliability Capacity Services Tariff (“RCST”), which was established as a result of Federal Energy Regulatory Commission (“FERC”) approval of an Offer of Settlement in *Independent Energy Producers Association v California Independent System Operator Corporation*, FERC Docket No. EL05-146 [“RCST Litigation”]. RCST will expire on December 31, 2007. The CAISO desires to work with stakeholders to implement a replacement “interim capacity procurement” mechanism that would become effective in late 2007 so that, if necessary, the CAISO can procure backstop resources pursuant to such mechanism starting on January 1, 2008.

Resolution Process

The CAISO intends to seek approval from the CAISO Board of Governors on September 6-7, 2007, and file tariff language with FERC on September 11, 2007 for an interim capacity procurement mechanism.

The CAISO posted this issues paper on May 9, 2007 to facilitate discussion at a stakeholder meeting scheduled for May 18, 2007. This issue paper presents a general strategy for developing the interim capacity procurement mechanism and describes many of the topics that will need to be discussed to reach a final proposal. The CAISO anticipates revising this issues paper or creating a more robust “white paper” after the May 18, 2007 meeting that incorporates stakeholder comments and reflects progress toward a fully developed replacement for RCST.

Prior to the posting of this issues paper, the CAISO talked informally with a broad range of stakeholders to better understand issues from the stakeholder’s perspective. Their feedback is included in a separate section of this paper.

Formal written comments from stakeholders are due on May 25, 2007. On May 29, 2007, the CAISO will post the received written comments. In their written comments, stakeholders should describe whether all of the essential topics have been captured, and suggest approaches to resolve such topics as well as any other topics that stakeholders have identified. Given the interaction among the components of the interim capacity procurement mechanism, such as the trigger for designating a resource, the term over which payment would be made, the price that would be paid for capacity, and the allocation of costs, suggested approaches should address the full set of elements and their interaction.

A list of project milestones is provided at the end of this paper. The milestones include additional stakeholders meetings, development of an Opinion from the Market Surveillance

Committee (“MSC”), preparation of draft tariff language, a decision from the CAISO Board of Governors, and a filing at FERC.

Background

On August 26, 2005, the Independent Energy Producers Association (“IEP”) initiated the RCST Litigation challenging the FERC imposed must-offer obligation (“MOO”) as unjust and unreasonable and recommending that the MOO be replaced with a tariff-based procurement mechanism. On March 31, 2006, the CAISO, in collaboration with IEP, the California Public Utilities Commission (“CPUC”) and other stakeholders, filed an Offer of Settlement that proposed the institution of an RCST that included modifications to the existing MOO. Under the Offer of Settlement, as approved by FERC, the RCST provides the CAISO a reliability backstop procurement mechanism to ensure the reliable real-time operation of the ISO Controlled Grid and modifies the compensation generators receive for the needed capacity. This Offer of Settlement will expire on December 31, 2007.

Rationale for Interim Capacity Procurement Mechanism

To reliably operate the system and serve Load, the CAISO must have sufficient capacity made available to it. The availability of capacity differs under the current market design and the Market Redesign and Technology Update (“MRTU”) market design.

Current Market Design

Under the current market design, LSEs contract with suppliers to meet the RA requirements that have been established by their Local Regulatory Authority (“LRA”). These RA resources then must be made available to the CAISO. The CAISO also has the ability to contract with resources, through RMR Agreements, that are needed to fulfill local needs. These RMR resources also must be made available to the CAISO. Finally, the CAISO has the ability through the FERC MOO, as augmented by RCST tariff provisions, to call upon resources that are needed for capacity to meet system and local needs, as well as Significant Events that occur, and to pay those resources a tariff-based rate for capacity¹. Put another way, under the current tariff, apart from its RMR authority, the CAISO can procure backstop capacity on a daily basis if LSEs, in aggregate, have not supplied sufficient resources to allow the CAISO to meet defined reliability needs on a local, zonal or system basis, or, on a more forward basis, if LSEs, in aggregate, have not met their system or local RA obligations or if a Significant Event occurs.

MRTU Market Design

Under the MRTU market design, which will be in effect from early 2008 forward, RA and RMR resources still must be made available to the CAISO. The MRTU market design also includes a Residual Unit Commitment (“RUC”) process. RUC provides an incentive for non-RA resources to make their capacity available to the CAISO in the Day-Ahead Market in return for a market-based capacity payment if selected by the RUC application software. To participate in RUC, a resource would also be required to submit bids for Energy or Ancillary

¹ Consistent with the previously established FERC MOO, RCST requires certain types of resources to make themselves available to the CAISO unless the resource is otherwise committed.

Services in the Integrated Forward Market (“IFM”). However, there is no obligation for a non-RA or a non-RMR resource to bid in the IFM or RUC and thereby make itself available to the CAISO.

Prior to the FERC approval of RCST, the Commission had ordered the FERC MOO to expire at the start of MRTU. Therefore, the current market feature that requires certain types of resources to make themselves available to the CAISO on a daily basis will not be present under MRTU unless the interim capacity procurement filing is to include it as a feature.

Functions of the Backstop Capacity Mechanism

There is an urgent need for an interim capacity procurement mechanism for the year 2008 and beyond to cover the following situations:

- An LSE chooses to not contract for its full RA requirement, i.e., the LSE is intentionally “short,” or otherwise violates a “counting” rule and therefore is short;
- The aggregate amount of resources are contracted for in a local area by the applicable LSEs, but the CAISO still needs more capacity to comply with Applicable Reliability Criteria due to the “effectiveness factors” of the individual units that form the aggregate portfolio of LSEs²; and
- A Significant Event occurs, such as the loss of a major transmission facility for an extended number of weeks or months.

There also is a continued need for an interim capacity procurement mechanism because it may be adapted to provide a more appropriate cost allocation mechanism than RMR for procuring needed capacity. This will be especially true when, in July 2007, the CAISO asks the ISO Board of Governors to approve aligning the criteria used in the currently separate studies determining RMR (Local Area Reliability Services or “LARS”) and local RA requirements (Locational Capacity Requirements or “LCR”). After the RMR and local RA requirements criteria are the same, if there is not an interim capacity procurement mechanism in place, then any shortfall in the 2008 RA capacity procurement process could be made up by the CAISO procuring the deficiency through the RMR process. This creates an incentive for LSEs to under-procure in their RA showings since the RMR cost of procurement would be allocated to all LSEs. Parties have expressed concern for the probable cost-shifting that would result from an increase in RMR as a result of changing the LARS criteria to be the same as that used in the LCR, and not having an interim capacity procurement mechanism to use in lieu of RMR for capacity deficiencies. The mechanism that will be the successor to RCST needs to be in place during December 2007 so that the CAISO can utilize it for procuring capacity rather than RMR. This approach is preferred because RMR costs are spread to all Load while backstop costs can be targeted to entities that have a deficiency. It should be noted that the CAISO is in the process of better defining the local capacity requirements for the year 2008 and beyond, which will further minimize the possibility of invoking the new interim capacity procurement mechanism.

² The CAISO also may need to procure backstop capacity in the circumstance where LSEs may be compliant with RA requirements, but insufficient capacity was procured in a specific load pocket. This issue can arise because an LRA may allow the aggregation of load pockets in a particular Transmission Access Charge (“TAC”) area for procurement compliance purposes. For example, the CPUC allows for the aggregation of load pockets in the PG&E TAC area.

Proposed Strategy

The ISO proposes the following principles to guide the development of an interim capacity procurement mechanism:

Continue the current RCST structure and discuss adaptations necessary to ensure compatibility with the MRTU market design and reliability criteria.

The interim capacity procurement mechanism would be effective from January 1, 2008 onward, but may be superseded, as necessary, by a market-based capacity pricing mechanism.

The interim capacity procurement mechanism would be a “pure” capacity product. Procurement of other reliability services such as black start, voltage support and dual fuel capability, will be accomplished in the near-term by means of RMR contracts, and over the long-term, potentially through separate tariff-based reliability products or alternative bilateral contracts.

No Daily MOO under Interim Capacity Procurement Mechanism under MRTU

As discussed above, FERC has ruled that a daily MOO will no longer exist under MRTU and, accordingly, this feature is not presently proposed to be part of the interim capacity procurement mechanism under MRTU. The CAISO seeks input, however, into the desirability of maintaining such a short-term offer obligation. That said, the need for daily interim capacity procurement mechanism fades to the extent it is agreed upon or otherwise understood that (1) the CAISO has been granted the authority to obtain on a forward basis local resources needed to comply with FERC-approved criteria to be applied in its annual Local Capacity Requirements Analysis³ and (2) the CAISO is to otherwise operate the system based solely on the resources provided through LSE procurement levels established by the CPUC and other LRAs or proposed market mechanisms, i.e., RUC. The only caveat to this understanding being that the CAISO must comply with applicable NERC/WECC requirements, including Minimum Operating Reliability Criteria (“MORC”). One potential means to ensure the ability to satisfy reliability requirements is to adopt a sufficiently flexible definition of “Significant Event” or a similar concept to address contingencies and unexpected system conditions.

It should be noted that under MRTU RUC provides an incentive for non-RA capacity to participate in CAISO markets, but does not create an obligation for resources to participate. Thus, without a daily MOO-type mechanism or other flexible means to procure capacity to address unforeseen or changed circumstances or inherent inefficiencies or deficiencies in RA programs, the CAISO could be placed in the position in the Day-Ahead timeframe of planning for the interruption of firm load or calling an emergency to obtain access to non-RA Participating Generator Agreement (“PGA”) resources, even when idle non-RA capacity exists on the grid. The CAISO recognizes its role is to operate the grid in accordance with CAISO Grid Planning Standards, that incorporate NERC/WECC requirements and to the

³ See, Order Conditionally Accepting the California Independent System Operator’s Electric Tariff Filing to Reflect Market Redesign and Technology Upgrade, 116 FERC ¶ 61,274 (Sept. 21, 2006) at P 1119, 1191 and Order Granting in Part and Denying in Part Requests for Clarification and Rehearing, 119 FERC ¶ 61,076 (April 20, 2007).

reliability level set by the CPUC and other LRAs. Thus, absent a potential violation of any NERC/WECC standard, the CAISO should work within the parameters established by LRAs (i.e., 115% planning reserve margin). If so, the result of this approach under MRTU could be potentially greater reliance on emergency declarations to obtain non-RA resources to meet MORC requirements when RA resources are insufficient. Providing the CAISO with flexibility to address potential deficiencies in the RA program or contingencies would give the CAISO some ability to minimize the need to rely on emergency declarations. As noted, improvements to the RCST concept of a “Significant Event” may accomplish this objective.

Topics to Discuss

Provided below are topics that have been identified by the CAISO that may need to be discussed during the stakeholder process. Stakeholders are encouraged to communicate to the CAISO additional topics that may not be currently on this list and which may also warrant discussion.

The CAISO notes that stakeholders may have divergent views on many of these topics. The CAISO will facilitate the discussion and attempt to drive stakeholders to consensus. The CAISO therefore encourages stakeholders to work together to craft approaches that collectively work to form a comprehensive whole.

1. Whether the current triggers for designating backstop resources are appropriate under MRTU. There may be a need to revisit and define the applicable triggers given that the daily MOO will not be a feature of the interim capacity procurement mechanism under MRTU.
2. The duration over which the interim capacity procurement payment would be paid, which may vary based on the reason for procurement. Options include daily, monthly, multi-month, balance of year, or full-year payment, and may depend on the type of service provided (system, local or Significant Event). The length of time of the payment may influence the rate paid.
3. Are there any cost allocation implications for the interim capacity procurement mechanism when the CAISO moves to the MRTU market design that includes locational marginal pricing?
4. Should RUC payments be accounted for and, if so, how?
5. Because this interim capacity procurement mechanism is likely to be in place for a number of years, a methodology may be needed to adjust the base price over time. How, if at all, should this be accomplished? Escalation formula such as an inflation adder?
6. Whether there needs to be an interim capacity procurement mechanism that would be in effect from January 1, 2008 up to the start of MRTU, and another, slightly different, “MRTU-ized” interim capacity procurement mechanism that would be in effect under MRTU (i.e., can one mechanism be made to work starting January 1, 2008 and go forward, or are two needed?).

Early Informal Input from Stakeholders

Prior to the posting of this paper, CAISO staff talked informally with a broad range of stakeholders to better understand this topic from the stakeholder's perspective. The feedback that was provided to the CAISO is copied below.

- Support extending RCST as the interim backstop mechanism until a Track 2 solution can be implemented. The current RCST backstop mechanism is the offspring of time-consuming negotiations by a multitude of parties and reflects significant compromise by all those who supported the settlement. It would not be prudent at this time to undertake contentious negotiations to reinvent a backstop mechanism that will only be in place for one to two more years.
- Extending RCST must not disrupt the current limited use of RMR. Supportive of the CAISO's efforts to align the annual studies for RMR and LCR as described in Proposal 8 of the Resource Adequacy Proceeding. Under Proposal 8, RMR contract renewals should be made available to those generating units already operating under RMR unless the preliminary resource adequacy demonstrations indicate that these units now have a resource adequacy contract. After the final local resource adequacy demonstrations are submitted, the CAISO should fill any deficiencies with RMR-lite contracts that might be needed, or with RCST contracts.
- We are mindful of the CAISO's needs to harmonize RCST with MRTU and therefore support only those changes that are absolutely necessary to facilitate integration.
- Extending RCST must not create any binding policy precedent as the RCST settlement is purely an interim mechanism.
- The RCST successor backstop capacity product/process should ideally:
 - Use the existing RCST structure and settlement agreement as much as possible
 - The current RCST should be extended - as is with no changes other than effective date - from 12/31/07 to the start of MRTU
 - For the period after the start of MRTU, the current RCST should only be modified to the extent necessary to accommodate MRTU
 - Deficiency assessment and cost allocation related to special 'system' related limitations associated with P26 constraints (i.e. zonal requirements)
 - PER calculations to reflect Gen Hubs (vs. zonal prices), and additional MRTU revenue streams
 - Proposal should not implicate or otherwise be conditioned on the future of RMR
 - RCST capacity payments should not be adjusted for inflation or any other reason; opening this area may well stall any RCST replacement as valid arguments can be made to either raise the price (inflation) *OR* to lower the price (to properly reflect 'existing capacity' and not the cost of new entry)
 - To be determined if needed: Apart from RCST successor agreements/tariffs, clear understanding that all PGA generators are under a CAISO tariff driven 'commitment obligation' irrespective of the sun-setting of the FERC MOO. PGA generators must provide 'backstop capacity' services as required and as

designated by the CAISO; the backstop capacity product/process will assure fair compensation.

- Backstop Capacity Needs Prior to MRTU:
 - What are the reasons why the CAISO would need to procure capacity under the current CAISO Tariff?
 - What are the backstop procurement alternatives under the current CAISO Tariff and what are their key attributes (RMR, RCST, bilateral, etc.)?
 - What is the timing for addressing backstop procurement for 2008 and what are the key issues (e.g., RMR, Local RA, preliminary/final RA showings, CAISO backstop contracting, RCST expiration, Local RA criteria filing with FERC, etc.)?

- Backstop Capacity Needs under MRTU:
 - What are the reasons why the CAISO would need to backstop procure in MRTU?
 - What criteria should the CAISO use to procure backstop capacity (e.g. Local RA deficiencies, system RA deficiencies, other)?
 - What generators are eligible to receive a backstop capacity product under MRTU, and how should the CAISO select among multiple generators if not all are required?
 - What role, in any, should the current or a replacement Must-Offer Obligation have in a post-MRTU backstop capacity requirement?
 - What role, if any, will RMR contracts have on a backstop capacity product?

- Structure, Payment, and Cost/Benefit Allocation:
 - Will the backstop capacity product be a contract (like RMR) or a Tariff (like RCST)?
 - How much of the current RCST mechanism can remain in place under MRTU?
 - What will be the term of the backstop capacity product (e.g. day, month, quarter, year) and should multiple terms be considered for various applications?
 - How much of the current cost recovery mechanism under RCST can be retained to ensure that only those LSEs that cause the backstop procurement requirement pay the costs?
 - Are any adjustments needed to the RCST payment structure?
 - What offer obligations and bidding requirements will generators have that subject to a backstop capacity product?
 - What mechanism will provide stakeholders with a clear indication as to when the CAISO needs to enter into a backstop capacity product agreement?
 - What happens to the energy from a generator under a backstop capacity contract?
 - Is a non-RA/non-RMR generator obligated to enter into a backstop capacity product agreement with the CAISO, if designated by the CAISO?
 - What LSEs get the RA credit of the backstop capacity contract and how much credit do they get?

- CAISO's backstop should be consistent with the CPUC RA that capacity is an annual process [one-year].
- CAISO cannot take capacity service on a day-to-day basis as it does today, and not distort RA markets as well as price signals generation needs in order to build new capacity.
- "Significant event" designation under RCST hasn't worked, and clear triggers with methodologies to be paid must exist. Some participants believe that the CAISO backstop mechanism must procure that service at the price of new generation in that area such as the cost of building new peakers and/or methodology looking at a full twelve-month period.
- Participants appreciate the CAISO implementing local capacity requirements that reflect its operating criteria, but desire the California ISO to ensure gaps don't exist between pure operating criteria and foreseeable events.
- CAISO criteria should also determine if and when the CAISO must designate backstop capacity. Moreover, if criteria is established and enforced in the RA process, there should be little if any need for CAISO backstop procurement.
- CAISO should enforce ALL the RA requirements, including zonal requirements beginning as soon as 2008 authority similar to that found in its IRRP section.
- Backstop Product Pricing should reflect local area cost to build new resources and/or based on benchmark cost of realistic new capacity in that local area. Some note various projects including Edison's peaker project to cost \$275 million for approximately 225 MW of capacity equating to \$170/kW-year.
- The operating characteristics of the benchmark unit must reflect the type of benchmark unit used. (e.g., backstop must benchmark a unit that can actually provide non-spin, cold-start and fully load in ten minutes).
- The CAISO should not acquire through an extra-market backstop what it has – or should have – markets for. The CAISO currently acquires two products that FERC has directed the CAISO to develop proposals for competitive procurement of black start and voltage support – through RMR contracts.
- CAISO needs to re-engage the FERC-ordered process of procuring black start and voltage support through competitive means as soon as possible and only utilize RMR contracts when necessary. CAISO should still consider procuring those products – on a well-defined, finite interim basis [some believe even through a backstop product if doing so would make RMR go away in 2008].
- Performance incentives must be balanced and include rewards as well as penalties. If the CAISO's markets work correctly, periods of high demand should produce periods of high prices that suppliers will want to be available for to capture. Unreasonably onerous penalties that apply during periods of high demand impose unbalanced risks on suppliers.

- If LSE's meet resource adequacy requirements, they are not "deficient" and, therefore, should have no costs allocated to them under the RCST successor unless the California ISO objectively determines otherwise.
- If CAISO should thereafter procure under the RCST successor to meet a need, it should allocate only those costs associated with those LSEs associated with such deficit. Regarding determinations based on the zones and/or other methodologies, some suggestions include:
 - Zonal
 - Costs allocated pro-rata to LSEs
 - (1) CAISO procurement to meet a reliability need that was unmet after all the LSEs met their requirements (because of the effectiveness factors of the resources procured by the LSEs) and
 - (2) "Significant events" to the extent this need can be justified and the RCST approach continues with the successor.
- Participants desire to understand how the publicly-owned utilities ("POUs") are treated in a comparable fashion to the jurisdictional LSEs following the CPUC rules. It seemed unclear to participants in the requirements POUs are meeting for system and local RA, how their requirements are calculated, how compliance is ensured, and how a "deficiency" is identified. Moreover, customers want to ensure that they do not have to pay for any procurement that can be attributed to a reliability need caused by the POUs.
- RCST and its successor will likely look out no more than 1 year; price for procurement should reflect generation that would likely be available to meet that need within the next year. There is a lively discussion on what really does present the cost of new generation? Many feel the price should be the cost of building new peaker plants.
- The objective of the RCST successor should be on meeting the very short-term reliability needs that flow out of the RA programs established by the Local Regulatory Authorities. If these programs are working as intended, the need for additional procurement by the CAISO should be minimal.
- To the extent an LRA isn't establishing a comprehensive program, CAISO should seek LRA remedies with the goal being a robust, state-wide program in which all LSEs participate.
- CAISO will need to articulate how backstop procurement is expected to function (1) when it expires December 31, 2007 and until MRTU implementation, (2) during MRTU until capacity market implementation, and (3) post capacity market implementation.

Key Milestones

Listed below are key milestones for this initiative.

Apr 23, 2007	Issue market notice announcing initiative and date of first meeting
May 9	Post issues paper
May 18	Hold stakeholder meeting at CAISO (10:00 a.m. - 3:00 p.m.)
May 25	Stakeholder written comments on issues paper due
May 29	Post stakeholder written comments submitted on issues paper
Jun 6	Market Surveillance Committee meeting
Jun 29	Post proposal
Jul 25	Hold SH meeting in Folsom at Lake Natoma Inn (10:00 a.m. – 4:00 p.m.)
Aug 2	Stakeholder written comments on proposal due
Aug 3	Post stakeholder written comments submitted on proposal
Aug 13	Post draft tariff language for review (start of 2-week comment period)
Aug 14	Issue notice on posting of draft tariff text, for review of lang. not policy
Aug 14	Post draft Market Surveillance Committee Opinion (specific date TBD)
Aug 21	Hold MSC conf call on draft MSC Opinion (specific date TBD)
Aug 24	Finalize Board meeting documents, including MSC Opinion
Aug 27	SH written comments on draft tariff lang. due (end of 2-week comment period)
Aug 30	Conf. call with SHs to review draft tariff language, not policy (date TBD)
Sep 6-7	Request Board approval to make filing
Sep 11	CAISO makes tariff filing
Sep 12	Start of FERC 60-day review period
Oct 31	LSEs file 2008 Final Local RAR and Year-Ahead System RAR showings
Nov 9	CAISO analyzes showings for residual needs and reports back to LSEs
Nov 13	FERC issues order on Sep 11 filing; establishing an effective date
Dec 3	Last day for LSE to file amended showing to reduce CAISO backstop procure.
Dec 4, 2007	→ If necessary, CAISO designates backstop resources needed for reliability