



September 17, 2003

Via Electronic Filing

The Honorable Magalie R. Salas
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

**Re: California Independent System Operator Corporation
Docket Nos. ER02-1656-015 and EL01-68-028**

Dear Secretary Salas:

Enclosed please find the Motion for Leave to File Answer and Answer of the California Independent System Operator Corporation ("ISO") to the Motions to Intervene, Motions to Reject, Comments, and Protests concerning the filing the ISO submitted in the captioned proceeding on July 22, 2003.

Thank you for your attention in this matter.

Respectfully submitted,

/s/ Anthony J. Ivancovich
Charles F. Robinson
Anthony J. Ivancovich
The California Independent System
Operator Corporation
151 Blue Ravine Road
Folsom, CA 95630

Attorneys for the California Independent
System Operator Corporation

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 THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

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**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**California Independent System) Docket Nos. ER02-1656-015 and
Operator Corporation) EL01-68-028**

**MOTION FOR LEAVE TO FILE ANSWER AND ANSWER OF
THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION TO
MOTIONS TO INTERVENE, MOTIONS TO REJECT, COMMENTS, AND
PROTESTS**

I. INTRODUCTION AND SUMMARY

On July 22, 2003, the California Independent System Operator Corporation (“CAISO”)¹ filed its “Amendment to the Comprehensive Market Redesign Proposal” (the “Amended Comprehensive Market Design Proposal” or “Proposal”) in the captioned proceedings (“July 22 Filing”). The Proposal would amend the market redesign proposal the CAISO submitted in the proceedings on May 1, 2002 as Amendment No. 44 to the CAISO Tariff (“May 1 Filing”).

The amended Proposal is designed to remedy certain structural flaws in the California electricity market design that contributed to the electricity crisis experienced in 2000-01. The Proposal contains several crucial features, including a forward spot Energy market to facilitate short-term balancing of supply and demand, transparent forward spot market prices that reflect transmission constraints, rules for forward allocation and pricing of transmission that are consistent with real-time operation, and effective protection of consumers against the exercise of local market power. The Proposal represents

¹ Capitalized terms not otherwise defined herein shall have the meaning set forth in the Master Definitions Supplement, Appendix A to the ISO Tariff.

a comprehensive and reasonable balance of benefits and burdens to the different sectors of the electricity market. The CAISO acknowledges that the Proposal will not, in and of itself, provide for all the remedies needed to ensure a well-functioning market. In particular, the State of California is taking separate actions to address resource adequacy and infrastructure improvements necessary to support a robust, competitive market. The CAISO also notes that the Proposal is not complete in every respect. The purpose for filing the Proposal at this time is to obtain sufficient conceptual approval of the overall design so that the CAISO can contract with vendors to proceed with development of the software and systems needed for implementation.

As explained in this answer, the CAISO recognizes the need to work closely with the Commission and Market Participants to ensure that the revised market design is implemented successfully. The status quo is unacceptable. The longstanding problems with the current Congestion Management system have led to unjust prices and pose a continuing reliability concern. Also unacceptable, however, would be the failure of another market design. Prudence demands a deliberate and considered implementation approach and not change merely for change's sake. Based on lessons learned from California and from other independent system operators, and from ongoing studies and a measured implementation process, the CAISO is committed to working with the Commission, state officials and Market Participants to transition California and the West into a healthy electricity market – a market based on fair competition

with appropriate safeguards to consumers to ensure that just and reasonable prices are maintained.

A number of parties have submitted motions to intervene, motions to reject, comments, and protests concerning the Proposal.² The CAISO does not oppose the interventions of parties that have sought leave to intervene in the proceeding. Moreover, a number of the parties explain that they support some of the concepts behind the Proposal, specific proposals in the Proposal, or both. See, e.g., CPUC at 6, 27; EPSA at 2; PG&E at 4, 6, 7; SCE at 8, 9, 10; Sempra at 2, 16; Strategic at 9. However, parties also raise concerns and criticisms with regard to the Proposal. Pursuant to Rules 212 and 213 of the Commission's

² Motions to intervene, motions to reject, comments, and/or protests were submitted by the following entities: Automated Power Exchange, Inc.; Avista Corporation, Bonneville Power Administration ("BPA"), Idaho Power Company, Nevada Power Company, NorthWestern Energy (a division of NorthWestern Corporation), PacifiCorp, Portland General Electric Company, Puget Sound Energy, Inc., and Sierra Pacific Power Company (collectively, "RTO West Parties"); Bay Area Municipal Transmission Group ("BAMx"); California Department of Water Resources California Energy Resources Scheduling Division ("CERS"); California Department of Water Resources State Water Project ("SWP"); California Electricity Oversight Board ("CEOB"); California Municipal Utilities Association ("CMUA"); Californians for Renewable Energy, Inc. ("CARE"); Cities of Anaheim, Azusa, Banning, Colton, and Riverside, California ("Southern Cities"); City and County of San Francisco ("San Francisco"); City of Los Angeles Department of Water and Power ("LADWP"); City of Redding, California, Redding Electric Utility ("Redding"); City of Roseville ("Roseville"); City of Santa Clara, California, doing business as Silicon Valley Power ("SVP"); CMUA, Public Power Council, and Washington Public Utility District Association (collectively, "RPPE"); Duke Energy North America, LLC and Duke Energy Trading and Marketing, L.L.C. (together, "Duke"); Dynegy Power Marketing, Inc., El Segundo Power LLC, Long Beach Generation LLC, Cabrillo Power I LLC, Cabrillo Power II LLC, and Williams Energy Marketing & Trading Company (collectively, "Dynegy/Williams"); Electric Power Supply Association ("EPSA"); Energia Azteca X, S. de R.L. de C.V., Energia de Baja California, S. de R.L. de C.V., and Wildflower Energy, LP (collectively, "Intergen"); FPL Energy, LLC and American Wind Energy Association (together, "FPLE/AWEA"); Independent Energy Producers Association and Western Power Trading Forum (together, "IEP/WPTF"); The Metropolitan Water District of Southern California ("MWD"); Modesto Irrigation District ("MID"); Morgan Stanley Capital Group Inc. ("Morgan Stanley"); Northern California Power Agency ("NCPA"); Pacific Gas and Electric Company ("PG&E"); Reliant Energy Power Generation, Inc., Reliant Energy Services, Inc., Mirant Americas Energy Marketing, LP, Mirant California, LLC, Mirant Delta, LLC, and Mirant Potrero, LLC (collectively, "Reliant/Mirant"); Sacramento Municipal Utility District ("SMUD"); Sempra Energy ("Sempra"); Southern California Edison Company ("SCE"); Strategic Energy L.L.C. ("Strategic"); and Transmission Agency of Northern California ("TANC"). In addition, the Public Utilities Commission of the State of California ("CPUC") filed a motion for leave to file comments out of time, and CMUA filed a motion for establishment of procedures.

Rules of Practice and Procedure, 18 C.F.R. §§ 385.212, 385.213, the CAISO hereby requests leave to file an answer, and files its answer, to the motions to reject, comments, and protests submitted in this proceeding.³ A table of contents for this answer is provided in Attachment 1 to the present filing.

Given the time limitations involved, the CAISO notes that it is only addressing certain claims raised by intervenors. Any failure on the part of the CAISO to address fully each and every issue raised in the protests should not be construed by the Commission as acquiescence to such protests. Further, any omission should not be construed as the CAISO's agreement to the specific objection raised or as a waiver of the CAISO's right to contest the issue at a later date. The CAISO's answer is primarily intended to address the following: (1) issues that must be resolved by the Commission before the CAISO can enter into a contract with a primary vendor. The answer does not discuss certain issues raised by intervenors pertaining to Congestion Revenue Rights ("CRR") allocation, existing transmission contracts ("ETCs"),⁴ metered subsystems ("MSSs"), and the treatment of pre-Locational Marginal Pricing ("LMP") bilateral contracts. These matters will be addressed in the stakeholder process identified below.

³ To the extent this answer is deemed an answer to protests, the CAISO requests waiver of Rule 213 (18 C.F.R § 385.213) to permit it to make this answer. Good cause for this waiver exists here because the answer will aid the Commission in understanding the issues in the proceeding, provide additional information to assist the Commission in the decision-making process, and help to ensure a complete and accurate record in this case. See, e.g., *Entergy Services, Inc.*, 101 FERC ¶ 61,289, at 62,163 (2002); *Duke Energy Corporation*, 100 FERC ¶ 61,251, at 61,886 (2002); *Delmarva Power & Light Company*, 93 FERC ¶ 61,098, at 61,259 (2000).

⁴ The CAISO recognizes that, consistent with the Commission's October 30, 1997 Order concerning the CAISO, the CAISO must honor Existing Contracts, including existing transmission contracts, interconnection agreements and all other contracts that pertain to the use of the

As explained below, the Commission should: (1) approve in its entirety the amended Comprehensive Market Design Proposal submitted in the July 22 Filing, and (2) approve the process proposed herein to address specified unresolved issues and the details of the market design, so that the CAISO can finalize the tariff language that the CAISO must file to implement the Proposal.

II. ANSWER⁵

A. The Commission Should Approve the Proposal On A Conceptual Basis And Approve The CAISO's Proposed Process Going-Forward

As the CAISO explained in the July 22 Filing, the Proposal is sufficiently complete to permit Commission approval. See Transmittal Letter at 11-20. This is especially true given the further procedures that the CAISO is committing to undertake in order to (1) resolve certain outstanding issues, i.e., issues regarding CRR allocation, ETCs, MSS,⁶ and the treatment of pre-LMP bilateral contracts and, (2) work out the design details in a manner that will permit the CAISO to finalize the tariff language implementing the market design conceptually approved by the Commission as a result of the July 22 Filing. This proposed process going forward is set forth below.

transmission system. *Pacific Gas and Electric Company, et al.*, 81 FERC ¶ 61,122 at 61,471 (1997).

⁵ In this answer, citations to the transmittal letter for the July 22 Filing will be to pages of "Transmittal Letter," citations to the amended proposal contained in Attachment A to the July 22 Filing will be to paragraphs in "Attachment A," and citations to the other lettered attachments to the July 22 Filing will be to those particular attachments.

⁶ The CAISO executed the MSS Agreement in 2002 with three Governmental Entities representing 11 municipal utilities. These MSS Agreements allow vertically integrated utilities to operate under the CAISO structure when their Existing Contracts expire. Until the Commission approves the proposed market design, most of the impact and implementation issues raised by MSS parties are impossible to resolve. Accordingly, the CAISO has discussed a number of "what ifs" to date, and is committed to working with these parties to resolve outstanding issues once the Commission issues an order.

1. Concerns with the Stakeholder Process

A number of parties raised concerns with the stakeholder process that led up to the CAISO's filing of the amended Comprehensive Market Design Proposal. Some parties also assert that the CAISO's filing is incomplete and fails to satisfy the Commission's Section 205 filing requirements and, therefore, should be rejected. Others argue that the CAISO's filing failed to receive the necessary vetting before stakeholders, and they request that the Commission conduct a Commission-administered technical conference process to modify the CAISO's revised market design proposal further. Others offer other pleas for specific relief and delay. The CAISO addresses these issues below.

IEP/WPTF assert that the CAISO has overstated the stakeholder process and omitted important process-related information. IEP/WPTF fault the CAISO for rejecting the recommendation of IEP and other stakeholders to create a "Stakeholder Advisory Committee." Further, IEP/WPTF claim that the CAISO did not hold any meetings to discuss its amended Proposal and request that the Commission require the CAISO to implement a more formalized participant process based on the eastern models.⁷ Dynegy/Williams claim that the Proposal is not the result of an adequate stakeholder process. They state that there has

⁷ Specifically, IEP/WPTF urge the Commission to take the following actions: (1) direct the CAISO, in conjunction with the Commission staff at the CAISO, to immediately convene a working group of the different participants and work in conjunction with the Regional State Committee ("RSC") to propose and implement a new formalized process in California; (2) oversee this developmental process and require monthly status reports from the CAISO, the RSC, and Market Participants; (3) require the CAISO to file monthly status reports regarding implementation issues and permit Market Participants to inform the Commission of issues and concerns regarding the CAISO's filing within five days thereof; and (4) possibly establish quarterly (or as needed) technical conferences on discrete issues or, if there are particularly controversial issues, refer such issues to settlement procedures. IEP/WPTF also suggest that there should be a series

not been any opportunity for significant dialogue or stakeholder input since the last stakeholder meetings in April 2003 and that several crucial features of the instant proposal were developed subsequent to that time. Dynegy/Williams believe the only solution to concerns regarding the stakeholder process is to resolve the governance problems at the CAISO. Dynegy/Williams also support monthly reporting process proposed by IEP/WPTF. Dynegy/Williams at 5-7.

MID contends that “virtually no participant supports the CAISO’s MD02 without reservation, and that CAISO is fully aware of the Market Participants’ serious concerns with MD02 and has chosen to move forward nonetheless.” MID at 7.

SCE asserts that the CAISO has made significant progress in developing an equitable market design; however, there are certain elements (e.g., sub-area ancillary service (“A/S”) procurement) of the Proposal that still need vetting with stakeholders. SCE encourages the CAISO to continue those stakeholder discussions, because they have been productive and have lead to useful results. SCE at 2-3.

Sempra argues that “[b]ecause of the press of time and the on-going dispute between the CAISO Board of Governors and the Commission about governance matters, the CAISO staff has largely dropped efforts to organize inclusive stakeholder meetings.” Sempra states that meetings have been held with selected stakeholders, but there has not been a formal all-inclusive process.

of comprehensive CAISO Market Participant meetings to address the open issues mentioned in the transmittal letter, as well as other implementation details. IEP/WPTF at 5-8.

Sempra claims that the result is a lack of factual and policy clarity in the proposal. Sempra at 5.

2. General Response to Comments Regarding Process

As a general matter, the parties that request further delay in implementing MD02 fall into two camps: those with minimal interest in seeing the new market design implemented and those with concerns regarding the impact of the new design on their customers and/or businesses. Those parties with a vested interest in permanently delaying MD02 implementation will never be satisfied with the process, and the CAISO urges the Commission not to fall prey to their siren song of “not enough information” and “too little process.”

With respect to those parties that have raised concerns regarding consumer/business impacts, the CAISO recognizes that many of the concerns expressed by such parties are legitimate. The Commission needs to distinguish, however, between legitimate concerns regarding effective implementation of the new market design and “concerns” that are grounded solely in economic self-interest and based on the CAISO’s decision not to adopt a particular party’s position on a given issue. Many of the cries for further meetings and objections to the stakeholder process that has occurred heretofore appear to amount to nothing more than criticism of the fact that the CAISO selected a different design element than the particular party desired. Just because a party’s particular position was not adopted by the CAISO, does not mean that the stakeholder process was inadequate. To the contrary, a stakeholder process means that the CAISO (1) provides relevant information to stakeholders and adequate

opportunities for stakeholders to present their positions to the CAISO, (2) listens to the positions of stakeholders on various issues, (3) attempts to develop consensus where possible among stakeholders, including the CAISO, and (4) factors stakeholder input into the development of a final integrated design package. The MD02 pre-filing stakeholder process accomplished these objectives.

Stakeholders have had the opportunity to provide input on the proposed design for over a year-and-a-half. Among other stakeholder activities, there have been numerous Commission-sponsored technical conferences, market issues forum meetings, general MD02 stakeholder meetings, meetings with individual stakeholder groups, and three full months of MD02 stakeholder Working Group meetings. In particular, four separate Working Groups were established to address the major design elements of MD02. These Working Groups were chaired by representatives of four major stakeholder groups, i.e., the IOUs, the municipal utilities, the suppliers, and the State.

Attachment E to the Transmittal Letter identifies the major changes to the market design since the CAISO filed its initial proposal in the May 1 Filing. Most of these changes resulted from the CAISO adopting specific stakeholder proposals submitted during the stakeholder process that occurred subsequent to the May 1 Filing. Unfortunately, the intervenors do not give the CAISO credit for making numerous, significant design changes. Instead, most parties prefer to focus on those aspects of the design for which the CAISO did not adopt their positions.

Several parties argue that more meetings with all stakeholders present are needed, and certain parties take issue with the targeted meetings that the CAISO had with particular stakeholder groups. These parties ignore the fact that, although the Working Groups met for three months and were able to identify numerous issues, the Working Groups were unable to reach consensus on any of the major elements of the market design. The undeniable fact is that the parties in California are polarized on almost all of the major design elements (e.g., LMP, Local Market Power Mitigation, treatment of ETCs, revocation of the RUC availability payment and CRRs). Virtually every all-inclusive meeting that the CAISO held in the MD02 process resulted in parties simply staking out their litigation positions and not showing any willingness to compromise or reach a consensus.⁸ In fact, it was the targeted stakeholder meetings that were the most productive, because they enabled the CAISO to engage in a free-flowing dialogue with specific stakeholders in a “clear-the-air” environment free of disagreements between stakeholders. These meetings allowed the CAISO to better understand specific Market Participant’s concerns and greatly assisted the CAISO in developing its final Proposal. The CAISO is concerned that holding more general stakeholder meetings would not resolve the policy issues addressed in the amended Comprehensive Market Design Proposal; it could only serve to delay implementation of a new market design that California needs.

⁸ Claims that the CAISO has not undertaken a more all-inclusive stakeholder meetings because of the governance dispute are misplaced. Over the last year-and-a-half, the CAISO had been involved in numerous all-inclusive meetings in addition to the three months of Working Group sessions. These all-inclusive meetings did not lead to the resolution of any major issues because parties were polarized on such issues. Recognizing this, the CAISO turned to more targeted meetings with specific stakeholder groups. As discussed above, these meetings were extremely beneficial.

Accordingly, it is both necessary and appropriate for the Commission to rule now on the policy issues raised by the amended Comprehensive Market Design Proposal and grant conceptual approval of the Proposal so that the CAISO can proceed to work out the details, execute vendor contracts, and implement the new market design in a timely manner.

With respect to the process going forward, the CAISO urges those parties with an interest in implementing a new market design, as well as the Commission, to commit to engage in the processes outlined and proposed below. The CAISO already has committed resources to those efforts and, working with interested parties, will endeavor to ensure that Market Participants are provided the requisite information necessary to make an informed judgment as to the efficacy of the CAISO's proposed market design.

Toward that end, the CAISO urges parties to understand that the CAISO's efforts are by their very nature multi-faceted and complex. Moreover, in order to achieve a timely implementation of the new design – and thereby address some of the well-known and long-documented deficiencies in CAISO's markets – many of the implementation activities must proceed in parallel. Thus, while many parties understandably desire a full and complete understanding of each facet of the design prior to progressing to the next phase or issue, such a sequential process will unnecessarily delay the implementation process. For example, by obtaining "conceptual" approval of the proposed design now from the Commission, instead of waiting until all of the details of the market design are finalized and codified in tariff language, the CAISO can proceed with vendor

contracting, and the vendors can begin to assemble the core functionality of the design. Absent such an approach, the CAISO would have to wait until all details are specified and approved by the Commission, thereby significantly reducing the lead time otherwise available to the vendors. Such a process would unduly delay MD02 implementation.

This concept also applies to efforts underway outside of the CAISO. Concurrent with the development of the CAISO's new market structure, the State has been focused on reestablishing a resource planning and procurement framework to ensure investment in and development of the infrastructure necessary to support a reliable and reasonably priced electric market. A number of parties assert that the market design should not move forward prior to a resource adequacy framework being in place. For example, MID states that the CAISO's new market design without resource adequacy is like a car with fancy new wheels but no engine. Such efforts can and must proceed in parallel, however, if the CAISO is to fix a dysfunctional market sooner rather than later, i.e., the wheels and engine can be produced at the same time as long as they can be assembled and integrated to form a working machine.

3. The CAISO's July 22 Filing Is Not Deficient and Is Consistent With the Understanding Reached at the December 9, 2002 MD02 Technical Conference

The CAISO disagrees with parties' assertions that the CAISO's filing is deficient, fails to contain the necessary supporting material, and should be

rejected.⁹ The CAISO has tried to be clear that it is seeking only conceptual approval of its Revised Comprehensive Design Proposal from the Commission so that the CAISO can proceed with vendor selection and contracting while, in parallel, continue to refine the detailed aspects of the market design. This approach is no different than that taken by RTO West and WestConnect in securing conceptual approval of their proposed market design prior to the submission of detailed tariff language. See *Avista Corporation, et al.*, 100 FERC ¶ 61,274 (2002); *Arizona Public Service Company, et al.*, 101 FERC ¶ 61,033 (2002). Moreover, this approach is completely in line with the understanding reached at the Commission's December 9, 2002, technical conference regarding MD02 implementation. At that conference, and as represented in the CAISO's numerous monthly updates regarding MD02 implementation, the CAISO understood there to be general agreement that the CAISO should file for "conceptual" approval of its proposed design and, once the Commission approved the conceptual design, then file detailed tariff language prior to actual implementation of the new market structure. As the CAISO indicated in the July 22 Filing:

⁹ See, for example, "The ISO should not be moving forward with MD02 until after a rigorous cost-benefit analysis has been performed and made available to Market Participants." SVP at 8. MID also contends that the Proposal has not been demonstrated to benefit consumers, and the software and IFM have not been "tried and tested." MID at 7. "Absent any consumer benefit analysis from the CAISO, MID believes that the CAISO's MD02 proposal will do far more harm to consumers than good. The Commission should reject the CAISO's MD02 proposal." MID at 11. The Commission should not approve MD02 because of its lack of rate or tariff language. Parties "will have no notice of the substantive detail of MD02 until after the expenditure of significant resources on implementation of the ISO's 'mystery' market design." CCSF at 1. The Commission should order Commission-administered and -supervised proceedings, and should order a cost-benefit analysis prior to ruling on MD02. Without the cost study, the cost impact on consumers cannot be determined. CCSF at 2.

[a]ssuming the Commission approves the Proposal without modifying any of the basic assumptions underlying the design, the CAISO proposes to submit detailed Tariff language 120 days prior to the effective implementation date of the new market design. Commission approval of this process in conjunction with approval of the Proposal will permit the CAISO to act expeditiously to finalize and execute contracts with vendors to commence development of the required software and systems.

Transmittal Letter at 25.

The July 22 Filing is consistent with that understanding and commitment. Thus, arguments that the CAISO's filing is somehow incomplete or deficient are premature pending the actual filing by the CAISO of the tariff language necessary to support MD02 implementation. Conceptual approval of the amended Comprehensive Market Design will focus the CAISO and Market Participants in the direction everyone must head in order to finalize the details of the market design. The CAISO intends to involve stakeholders in that process consistent with the discussion below. Accordingly, the CAISO requests that the Commission approve the CAISO's proposed going forward process in addition to approving the amended Comprehensive Market Design Proposal.

4. The July 22 Filing Does Not Represent the End of the Stakeholder Process

A number of parties assert that the CAISO's amended Comprehensive Market Design Proposal lacks sufficient detail and requires further vetting before stakeholders. For example, a number of parties state that they have been unable to ascertain whether the CAISO will make available sufficient CRRs for them to hedge potential Congestion costs under LMP. Others assert that the CAISO's proposed new procedure for honoring ETCs will either abrogate or

substantially diminish their previously existing rights. A number of suppliers assert that the CAISO's Proposal cannot be implemented until a resource adequacy framework is in place in California and that, absent a resource adequacy program, revenues under the proposed market design are likely to be insufficient to sustain their operations. As a result of these concerns, many of the parties request that the Commission reject the CAISO's proposal and direct the CAISO to engage in further discussions with stakeholders.

For the reasons stated above, and as further outlined below, rejection of the filing is inappropriate. Further, any Commission directive to prolong the stakeholder process to attempt to resolve the general policy issues reflected in the amended Comprehensive Market Design Proposal is both unnecessary, unwarranted, and unlikely to be fruitful. However, additional stakeholder process is both appropriate and necessary in order to (1) address CRR, bilateral contract and ETC issues and (2) transform the conceptual design approved by the Commission into a more detailed design that will allow the CAISO to draft the tariff language necessary to implement the Proposal. The CAISO's proposed procedures for dealing with these matters is set forth below.

On a general level, the CAISO is sympathetic to the concerns raised by Market Participants with respect to the stakeholder process. Over the last five years, the CAISO has strived to develop a stakeholder process that attempts to arrive at consensus, and, if no consensus is possible, at least results in a general acknowledgement that a proposal has been well vetted and is widely understood. The CAISO has been successful on occasion in developing a consensus on

issues – the CAISO’s annual transmission planning process is generally well regarded – but on the whole, most stakeholder processes have left Market Participants unsatisfied.

There are three critical and necessary ingredients to a successful stakeholder process: *time, commitment and dialogue*. Commitment and dialogue contemplate the willingness to cooperate and compromise where appropriate and necessary to reach a consensual resolution. With respect to the first, processes that are artificially or arbitrarily constrained due to tight timeframes – either through the press of specific or systematic failures, the establishment of unrealistic implementation schedules, or by arbitrary legal or regulatory deadlines that fail to consider the scope of an issue – inevitably fail. The issues before the CAISO, stakeholders and the Commission in MD02 are not simple; they require time to fully understand not only the basic mechanics of the Proposal, but also the interrelationship with other features of the design, as well as the potential unintended consequences of one design or market choice versus another. While many would argue that they have suffered long enough under the existing failed design and that the CAISO’s efforts of the last 20 months have taken too long, others would argue that the overall design of a market must be accomplished in a more measured and deliberate manner that ensures that California once again does not end up with patchwork design that fails to satisfy the CAISO’s core objectives – providing open access transmission, operating the CAISO Controlled Grid reliably and making reasonably priced electricity available to consumers.

Despite the fits and starts of the MD02 process over the past year-and-a-half, California is now at a critical crossroads and has an opportunity to right its course. By means of conceptual approval of the proposed design at this juncture – well before implementation – the Commission has an opportunity to set a course now for the CAISO and provide the time necessary to hone further the design details. To that end, by granting conceptual approval of the CAISO’s amended Comprehensive Market Design Proposal, the Commission has an opportunity to resolve all major policy issues (e.g., whether or not to establish an integrated Energy market and Congestion Management system based on LMP) and refocus the debate to resolution of the many key implementation details. The CAISO envisions that such a process can take place over the next six-to-twelve months and conclude, as stated above, with a complete and exhaustive analysis of the question “Are we ready to go?” Now is the opportunity to take the *time* necessary to implement the right market design.

a. Commitment

If the CAISO, Market Participants and the Commission are to be successful in reforming the CAISO’s markets, then each and every party must commit to the task. At present, the CAISO is not convinced that there is an environment for or a widespread commitment to consensus-building in California. The existing constituency-by-constituency fighting in California has led to a stalemate on most issues, as well as general exhaustion. Although many parties argue to the contrary, the CAISO’s July 22 Filing does reflect a number of “compromises” adopted by the CAISO (consistent with preserving a cohesive,

comprehensive and internally consistent design). Unfortunately, either based on a desire for a perfect design, or a failure by the CAISO to adopt specific parties' positions, many intervenors are unhappy with the Proposal on a particular issue or issues.

For example, there are a broad range of opinions on whether the CRRs offered by the CAISO should include a "scheduling priority." In the end, the CAISO compromised by offering a "scheduling priority" to the load side of Balanced Schedules protected by CRRs. In this way, the CAISO was able to offer some assurances of protection to Balanced Schedules, yet not completely compromise the efficiency of the Congestion Management outcome and further exacerbate operational issues (i.e., defer satisfying load until real time).

Another example is the CAISO's proposal for honoring ETCs. While all ETC Rights holders were adamant that the CAISO should continue to honor their pre-existing rights in the manner done under the existing market design, other "new firm users" of the system wanted to ensure that as much transmission capacity as possible was made available to Market Participants in the forward market. In the end, the CAISO proposed a means to continue to honor all ETCs, while encouraging consistency of allocation and pricing between the forward and Real Time markets and providing more transmission capacity to the market – an attempt to benefit all Market Participants.

Going forward, the CAISO and stakeholders, as supported by the Commission, must come together and deliberately and conscientiously work together to finalize the details of the market design. Toward that goal, the CAISO

commits to work toward a more fruitful collaboration with stakeholders. This does not require “supervised visits” with the Commission. While many parties have requested that the Commission directly engage, if not run, the stakeholder process through some form of technical conference process or Commission-mandated committee structure, the CAISO cautions that the experience of the last year indicates that this would be a less than optimal choice. The Commission has neither the resources nor time to commit to run the process here in California. Moreover, hauling everyone in California back to Washington, D.C. for extended periods of time will only detract from the effort. If the CAISO is ever to establish what is widely considered to be a legitimate and workable stakeholder process, it must be homegrown.

To begin (or renew) that collaboration, the CAISO proposes to establish an “External Energy Market Group” (“EEMG”) made up of representatives from each stakeholder group. While informal at this juncture, this group would work with and advise the CAISO staff on issues of concern and to begin to work through many of the outstanding detailed issues surrounding MD02. Similar to the joint application development (“JAD”) groups formed by the CAISO over the last year – which have been highly successful – the EEMG would be comprised of individuals with technical expertise capable of addressing the complex issues of a market design. Once the Commission approves the CAISO’s Proposal, which will define the forward-looking focus of the group, the CAISO will move expeditiously to establish this group.

b. Dialogue

A persistent criticism of the CAISO is that it fails to listen or respond to stakeholder feedback. Moreover, stakeholders often feel the CAISO hands them a *fait accompli* and moves through a stakeholder process for the sake of process. These concerns are legitimate, and the CAISO must address them. However, reflected in Attachment E to the July 22 Filing, the CAISO did make numerous modifications to its design proposal in response to stakeholder comments. Thus, the level of criticism aimed at the CAISO is not commensurate with the CAISO's efforts. Stakeholders need to recognize that the CAISO cannot simply adopt every one of their often-conflicting positions. Further, just because the CAISO does not adopt a particular stakeholder's position does not mean that the CAISO failed to consider each party's concerns and conduct an adequate stakeholder process. The CAISO is responsible for assimilating a vast number of disparate positions and developing an integrated market design that is internally consistent and results in a workable solution to a host of particular constituencies' concerns. That is a difficult task, and a task that rarely will produce a satisfactory result for every party involved in the process. In order to address the "dialogue" concerns raised by stakeholders, the CAISO offers the following. First, as noted above, time and commitment are essential prerequisites to meaningful dialogue. Second, the process must be organized in a fashion to facilitate the exchange of ideas. Unfortunately, and too often, large stakeholder meetings only result in an opportunity for parties to stake out their litigation positions and espouse their philosophical preferences regarding their preferred shape and function of the larger market. This has clearly been the case in California, as is reflected by the

fact that no major design issues were resolved in the Working Group process. Rarely do these large-scale meetings result in progress towards resolution of important policy issues, let alone complex design/technical issues. This is one of the reasons the CAISO instituted the JAD sessions regarding certain elements of the market design. Moreover, it is another reason why the CAISO chose to engage in more focused discussions with individual constituency groups over the last several months. Many design changes were the direct result of these meetings. Due to the press of time and competing priorities, the CAISO acknowledges that it was unable to meet with all groups on an equal basis. Unfortunately, this resulted in a perception that the CAISO was only interested in hearing from certain parties. This is not true. Indeed, if one reviews the chart in Attachment E to the July 22 Filing – which shows changes from the initial MD02 design – one can clearly see that the CAISO has adopted changes proposed by every major stakeholder group – changes that, in some cases, primarily address the concerns of the specific stakeholder group that proposed them.

In any event, in order to remedy the concern that the CAISO does not listen to stakeholders, the CAISO offers the following process options that would apply to unresolved MD02 issues. First, in order to initiate the process, the CAISO will develop a “straw” proposal that would attempt to lay out or define the issue/problem at hand and identify some options for a solution. The CAISO would then post that paper on its website and request comments. The CAISO would allow parties a minimum of one week to comment on the proposed paper. The CAISO would then organize and assess the comments and present such

feedback to Market Participants in an open forum. That would inform all parties regarding the comments received and allow each party to ask and receive clarification on the issues and each party's position. Subsequent to that meeting, the CAISO could then either work with each constituency to have a focused discussion and understanding of the issues or could work through the EEMG. At the end of that process, the CAISO could issue a second paper reflecting each party's contributions and, if possible, offering a proposal that balances competing concerns. The revised proposal could then serve as the basis for a second public meeting to try and reach final resolution. The CAISO believes that such a process would greatly enhance the CAISO's, as well as Market Participants', understanding of the issues and provide greater clarity as to why the CAISO reached the conclusions stated in the proposal. However, to the extent parties' competing concerns cannot be resolved, the CAISO will ultimately be responsible for resolving the matter in its filed tariff language.

If successfully implemented, such a measured and iterative process would address the concerns of Market Participants. Moreover, in combination with the additional processes and efforts outlined below, MD02 can be implemented in a prudent and timely fashion. The CAISO urges the Commission to support such a process.

5. The CRR Study and Allocation Effort and LMP Studies and Market Testing

The CAISO appreciates the concerns expressed by a number of Market Participants with respect to certain features of the proposed design. In particular, the CAISO acknowledges the concerns expressed by Market Participants

regarding committing to a new design without a complete understanding of the potential financial impact of such design on their businesses. In recognition of such concerns, and to ensure a measured and prudent implementation of the new design, CAISO management recommended, and the ISO Governing Board adopted, a number of measures and processes to mitigate that uncertainty. First and foremost, the CAISO has agreed to conduct extensive LMP pricing simulations and testing, the results of which will be shared with Market Participants and fully considered prior to implementation. In fact, the CAISO began such LMP price studies earlier this year. The CAISO has already published the results of a cost-based LMP analysis and is in the process of undertaking a LMP price simulation study based on real-time bid data. The initial results of that analysis should be available shortly. Moreover, prior to implementation, the CAISO proposes to conduct at least three months of extensive “market testing” once the new IFM/LMP software is in place. Thus, prior to implementing such software programs, the CAISO will permit Market Participants to test such software and gain experience for predicting and using the resultant LMPs. Finally, the ISO Governing Board specifically provided, in its June 26, 2003 motion authorizing management to proceed with the conceptual filing at the Commission, that it will review the results of such analyses and testing and make a final determination as to whether to implement LMP no later than 60 days prior to the proposed implementation date.

Of equal importance, the CAISO, in cooperation with the CPUC, proposes to conduct an extensive study, i.e., a simultaneous feasibility assessment, to

determine the amount of CRRs likely to be available to load-serving entities (“LSEs”) to hedge Congestion costs under the proposed LMP regime. In addition, as a result of that analysis and study, the CAISO proposes to work with the CPUC and non-CPUC jurisdictional entities to determine the allocation of such available CRRs to LSEs (including new Participating TOs, MSS Operators and ETC Rights holders). As one of the first steps in that process, the CAISO and the CPUC recently sponsored a CRR Workshop to begin a dialogue with Market Participants regarding the nature and use of CRRs. To further that understanding, the CAISO and CPUC invited representatives from the New York Independent System Operator, Inc. (“NYISO”), PJM Interconnection, L.L.C. (“PJM”) and the Midwest Independent Transmission System Operator, Inc. (“MISO”) to discuss the manner in which they offer and provide CRRs to hedge Congestion costs. That was the first of many meetings on CRRs that will be scheduled over the next six months to a year.

This process, once concluded, should provide Market Participants with the information necessary for them to make an informed assessment as to the extent to which they will be hedged from LMP-based Congestion costs. As noted above, based on the results of the CRR study and allocation effort, Market Participants will then have ample opportunity, prior to the implementation of LMP, to raise concerns with both the CAISO Governing Board and the Commission if they believe that they will be unnecessarily and inappropriately exposed to increased costs under the new market design.

As a final note, two parties (CMUA, Dynegy/Williams) have raised concerns regarding the availability of information necessary to evaluate and understand the impact of the proposed market design. These parties have requested access to, *inter alia*, the CAISO's proposed network model, the data necessary to produce LMPs, and the details of the optimization engines.

Because much of the requested information is currently protected under various confidentiality provisions, the CAISO may be prohibited from providing information by its vendors. Nonetheless, the CAISO will continue to seek a resolution of these matters. Over the course of the coming months, the CAISO will endeavor to provide the Commission and Market Participants more information on these matters and will attempt to maximize the availability of the requisite data.

6. The CAISO Is Committed To Address Parties' Concerns Regarding The Impact Of LMP On Their Pre-Existing Bilateral Contracts

As stated in the July 22 Filing, the CAISO is also committed to addressing concerns regarding the impact of LMP on pre-existing bilateral Energy contracts. Among other Market Participants, CERS has raised concerns that LMP may increase costs to consumers under the state's long-term Energy contracts. The CAISO understands the importance of these contract issues and agrees that they must be addressed. In addition, other parties have raised issues and expressed confusion regarding the scheduling of other bilateral contracts in a LMP regime.

To address these concerns, the CAISO proposes to hold a series of discussions with interested parties to discuss and hopefully resolve these

outstanding issues. As stated previously, the CAISO has already held a series of meetings with CERS, the IOUs, the CPUC and the EOB regarding the impact of LMP on the long-term state contracts. The CAISO also understands that other participants share similar issues and concerns. Thus, the CAISO intends to expand the discussion of this issue to other Market Participants.

Consistent with the process outlined above, the CAISO intends to issue shortly a draft white paper regarding the impact on bilateral contracts of an LMP-based regime. More specifically, the draft white paper will focus on the potential financial impact of LMP on such contracts and the arrangements that may be necessary to hedge such contracts from increased forward market Congestion costs.¹⁰ Such a paper will help Market Participants better understand and assess how bilateral schedules can be accommodated under LMP and how Market Participants may or should do business with each other outside of the CAISO's markets. Any assessment regarding the ultimate financial impact of LMP on bilateral arrangements will have to be coordinated with the outcome and information provided in the CRR Study and Allocation process discussed above. An important focus of this exercise will be to discuss and further hone the rules for trading (e.g., "inter-SC trades") under MD02.

Subsequent to the issuance of the white paper, the CAISO will solicit comments and inform Market Participants as to the general substance of

¹⁰ It is important to recognize that a change from zonal to nodal pricing increases forward market Congestion costs in general (not just for bilateral contracts) because more (otherwise intra-zonal) transmission constraints are enforced. But the real-time Congestion Management costs are expected to be substantially lower. Presently, these costs are borne by all Scheduling Coordinators rather than just those that cause the costs because of their infeasible forward market bilateral schedules.

comments and concerns expressed. The CAISO will meet with constituency groups to address their questions and concerns and then bring the entire discussion back to the larger stakeholder forum to discuss how to move forward. The CAISO hopes that, in the end, such a process can result in a resolution of key issues and provide Market Participants with more comfort when functioning in an LMP-based regime.

7. The CAISO's New ETC Procedure Does Not Abrogate Existing Contracts and the CAISO Commits to Resolving Outstanding Cost-Allocation Issues

As noted above, a number of parties raised concerns regarding the CAISO's proposed procedure for honoring ETCs. Certain parties assert that the new procedure will abrogate their Existing Rights or that details of the proposal are still undefined. The CAISO responds to the substance of those concerns in the ETC section of this pleading.

With respect to the procedural issues raised by parties, the CAISO acknowledges that the CAISO's ETC proposal was developed and released relatively late in the development of the amended Comprehensive Market Design Proposal. However, as explained above, the proposal was the result of an intense effort to reconcile parties' polarized positions. Certain parties advocated for the maximum release of transmission capacity to the market and, concomitantly, the maximum potential release of CRRs, while others argued that the CAISO must maintain their Existing Rights in the same manner as has been done since the start of CAISO operations. As noted above, the CAISO's proposal effectively reconciles those two views. The CAISO acknowledges other

parties' recommendations to pursue alternative mechanisms to address the "phantom Congestion issue", such as recallable transmission service ("RTS"). As discussed in greater detail in the ETC section of this pleading, although RTS is attractive in concept, after a long, drawn-out process with stakeholders, the CAISO concluded that such an approach would be difficult to implement under the integrated market paradigm where Energy, Ancillary Services, and Congestion Management are co-optimized using a centralized unit commitment. As such, the CAISO strongly urges the Commission to consider the merits of the CAISO's proposal and reject parties' requests that the CAISO implement RTS.

Certain parties raise concerns regarding the cost impacts and related cost- allocation issues resulting from the CAISO's ETC proposal. As explained in detail in the July 22 Filing, the CAISO has committed to address those issues prior to MD02 implementation. In that regard, in the July 22 Filing the CAISO stated:

the CAISO acknowledges that many details of the proposal remain to be specified, and the CAISO intends to work with the affected parties to develop the ETC design in the most efficient and acceptable manner possible, in accordance with the principles stated above. For example, with regard to day-to-day verification of compliance of ETC schedules with their contractual rights, the CAISO believes that the PTOs are in the best position to do this. At the same time, the CAISO understands that in some instances the PTOs have transferred ETC scheduling responsibility to the ETC rights holders themselves. In those cases, it may be appropriate to transfer this responsibility to another designated SC, subject to periodic audit.

Similarly, with regard to responsibility for CAISO charges, the CAISO Tariff clearly allocates charges to SCs based on their schedules and meter data. The CAISO is willing to work with the parties to develop mechanisms – such as special SC ID numbers and inter-SC trades – that will facilitate an allocation of cost

responsibilities that is acceptable to the parties while still being consistent with the CAISO settlement rules and systems.

Transmittal Letter at 18. Similar to the prior discussion regarding the impact of LMP on bilateral contracts, the CAISO proposes to conduct a process whereby the outstanding issues regarding the ETC proposal are appropriately vetted and resolved to the extent practicable prior to MD02 implementation.

8. CAISO MD02 Tariff Filing

As previously discussed, a number of parties assert that the CAISO filing is deficient and therefore should be rejected because it lacks sufficient detail and tariff language. As explained above, the Commission should reject such arguments because the approach proposed by the CAISO is consistent with the approach taken by RTO West and WestConnect. Moreover, the approach is consistent with the agreement reached at the December 9, 2002, MD02 Commission technical conference.

As the CAISO indicated in the July 22 Filing:

[a]ssuming the Commission approves the Proposal without modifying any of the basic assumptions underlying the design, the CAISO proposes to submit detailed Tariff language 120 days prior to the effective implementation date of the new market design. Commission approval of this process in conjunction with approval of the Proposal will permit the CAISO to act expeditiously to finalize and execute a contract with a vendor to commence development of the required software and systems.

Transmittal Letter at 25. By allowing the CAISO to contract with vendors now, subsequent to Commission approval of the conceptual design set forth in the Proposal, the CAISO and its vendor can proceed with the development of the core systems necessary to support the new market while, at the same time,

allowing the CAISO and stakeholders time to resolve the specified outstanding issues and work on the details of the market design. Because the CAISO is pursuing software and systems development on a parallel course, there will be ample time for the CAISO and stakeholders to develop the design details and for the CAISO to finalize the final tariff language that codifies such business rules. The CAISO proposes to file such tariff language at least 120 days prior to implementing the new market design.

B. The Proposed Market Design, In Conjunction With Other Efforts In California, Provide An Adequate Opportunity For Suppliers To Recover Their Fixed Costs

In its Transmittal Letter, the CAISO pointed out that its proposed market design, in conjunction with existing bilateral contracts and the CPUC's efforts at developing a resource adequacy program, would provide adequate opportunities for suppliers to recover their fixed costs. Transmittal Letter at 21-23.

Reliant/Mirant assert that the CAISO's proposal does not provide suppliers with adequate opportunities to recover their fixed costs. Reliant/Mirant at 25-30.¹¹

Reliant/Mirant argue that, although A/S markets provide an opportunity to recover fixed costs, the "magnitude of the opportunity is relatively small" due to the decrease in A/S purchases in the CAISO market. Reliant/Mirant attribute the decline in A/S sales to increased utility self-provision of Ancillary Services and the must-offer requirement and waiver denial procedure. Reliant/Mirant at 26-27.

The CAISO has not decreased its procurement of Operating Reserves and Regulation as a result of the Must-Offer Obligation ("MOO"). Recently, there

¹¹ The CPUC, on the other hand, argues that suppliers in the CAISO markets will have ample opportunities to recover their annual revenue requirements. CPUC at 22-23.

has been more self-provision of these services. However, the CAISO's purchases of Operating Reserves have been consistent on a percentage-of-load basis both before and after 2001. See Attachment No. 2 to the present filing. The CAISO acknowledges that the MOO has displaced the need for the CAISO to procure Replacement Reserves to a certain extent, but the CAISO disagrees that this shift will result in reduced revenue opportunities for suppliers under MD02. Replacement Reserve requirements are based on the difference between CAISO forecast and forward Energy Schedules. Capacity is procured based on the expectation that it will ultimately be Dispatched in real time and, to the extent it is, the replacement capacity payment is rescinded. This is precisely the treatment the CAISO proposes for RUC capacity. Therefore, the CAISO fails to see how revenue opportunities are diminished by the CAISO's reliance on RUC and the MOO. Rather, these revenue opportunities simply shift to a different source. Moreover, the MD02 design provides for explicit start-up and minimum load cost compensation under RUC; whereas these costs previously had to be recovered from Energy and capacity revenues from Replacement Reserve sales. Reliant/Mirant also ignore the fact that the CAISO has paid out more than \$98 million in Minimum Load Cost Compensation since commencement of the MOO.

Reliant/Mirant also argue erroneously that the price of A/S purchases has diminished substantially since implementation of the MOO in mid-2001, but offer no support for this statement. To the contrary, excluding the extraordinary A/S prices experienced during the energy crisis (May 2000-July 2001), average A/S

prices under the MOO are comparable and, in most instances, higher than the September 1999-April 2000 period. See Attachment No. 3 to the present filing. Reliant/Mirant's "concern" that A/S self-provision has increased is somewhat befuddling. A/S self-provision can only come from two sources – utility retained generation or bilateral contracts with suppliers. To the extent it is the latter, suppliers such as Reliant are the beneficiaries. To the extent it is the former, the utilities will need to purchase additional Energy from the market. Because, as Reliant/Mirant point out, existing long-term contracts do not account for the entire net short, i.e., IOUs are net-Energy buyers in the market, suppliers benefit because there will be additional opportunities for bilateral contracts.

Reliant/Mirant also assert that, although Reliability Must-Run ("RMR") Contracts provide some opportunity for fixed cost recovery, the number of RMR Units has been significantly reduced due to the urging of the LSEs and the CAISO's reliance on the must-offer requirement and waiver denial procedure to obtain RMR-like services. Reliant/Mirant at 27. Moreover, Reliant/Mirant note that the reason some RMR Units have recently switched from Condition 1 to Condition 2 is because they have been unable to recover their fixed costs through market sales under Condition 1. Reliant/Mirant at 27-28.

Reliant/Mirant incorrectly claim that the CAISO has reduced the number of RMR Contracts due to pressure by LSEs and reliance on the MOO obligation and waiver denial procedure. The need for RMR Units in SCE's territory has diminished over the past few years because of upgrades made to SCE's transmission system, which proved to be more cost-effective than continuing with

RMR Contracts. The need for RMR Units in the PG&E and SDG&E service territories has not diminished in recent years and, in fact, the number of RMR Units increased this year due to load growth in their service territories. The determination of RMR requirements is based on a formal annual Local Area Reliability Service process (“LARS”). As participants in that process are well aware, the MOO has absolutely no bearing on RMR determinations.

While Condition 1 RMR Contracts do not pay 100% of fixed costs, they do provide substantial fixed cost recovery, which can be supplemented through market transactions. Moreover, RMR Unit owners always have the option to switch to Condition 2 RMR contracts if they are too inefficient to recover their fixed costs through the market.¹² To date, the units that have switched to Condition 2 RMR contracts have been older inefficient units that are unable to compete in a market that is increasingly being dominated by newer and highly efficient combined cycle units. It is not surprising and to some extent expected, that these units are less able to recover their annual fixed costs through the market.

Reliant/Mirant seem to be blaming the market design for suppliers’ inability to recover their fixed costs for every unit and suggest that the market’s alleged failure to provide them with fixed cost recovery requires that the market rules be changed to guarantee suppliers additional profits. This argument is misplaced. If suppliers choose to play the market, they must bear the risk that the market not provide them with adequate revenue. Reliant/Mirant basically want to be

¹² The CAISO currently has over 3,000 MW of generation in its Control Area under RMR Condition 2 Contracts.

guaranteed recovery of 100 percent of their fixed costs for every unit in every year, and then be able to reap any additional profits gained by participation in the market without bearing any of the downside risk. If suppliers want guaranteed cost recovery every year, they have the option to file for cost-based rates. Indeed, several older inefficient units have opted for RMR Condition 2 status for just that reason. If suppliers chose to play the market instead, they must bear the full consequences of that choice. Instead, Reliant/Mirant want to avoid any potential downside, but reap all of the benefits of any upside. The Commission should not countenance this view.

Reliant/Mirant also argue that the long-term CERS contracts are not sufficient to ensure fixed cost recovery, because IOUs still have a significant net short position during peak periods that a substantial portion of the peak load and reserve requirements is being met through uncommitted generation made available via must-offer and the waiver denial process. Reliant/Mirant at 28-29.

The CAISO noted in its filing that the CERS contracts were a significant revenue source for fixed cost recovery, but not the sole source. The fact that the IOUs still have a net short position means that there are more opportunities for long-term contracting. The ongoing CPUC procurement proceeding will result in a reserve adequacy plan that will enable IOUs to “cover” their net short via long-term contracts. The CAISO notes that the CPUC has already authorized the IOUs to enter into short-term contracts, i.e., contracts for less than a year. The IOUs have entered into such contracts, and such contracts contribute to the suppliers’ total cost recovery. Reliant/Mirant claim that a substantial portion of

the peak load and reserve requirements are being met through capacity made available to the CAISO under the MOO and must-offer waiver denial procedure is unsupportable and contrary to Reliant/Mirant's previous claim that the A/S markets are shrinking due to the IOUs self-providing A/S. Thus, on the one hand, Reliant/Mirant assert that A/S markets do not provide an adequate opportunity to recover fixed costs because the size of the market is shrinking. On the other hand, Reliant/Mirant argue that LSEs are relying excessively on the CAISO markets and the MOO to meet their reserve requirements. These are inconsistent claims. If the A/S market is shrinking, LSEs must not be relying on the CAISO for Operating Reserves.

Reliant/Mirant ignore the fact that over the past year, Real Time Market volumes have been extremely small, typically representing less than 3% of system loads. During this past summer (June 1, 2003-September 7, 2003) hourly real-time incremental market volumes represented less than three percent of system loads in over 90 percent of the hours and never exceeded more than nine percent. This indicates that LSEs are forward procuring most of their Energy needs rather than relying on the MOO and the real-time Imbalance Energy market. As indicated in the July 22 Filing, during the peak hour in 2002, only nine percent of the IOUs' load was met through short-term contracts and the Imbalance Energy market. July 22 Filing at 22. Thus, the CAISO's Imbalance Energy Market has shrunk considerably since 2000, and claims that LSEs are over-relying on the Imbalance Energy market are incorrect.

To the extent the small Real Time Market volumes are met through units operating under must-offer waiver denials, units are adequately compensated. For example, in 2002 alone, the CAISO paid approximately \$60 million in start-up and Minimum Load Cost Compensation for units operating under must-offer waiver denials. These same units received an additional \$23 million in uninstructed Energy payments for their minimum load output for a combined total of approximately \$83 million dollars. This amount well exceeds the estimated market value of Operating Reserves. The CAISO estimates that equivalent market payments for this capacity would have been just under \$42 million.¹³

Finally, Reliant/Mirant argue that RUC does not provide the opportunity for fixed cost recovery because, while a unit has to incur the fixed costs of making itself available to the CAISO, the CAISO decides each day whether it wants to call on the capacity. Further, if the CAISO Dispatches Energy from the unit, the RUC capacity payment is rescinded. Reliant/Mirant at 30.

Under the Proposal, units Dispatched in RUC are guaranteed compensation for start-up, minimal load, and Energy costs. Further the CAISO made a significant concession to suppliers by allowing bid-based start-up and minimum load costs. Moreover, to address Reliant/Mirant's specific concern that the CAISO might over-commit capacity in RUC so that it has extra reserves

13 See "Must Offer Obligation (MOO)" presentation to the ISO Market Surveillance Committee, September 15, 2003. For this analysis, the minimum-load Energy was valued against the real-time Imbalance Energy Market Clearing Price for incremental energy, and the unloaded capacity was valued against the prices for Spinning and Non-Spinning Reserves. The division of the capacity into spinning and non-spinning was done by determining the maximum ramp rate for each unit and multiplying it by 10 to ascertain the capacity that could actually be sold into the Ancillary Services markets as Spinning Reserve, given the plant characteristics. This capacity was valued at the Day-Ahead spin price. The balance of the capacity was valued at the Day-Ahead non-spin price.

available for real time, the CAISO proposed a RUC availability payment. This availability payment is bid-based and subject to a cap of \$100/MW. To the extent capacity is committed in RUC, but not Dispatched in real time, unit owners keep the availability payment associated with that capacity, in addition to compensation for start-up and minimum load costs. This contributes to the unit's annual going forward fixed costs. The CAISO addresses comments regarding rescission of the RUC availability payment in the RUC section of these comments.

However, the CAISO notes that it is curious that Reliant objects vehemently to the CAISO's proposal to rescind of the availability payment in the circumstances described above. Throughout the stakeholder process, Reliant argued that the CAISO should rely on its existing Replacement Reserve, not on a new RUC mechanism to meet forecasted load. Under the Replacement Reserve, the capacity payment is rescinded when the CAISO Dispatches Energy from the unit. Thus, the very mechanism that Reliant desires the CAISO to use provides for rescission of the availability payment, just like RUC.

C. Intervenors' Arguments Regarding Resource Adequacy Are Without Merit

Dynergy/Williams claim that there has been little progress toward developing a workable resource adequacy requirement in the state. They argue that the Commission should require the CAISO to work with stakeholders to develop a resource adequacy plan and file such plan with the Commission. Dynergy/Williams at 14-17. EPSA accuses the CAISO of being in the hands of the CPUC on the resource adequacy issue and argues that the Commission

should link mitigation to the existence of a capacity market in California. EPSA at 3-7. Some intervenors argue that the Commission should condition RUC and any Real Time MOO on the implementation of a resource adequacy program. IEP/WPTF at 22-24.

These arguments are misplaced. In the Commission's *White Paper on Wholesale Power Market Platform* ("White Paper") issued on April 28, 2003, in Docket No. RM01-12, the Commission determined that

[w]e will not include a minimum level of resource adequacy [in SMD]. The RTO or ISO may implement a resource adequacy program only where a state (or states) asks it to do so, or where a state does not act.

White Paper at 5.¹⁴ Thus, the Commission has placed the responsibility for resource adequacy squarely with the states. As indicated in the July 22 Filing, the CPUC is currently in the process of developing a resource adequacy plan in a fully litigated, very active proceeding. Consistent with the White Paper, the CAISO has not proposed a resource adequacy plan or a capacity market in its July 22 Filing.¹⁵ To the extent Dynegy/Williams and EPSA have an issue with this, their issue should be with the Commission's statements in the White Paper and not with the CAISO's compliance. It is particularly unfair to accuse the CAISO of being in the hands of the CPUC given that the Commission itself has stated that the CPUC has "jurisdiction" over the resource adequacy issue and that the CAISO can act only if the CPUC does not act. Given that the

¹⁴ SMD means the Commission's proposed Standard Market Design, which was first described in detail in the Notice of Proposed Rulemaking issued in Docket No. RM01-12-000 on July 31, 2002 ("SMD NOPR").

¹⁵ In its May 1 Filing, the CAISO submitted an Available Capacity ("ACAP") proposal to address resource adequacy issues. The CAISO subsequently requested that the Commission

Commission has deferred the resource adequacy issue to the states and the CPUC is actively engaged in the development of a formal resource adequacy plan, the Commission cannot use the CAISO's lack of a capacity market or other type of resource adequacy plan as a basis for eliminating the existing MOO or rejecting the CAISO's RUC proposal.

Any suggestion that the CPUC is not moving forward on the resource adequacy issue in a satisfactory manner is baseless and represents an unfair pre-judgment of the outcome of the CPUC procurement proceeding. The administrative hearing in the CPUC procurement proceeding has recently ended, and the parties presently are in the briefing process.¹⁶ The CAISO has been an active participant in the proceeding and submitted extensive testimony. The CAISO has argued, *inter alia*, that the CPUC should adopt formal reserve requirements for IOUs and a formal process to validate IOU compliance with procurement and reserve requirements. In their motion to intervene, Reliant/Mirant lauded the position the CAISO has taken in the procurement proceeding.¹⁷ Reliant/Mirant at 5. Thus, the insinuations of certain parties that the CAISO is simply "caving" on the issue of resource adequacy are misguided and disingenuous.

Arguments that retention of the real-time MOO must be tied to existence of a CAISO capacity market are misplaced. First, as indicated above, the

defer ruling on the ACAP proposal pending CPUC action in the CPUC procurement proceeding, i.e., the proceeding in which the CPUC is addressing resource adequacy issues.

¹⁶ Initial Briefs are due on September 15, 2003 and Reply Briefs are due on September 22, 2003.

¹⁷ Reliant/Mirant included some of the CAISO's testimony as an attachment to their motion to intervene.

Commission has deferred the issue of resource adequacy to the states. Thus, it is unfair to hold the MOO hostage to the CAISO's development of a capacity market.

Second, Real-Time MOO is not a resource adequacy issue. The real-time MOO was intended to prevent physical withholding. If a resource owner has available (i.e., operable and not otherwise committed) capacity and can offer that capacity at a bid price of its choosing (up to a specified cap), there is no legitimate reason why the resource owner should not offer such capacity into the Real Time Market. As the Commission has previously recognized, "under competitive conditions, a generator that has available energy in real time should be willing to sell that energy at a price that covers its marginal costs, since it has no alternative purchaser at that time." See *San Diego Gas & Electric Company v. Sellers of Energy and Ancillary Services into Markets Operated by the California Independent System Operator and the California Power Exchange*, 95 FERC ¶ 61,115, at 61,355-56 (2001). A Real-Time MOO protects consumers against physical withholding and promotes stable and competitive markets. It should be a permanent feature of any market, with or without a resource adequacy program.

Finally, RUC is a mechanism to enable the CAISO to maintain real-time reliability; it is not a resource adequacy mechanism. The Commission recognizes this distinction in the SMD NOPR by addressing unit commitment-related issues in the Day-Ahead Market section of the SMD NOPR and not in the Resource Adequacy section. See SMD NOPR at PP 298-301. Nowhere does

the Commission state that unit commitment (which the Commission refers to as Replacement Reserves) is conditioned upon having a resource adequacy program in place. That is appropriate. In that regard, the Day-Ahead integrated forward market will clear based on what load wants to do. In other words, the extent of participation in the Day-Ahead Market is determined by load (and presumably by load's forecast of its anticipated Demand) not by the CAISO. However, there can be a difference between CAISO and LSE forecasts of load for the following day, and it is irrelevant whether or not there is a resource adequacy plan in place. RUC is a unit commitment process that enables the CAISO to meet its forecasted load by utilizing available generation that has made itself available to the unit commitment process. The CAISO needs RUC regardless of whether there is a resource adequacy program in place. Resource adequacy programs are intended to ensure that LSEs have sufficient capacity to serve their projected native load needs. On the other hand, RUC is intended to serve the CAISO's forecasted needs (when such forecasts exceed LSE forecasts). In any event, the CPUC is developing a resource adequacy plan that will be in place when MD02 is implemented. Thus, the claims of IEPA/WPTF really are moot.

D. The Proposal Does Not Create Any Insurmountable Seams Issues

In the July 22 Filing, the CAISO explained that it will work to minimize any seams between the Proposal and the operation of the other markets in the Western Interconnection. In particular, the CAISO noted that it is already working toward the creation of seamless western markets through its

participation in the Seams Steering Group – Western Interconnection (“SSG-WI”). See Transmittal Letter at 16 n.18, 46-47, 83.

Some parties express doubts that the Proposal can go into effect without creating insurmountable seams issues in the West. CMUA at 14-15; MID at 5-6; Redding at 11-12; RPPE at 6-7; SMUD at 6-7.; SVP at 20.

Intervenor concerns are inapposite, and Commission adoption of intervenors’ positions would result in an interminable and intolerable delay in implementing MD02. As frequently expressed by the CAISO since the inception of the MD02 effort, the CAISO is proposing a “best practices”-based software design built upon a flexible and adaptable system design and architecture. The conceptual design of the MD02 software and systems was presented in detail at the Commission’s December 9, 2002, technical conference. As stated at that conference and in subsequent monthly reports, the CAISO’s proposed approach largely conforms to the open architecture approach originally presented by the Commission in the SMD NOPR.¹⁸ Thus, to represent that the CAISO’s proposed design will create insurmountable seams issues – especially with respect to market and system designs that respectively are still under development or have not yet been formulated – is a disingenuous and spurious attempt to delay any reform of the market and should be summarily rejected by the Commission.

1. The CAISO Is Fully Committed to the SSG-WI Effort to Establish a Seamless West-wide Market

The CAISO does not object to RTO West’s request that the Commission “require the CAISO to implement software and systems that are modular, open

and flexible to accommodate resolution of seams issues.” RTO West at 4. As explained above, the CAISO has already committed to do just as RTO West requests. The CAISO stands committed to working with its regional partners to further development of an efficient Western market with three RTOs.

As the Commission is aware, the CAISO has been working with representatives of the RTO West and West Connect filing utilities since mid-2001 to coordinate and further develop a seamless Western market. To that end, the CAISO has been proactively engaged in the following SSG-WI-established working groups: (1) West-wide Market Monitoring; (2) Congestion Management Alignment; (3) Transmission Planning and Expansion; (4) Common Systems Interface Coordination; and (5) Price Reciprocity.¹⁹

In its own way, each of these working group efforts is intended to ensure that seams issues do not arise in the context of three functioning RTOs in the West. The intended outcome of the market monitoring effort is to establish an institution or institutional arrangement that provides effective monitoring of the entire Western market, with a particular focus on seams-related market issues that may arise. The planning working group is focused on effective and efficient expansion of the regional transmission system, with a particular focus on “economic” transmission projects, i.e., transmission projects that will support increased and efficient (from a West-wide perspective) interregional transfers.

¹⁸ See presentation of the CAISO dated December 9, 2003, in Docket No. ER02-1656-000. See *also* SMD NOPR at PP 351-360.

¹⁹ Additional detail regarding the mission, scope of activities, and work product regarding each of these work groups can be found on the SSG-WI website at <http://ssg-wi.com/>. In addition, additional detail regarding SSG-WI and its efforts can be found in SSG-WI’s January 8, 2003, filing to the Commission in Docket Nos. ER02-1656-000, RTO1-35-000, RTO2-1-000, and EL02-9-000.

The Common Systems Interface Coordination (“CSIC”) group is focused on identifying opportunities for shared system development and investment and to informally coordinate RTO/market implementation timeframes. Moreover, CSIC’s progeny, the Business Architecture Design or “BAD” group is focused on coordinating system design so as to support each of the RTOs goals of an open-architecture-based design. The purpose of the Price Reciprocity work group is to reduce or eliminate transaction-based barriers to trade among and between the proposed RTOs. By eliminating export fees on transactions between the RTOs – subject to potential recovery of any “lost revenues” through other means - the RTOs can hopefully support a more efficient inter-regional market.

Finally, the efforts of the Congestion Management Alignment Group are focused directly on reducing market-related seams issues. In fact, the work group has expended great effort to develop a conceptual framework for performing Day-Ahead Scheduling and Congestion Management across the three RTOs.²⁰ To develop such a conceptual framework is no small task, but at present the group is optimistic about the results of those efforts. These efforts indicate that it is possible to take three different designs – including the CAISO’s Proposal – and align them to the extent necessary to perform effective Day-Ahead scheduling and Congestion Management.

2. The CAISO’s MD02 Design Is Not Out Of Step With the West, But Rather Is In Step With The Creation Of Efficient Markets

²⁰ See http://ssg-wi.com/documents/269-081903_030815_CMAWG_Straw_Proposal_CLEAN.doc

Redding argues that the Proposal is overly complex and is not aligned with practices throughout the West (Redding 11-12). Redding's arguments are misleading. While Redding is correct that CAISO's proposed design relies on sophisticated software programs that take time to run, Redding ignores the fact that such programs enable the CAISO to simultaneously *optimize* Energy and A/S procurement while managing Congestion and thus run an efficient market. This is in contrast to the arcane and inefficient adaptation of physical transmission rights²¹ that Redding wants to use – rights the CAISO has agreed to preserve under its new proposed ETC procedure. Redding asserts that the need for markets based on five-minute intervals in real time “exist only in the mind of the California ISO.” Since its inception, a primary objective of the MD02 design has been to align the markets with the reality of the grid. Five-minute-based Dispatch with LMP represents the reality of the grid and real-time operations. Thus, while Redding would argue that the CASIO design is out of step with the West, it is in fact Redding's predilection towards the fiction of a contract-path based physical rights model – and its inherent inefficiencies - that is not in step with operational reality.

Redding states that the Proposal, while retaining the CAISO's existing scheduling timeframes, continues to not permit schedule changes close to the operating hour. Redding at 12. First, to the extent Redding has ETC rights that permit it to submit schedule changes close to or within the hour, Redding will be

²¹ The CAISO does not have a problem with markets entirely based on physical rights (such as WestConnect). As mentioned above, the CMAWG has been able to work out a process to accommodate different market designs at the seams. The problem MD02 attempts to resolve is

able to continue to do so under the Proposal. Second, the issue of whether or not to retain the existing Hour-Ahead Market was one which the CAISO largely deferred to Market Participants. During the working group discussions of last year, the CAISO specifically raised the issue/option of eliminating the Hour-Ahead Market and all its attendant requirements, i.e., performing, among other things, 24 independent market/optimization runs, establishing Final Hour-Ahead Schedules, and settling on that basis. In essence, the CAISO raised the issue whether Market Participants desired a three-settlement system or the more common two-settlement system envisioned in the SMD NOPR and in place in certain of the eastern markets. The CAISO stated that because of the time requirements of running an Hour-Ahead Market, i.e., the time to run the optimization program as well as all the price mitigation measure-related software programs such as AMP, it was unable to move the scheduling timelines closer to the actual operating hour. Understanding these competing interests (e.g., facilitating an Hour-Ahead Energy market or more flexible scheduling timelines), Market Participants opted to retain the additional option of having an Hour-Ahead Market and the CAISO retained the Hour-Ahead Market in the proposed design. In the end, the CAISO is indifferent to the outcome of this issue and recognizes the benefits of eliminating the Hour-Ahead Market, possibly moving the scheduling timeline closer to the operating hour, and generally simplifying the market.

inefficiencies resulting from blind and indiscriminate mix up of physical and financial rights in the same market structure.

Redding also asserts that the CAISO's proposed design is out of alignment or not compatible with the hydroelectric operations or hydro-based systems. This argument is tired. The CAISO has long recognized that hydro-based systems and operations require optimizing such resources over days, months and seasons, and that such resources are subject to other competing interests and restrictions, be they environmental, agricultural, or otherwise. However, to date, the CAISO has not heard any specific reasons from stakeholders why such concerns and requirements cannot be accommodated under an LMP-based five-minute Dispatch paradigm. Under the proposed MD02 design, the owners of such resources will be free to optimize the use of such resources as they see fit and can then schedule such resources with the CAISO consistent with those needs. MD02 provides additional facilities for the owner of such resources to help them schedule their resources more efficiently in the course of a day if they so wish. Once the owner of a use-limited resource (such as hydro) has carried out its own seasonal and weekly optimization and determined its optimum daily resource utilization, it may elect to further break down the scheduling of such resources on an hourly basis (e.g., based on its forecast of hourly prices), or simply state the total allocation quota (its intended usage over 24 hours) and let the CAISO optimize the allocation over 24 hours (based on actual rather than forecast prices) without exceeding the allocation quota stated by the resource owner. Thus, Redding's arguments are without merit. RPPE states that because the CAISO is moving ahead with MD02, "...the end result is likely to be a disharmonious approach to market design in the

West,...” RPPE at 7. There is no basis for RPPE’s arguments. RPPE states that the CAISO is moving ahead “irrespective of the efforts of SSG-WI.” RPPE at 6-7. As explained above, that is just plain wrong. As a charter member of SSG-WI, the CAISO is committed to the SSG-WI effort and such effort is making progress.

RPPE also states that, “The CAISO’s claim that its system is flexible enough to accommodate changes is not supported by history or common sense.” RPPE at 7. RPPE further asserts that a host of market design issues (physical versus financial rights, LMP, Resource Adequacy) will affect regional markets and the “MD02 simply predisposes the outcome of those discussions.” *Id.* The CAISO disagrees. In fact, the Proposal attempts to accommodate concerns with a purely financial market by retaining certain features of a physical market. For example, the proposed design requires that participants only schedule from “physical” resources and purposefully defers implementation of “virtual” bidding until a later date. In addition, as an additional accommodation/compromise, the CAISO proposes to retain Day-Ahead “scheduling priority” for the load-side of balanced CRR self-schedules. These issues are discussed in detail in other sections. With respect to LMP, as explained in detail in Section II.A.5 above, the CAISO has proposed a prudent and measured plan for implementing – and testing – LMP prior to implementation, and the ISO Governing Board has specifically preserved the opportunity to make a final assessment of whether and when to go live with LMP prior to implementation. Finally, with respect to Resource Adequacy, as discussed in Section II.C, *infra*, this is an issue on which

both the CAISO and Commission have deferred to the state. The CAISO has not predisposed the outcome of the State's efforts. In fact, in recognition of the need to align whatever resource adequacy framework is established by the State with MD02, the CAISO has specifically committed to reexamining MD02 once the rules for resource adequacy are in place. Thus, none of the obstacles to MD02 implementation identified by RPPE in fact exist.

E. The CAISO's Proposal Concerning Locational Marginal Pricing Is Just and Reasonable

1. An Integrated Forward Market Based on Locational Marginal Pricing Is Necessary and Appropriate

The CAISO proposes to manage Congestion and to price Energy using LMP. The IFM will produce final Schedules that are feasible and will eliminate the current distinction between Inter-Zonal and Intra-Zonal Congestion.

Transmittal Letter at 12-13, 25-36, Attachment A at ¶¶ 5, 6, 11, 12, 14, 17.

Numerous parties assert that (1) LMP has not been adequately justified, (2) it is premature to implement LMP, (3) the mitigation measures proposed to protect consumers from potentially high locational prices will undermine the benefits of LMP, (4) LMP is not sufficient to stimulate needed investment in transmission, (5) LMP does not resolve the problem of resource adequacy or (6) LMP will produce unjust and unreasonable prices. BAMx at 6; CERS at 21-24; MID at 9-10; MWD at 4-8; Redding at 9-10; SMUD at 4-7; SUP, et al, 18; TANC at 5.

The CAISO has thoroughly responded to these assertions in both its original May 1 Filing (Amendment 44) and in the July 22 Filing. The CAISO's arguments in support of LMP are summarized below:

First, the implementation of LMP as proposed under MD02 addresses and fixes severe and well-known problems with the CAISO's original Zonal Congestion Management approach, problems that are becoming more acute with the addition of new generation facilities that serve California consumers. The CAISO currently has no way to manage Intra-Zonal Congestion in the Day-Ahead and Hour-Ahead time frame, and this allows the infamous "DEC Game" to be played and leads to excessive and unsustainable adverse impacts on real-time grid operations.

Second, the CAISO is not proposing a new or experimental approach. LMP is a thoroughly tested and proven method for managing and pricing Congestion in the forward scheduling process in a manner that is consistent with the physics of real-time electricity flows by virtue of employing a "Full Network Model" ("FNM") that accurately represents the transmission grid. The only way to properly manage Congestion is to employ such a model. Once this fact is recognized, then the decision to perform Congestion Management using bids submitted by Scheduling Coordinators (to enable them to express the economic value they place on establishing forward schedules) leads to locational prices that reflect the economic value of supply and demand at each network node, i.e., LMP.

Third, the CAISO has consistently acknowledged the inadequacy of current knowledge regarding nodal price variation in California, as well as the fact that LMP can result in extreme prices at particular nodes under certain circumstances. Therefore, the CAISO's LMP proposal features a series of preliminary LMP studies to provide early insights into nodal price variation and an extensive period of testing using the actual market software when it becomes available. Most importantly, the proposal includes the following mitigation measures to protect consumers from potential adverse impacts:

- aggregate pricing for loads over large geographic areas defined by the service territories of the three original participating transmission owners;
- allocation of Congestion Revenue Rights ("CRRs") to all loads within the CAISO Control Area as a hedge against Congestion charges;
- effective local market power mitigation (which is especially necessary under LMP); and
- a nodal price "haircut" which will limit all nodal prices to the level of the Damage Control Bid Cap.²²

²² The CPUC expresses concern that nodal prices, typically in load pockets, have the potential to significantly exceed prices bid by all generators at or near the relevant node. CPUC at 6-9. The CAISO recognizes the potential for such an outcome of the LMP optimization when there are binding Congestion constraints and non-price-responsive (i.e., self-scheduled) loads. The proposed nodal price "haircut" will ensure that such occurrences do not affect settlements by limiting the nodal prices used for settlement to the level of the Damage Control Price Cap. In each settlement market the CAISO will first calculate nodal prices without applying any limit or "haircut" to the prices themselves (although the bids will be subject to all the mitigation measures as described in the filing). These untrimmed prices are crucial for information purposes because they correctly reflect the optimal Dispatch of resources in the presence of grid constraints. Such information is needed for planning purposes to evaluate proposed transmission projects and sites

Fourth, although the CAISO's proposed mitigation measures do mute the locational price signals to consumers, the experience of other independent system operators with LMP has demonstrated that insulating consumers from nodal prices does not diminish the effectiveness of the most important aspects of LMP, namely (1) permitting accurate Day-Ahead Congestion Management using a FNM to reflect the real-time flows of Energy on the grid, and (2) settling supply resources at nodal prices. These aspects of the Proposal provide the foundation for establishing feasible forward schedules and for the operation of supply resources in a manner consistent with real-time operating needs. For the most part, supply resources currently are far more motivated and able to respond to locational prices than consumers are. If broader consumer price responsiveness is to be developed, then broader application of hourly prices will yield a greater benefit than exposure to nodal prices. Moreover, LSEs will still have incentives to develop load response in areas with high nodal prices because Demand reductions in such areas will have greater impact on aggregate prices than reductions in low-cost areas will.

Fifth, the CAISO has consistently acknowledged that LMP should not be depended on to stimulate needed investment in transmission upgrades, and that effective grid planning must accompany CAISO market redesign. The primary rationale for implementing LMP rests on the benefits of improved Congestion Management and generator operating incentives. However, it is important to realize that LMP will provide valuable data on the economic value to Market

for new generation. However, for settlement purposes, the nodal prices will all be trimmed to the level of the Damage Control Bid Cap (\$250 per MWh).

Participants of particular transmission projects being considered. Nodal price differences reflect the cost of moving power from one grid location to another. These costs (specifically, the costs of Congestion and Transmission Losses) derive from the characteristics of the transmission infrastructure. From the CAISO's perspective, the sooner the CAISO can begin to establish a record of hourly nodal prices on the grid the better.

Sixth, with respect to resource adequacy, the Commission and all commenting parties are well aware that the State of California is addressing this subject and, therefore it is not an explicit element of MD02. At the same time, the CAISO strongly believes that an effective, reliable and stable set of rules for the operation of the CAISO's Congestion Management function and spot markets is a necessary element of a healthy climate for investment in new generation. In particular, the record of nodal price variation will provide crucial economic information on the value of generation at specific locations on the grid. Having robust forward Congestion Management procedures will enable potential generation investors to estimate the Congestion costs they will likely face at specific locations, thereby reducing uncertainty and making investment risks more manageable.

2. Load Aggregation

The CAISO proposes to settle most loads within the CAISO Control Area at aggregated prices based on the average of nodal prices in each of the transmission service areas of the three original IOUs. The aggregated prices will apply to all entities located within the general geographical footprint of the IOU.

The eastern independent system operators use a comparable load aggregation process, and the Commission's White Paper permits such load aggregation. Transmittal Letter at 14-15, 38-40, Attachment A at ¶¶ 15, 62-65, 123-126. The CAISO also proposed to cap nodal prices at \$250/MWh initially and recover, as an uplift, any revenue shortfalls. Transmittal Letter at 39-40, Attachment A at ¶ 16.

Morgan Stanley asserts that, although the CAISO is technically correct that the eastern independent system operators aggregate load, their load aggregation areas are significantly smaller than the service areas in the CAISO. Morgan Stanley argues that the Participating TO service territories are too large to serve as aggregation levels for purposes of settlement. Morgan Stanley also contends that the consequence of aggregating load at such significant levels essentially defeats the purpose of moving to LMP. Morgan Stanley at 3-5.

The eastern independent system operators also use the service territories of their constituent transmission-owning utilities as the basis of their load aggregation pricing areas. Further, the White Paper expressly contemplates that a utility territory service can serve as a load aggregation zone. White Paper, Appendix A at 10. To use smaller areas in California would defeat the purpose of load aggregation, because the IOUs, under the terms of retail rate setting, would still be averaging prices for their customers over their entire service territories while the impact of high prices in particular locations would fall unfairly upon the non-IOU consumers in those areas, i.e., upon municipal utilities and customers of non-IOU, retail ESPs. Moreover, as noted above, the crucial benefits of LMP

derive from using the full network model to manage Congestion in the forward markets and settling supply resources at nodal prices. Settling loads at more granular locational prices is not crucial to a successful implementation of LMP.

Several parties argue that the load aggregation proposal imposes an unjust and unreasonable cost shift. SMUD argues that LSEs should be able to opt out of the load aggregation provision in order to avoid such a cost shift. According to SMUD, the proposal discriminates against LSEs located in low-price nodes by requiring them to subsidize LSEs located in high Congestion areas. SMUD at 19.

As the CAISO argued in previous filings, the crucial unfairness to be addressed is the fact that the transmission system in California was designed and constructed under an integrated utility industry structure and regulatory framework that never anticipated either locational pricing or the unbundling of the generation function of electricity from the transmission function – actions which made the former competitive, while the latter remains a regulated monopoly. Under the prior framework, decisions to build transmission were based on the presumption that (1) consumers would not be charged different rates based on the impact of transmission constraints, and (2) the integrated utility should plan investment in generation and transmission infrastructure in an integrated fashion, substituting one for the other as appropriate. As a result, the structure in certain areas of the grid unduly limits access by consumers in those areas to competitive supplies. As such, it would be patently unfair, upon changing the industry structure and regulatory framework, to subject consumers to the legacy of the

prior rules, thereby preventing all consumers from realizing the benefits of competition.

Southern Cities argue that if the CAISO bills the Southern Cities' loads (which would be within the SCE load aggregation zone) based on the average price for the entire SCE load aggregation zone, it is unclear how the Southern Cities will receive the economic value of their resources. They assert that LSEs will be less likely to make resource commitments if the benefits (but presumably not the obligations) are spread to all loads in the aggregation zones. Southern Cities at 8-10.

The question Southern Cities raise is fundamental to the LMP design being proposed. Southern Cities are correct in their understanding that their load will be settled at the SCE aggregation zone price, and their supply resources will be settled at the nodal prices where the resources are located. The IFM algorithm will produce nodal prices at all grid nodes even though some nodes may feature only self-schedules and no bids. Southern Cities will therefore be charged for Congestion between the resource locations and the load aggregation zone, but will be allocated CRRs between the same locations in sufficient quantities to provide a Congestion revenue stream that should offset the charges associated with their schedules. The determination of the appropriate quantity and injection points of CRRs will be the subject of the continuing stakeholder process on CRR allocation once the Commission issues its order on the CAISO's Proposal.

Strategic encourages the Commission to accept the CAISO's proposal to create load aggregation zones, though it also asserts that load zones should be created through a transparent process that treats ESPs the same as all other LSEs. Strategic at 9-10.

All loads within each aggregation zone – including those served by ESPs and municipal utilities within an IOU's transmission service territory – will be settled using the same aggregated prices as the IOU loads.

BAMx and SVP contend that ETC-served load should not be excluded from the load aggregation. BAMx at 9-10; SVP at 24.

It is important to recognize that load served by ETCs is treated differently from other CAISO Control Area load in that it enjoys the highest level of priority against curtailment in all of the CAISO's market time frames. For the CAISO to honor this priority of ETCs and still allocate and price transmission accurately for other grid users, it is essential to schedule ETC load at its actual locations rather than aggregate it in the same manner as other loads. In any event, ETCs that have not converted to open access transmission service should not be accorded the benefits that are available only to open access customers. Stated differently, ETC rights holders should not be permitted to retain the benefits of their ETCs along with the benefits – but not the burdens – of open access service.

3. Marginal Losses

The CAISO proposes to utilize the NYISO's methodology of incorporating the cost of full marginal losses into the LMP. The CAISO would add any over-

collection of losses to the CRR Balancing Account. Transmittal Letter at 44-46, Attachment A at ¶¶ 71, 72.

FPLE/AWEA argue that the CAISO should continue to assess scaled marginal losses, rather than full marginal losses, or else should specifically allocate over-collected losses to those that were overcharged. FPLE/AWEA state that, by the CAISO's own admission, its proposed methodology will over-recover physically based Transmission Losses, as marginal losses are typically "twice as much" as average losses. Further, FPLE/AWEA contend, the CAISO proposed method for refunding the over-recovery is also flawed. FPLE/AWEA at 2-8.²³ IEP/WPTF argue that the CAISO's proposed allocation of losses is discriminatory and unfair. IEP/WPTF at 27. IEP/WPTF seem to suggest that such losses should be "returned" to the suppliers.

FPLE/AWEA's argument is based on a crucial misunderstanding of the Proposal. They argue that the over-collection of loss revenues should be refunded "to the suppliers who overpaid these loss charges." FPLE/AWEA at 2. Although it is true that today the methodology of Generation Meter Multipliers (GMMs) does assess loss charges to suppliers, under LMP, the cost of losses will be paid by loads. In that regard, when the IFM calculates nodal prices, each nodal price will reflect the marginal cost of serving an additional MWh of load at that location, including the effects of Congestion and losses to deliver the supply to the load. Thus the cost of losses will be included in the settlement charges to

²³ The CPUC and IEP/WPTF raise similar concerns. CPUC at 27-28; IEP/WPTF at 26-27. IEP/WPTF argue that the CAISO's proposed allocation of losses is discriminatory and unfair. IEP/WPTF at 27. IEP/WPTF seem to suggest that such losses should be "returned" to suppliers.

load. Therefore, it is appropriate to refund the over-collected revenues to loads, not to suppliers.

Once it is understood why it is appropriate to refund the loss revenues to loads rather than suppliers, the use of the CRR balancing account as the means to do this should be less of an issue. The CAISO agrees that it may be more precise to create a separate balancing account for losses, but the required settlement system would be more complex and costly. Moreover, using the CRR account should achieve a very similar result. The reason for this is that any balancing account surplus paid to the Participating TO becomes an offset to the transmission Access Charge which is paid by all load on a per-MWh basis.

4. Treatment of Constrained Output Generators

In Amendment No. 54, the CAISO proposes to permit constrained-output resources (“lumpy generators”) to set the Market Clearing Price (“MCP”) in real time. Under the Proposal, lumpy generators would continue to be able to set the real-time MCP but would not be permitted to set the Energy price in the forward markets. Transmittal Letter at 48-49, Attachment A at ¶ 117.

Dynegy/Williams and Reliant/Mirant argue that lumpy generators should be permitted to set the Energy price in the forward markets. Reliant/Mirant argue that permitting lumpy generators to set to price in the forward market is consistent with Commission’s treatment of the NYISO’s “fixed block” generation. Reliant/Mirant at 18-19; Dynegy/Williams at 24. Dynegy/Williams state that their proposal would permit the market to see the value of these resources. Dynegy/Williams at 24.

The CAISO's primary reason for not letting lumpy generators set forward prices is that this would result in one of two equally undesirable outcomes. To illustrate, consider two possible approaches for letting lumpy generators set forward prices when they are on the margin. Under approach A, the IFM would pretend that a lumpy generator is flexible and would Dispatch it at an infeasible operating point, to respect the merit order of available bids. Once Real Time arrives, this generator would then be forced to deviate and incur an uninstructed deviation because its lumpiness would prevent it from operating at its previous Dispatch point. It does not make sense to let the "lumpy" generator set the price in this scenario because that would essentially involve acceptance of an infeasible schedule, with the knowledge that such schedule would have to be adjusted in Real Time.

Under approach B, the IFM would respect the generator's lumpiness and Dispatch it at its feasible operating point, but would then have to DEC another non-lumpy generator at a lower price to make room for the full amount of lumpy output. This would create a disconnect between the pricing of Energy and the pricing of Congestion for CRR settlement. Energy would be priced based on the lumpy generator, but the actual marginal price for determining Congestion charges, i.e., the price of serving an additional MWh of load, would be the price of the lower-price generator that was DEC'd to make room for the lumpy generator.

Regarding the reference to the NYISO procedure, the comparison is not appropriate because the NYISO runs a multi-pass IFM in which the outcome of

their unit commitment (i.e., RUC) procedure – specifically the minimum-load Energy of RUC-committed units – is incorporated into the final Day-Ahead Market results by clearing the RUC minimum-load Energy against load that has bid into the Day-Ahead Market. See *New York Independent System Operator, Inc.*, 100 FERC ¶ 61,187 at PP 3, 7, n.6 (2002). This minimum-load Energy is treated as flexible (and may be Dispatched below minimum operating point) and allowed to set prices, but the resulting prices can be either higher or lower than the prices would have been without incorporating RUC minimum-load Energy. By way of comparison, both PJM and ISO New England, Inc. (“ISO-NE”) operate sequential RUC procedures as the CAISO is proposing do to. They allow lumpy generators to set forward prices by pretending they are flexible and dispatching them in the forward markets at infeasible operating points (i.e., ignoring their lumpiness), and these generators then become price takers in Real Time because they are forced by their own lumpiness to deviate from their forward Dispatch points. In the PJM and ISO-NE markets there is no real-time Uninstructed Deviation Penalty beyond the ineligibility to set prices.

5. LMP and Bilateral Contracts

In its Transmittal Letter, the CAISO noted that a key issue that needs to be addressed is the impact of the Proposal on the scheduling of, and Congestion costs related to, all bilateral power contracts entered into under a zonal market design. The CAISO explained that it was working with – and would continue to work with – parties to resolve this issue prior to implementing LMP. Transmittal Letter at 19-20.

CERS asserts that implementing LMP-based settlements will harm the IOUs' ratepayers and the State in two ways: (1) it will diminish and possibly nullify the benefits of the hedge provided by the existing long-term power purchase contracts entered into by CERS; and (2) because the state contracts constitute a significant investment in physical Energy supplies, any substantial financial shifts, which affects any party's ability to perform under the contracts would unacceptably impact the reliability of service to the IOUs' customers.²⁴ CERS argues that the Proposal will radically alter the existing market rules such that all of the State contracts will be exposed to Congestion costs in the forward Day-Ahead and Hour-Ahead Markets, and this may have the undesirable effect of increasing IOU reliance on the spot market for Energy purchases. CERS acknowledges that solutions to accommodate the state contracts remain under active consideration and should be explored further and contends that a solution should be reached prior to allowing LMP to go into effect. CERS at 12-18.

The CAISO has already indicated it will work with stakeholders to address the problem of pre-LMP zonal-based contracts. The CAISO intends to address these issues in accordance with the process described in Section II.A above. CAISO management is committed to reporting the outcome of this effort to its Governing Board prior to making LMP operational.

Strategic contends that all long-term contracts should be treated the same under LMP and that no special advantages should be provided to the CERS contracts. Strategic at 6.

²⁴ SVP argues that nodal pricing will have a detrimental effect on bilateral contracts that call for delivery in zones or at hubs and will undermine market liquidity by "reducing the volume of

The CAISO agrees with Strategic. The CAISO will work with all stakeholders to develop an approach to bilateral contracts that is applicable to all pre-LMP, zonal-based contracts.

CERS states that the CAISO should clarify whether all Energy trading will be initially limited to only the NP 15, ZP 26 and SP 15 trading hubs and, if so, for what duration. Duke and IEP/WPTF assert that the Commission should clarify that delivery points for inter-SC trades are not constrained to CAISO-designated hubs. They contend that inter-Scheduling Coordinator trading hubs should be completely voluntary, and that both parties to a transaction should be free to negotiate mutually agreeable delivery points. However, IEP/WPTF do not oppose the CAISO's proposal to establish commercial trading hubs. In addition, Duke and IEP/WPTF assert that Market Participants should be able to request the establishment of trading hubs. Duke at 4, 14-15; IEP/WPTF at 26.

The CAISO's proposal would allow inter-SC trades at individual nodes or CAISO-defined Trading Hubs, including hubs that coincide with today's three Congestion Zones and with the proposed load aggregation zones. However, with respect to pre-LMP, bilateral contracts, the CAISO is evaluating suggestions by some stakeholders regarding the need to place some limits on the permissible locations of inter-SC trades. Depending on the interpretation of the deliverability terms of the bilateral contracts, this may be necessary to better facilitate fulfillment of such contracts in an LMP environment that was not contemplated at the time the contracts were executed. In any event, this issue will be fully vetted with stakeholders, as described above.

wholesale transactions in each separately designated market." SVP at 13.

F. The CAISO's Proposal Concerning the Must-Offer Obligation Is Just and Reasonable

The CAISO requests that the Commission retain the existing real-time MOO. The CAISO also proposes to extend the MOO to require all non-hydro-electric units within California that use the ISO Controlled Grid or participate in CAISO markets to bid or schedule their entire operable capacity into the Day-Ahead and Hour-Ahead forward markets. Transmittal Letter at 12, 84-87, Attachment A at ¶¶ 1-4, 118.

1. The Existing Real-Time Must-Offer Obligation Should Be Continued

A number of parties argue that the existing real-time MOO is no longer necessary, should not be continued in the Proposal, and should not become a permanent part of the market design. Duke at 3; Dynegy/Williams at 9-13, 17-18; EPSA at 7-8; IEP/WPTF at 8-15; InterGen at 9-13; Reliant/Mirant at 4, 6-7; Sempra at 11.²⁵ Parties also assert that (1) the MOO should be replaced with a resource adequacy plan, and (2) there are adequate supplies available in the market, so the MOO is no longer needed. Dynegy/Williams at 18; IEP/WPTF at 19-20; InterGen at 8-9; Reliant/Mirant at 4-6; Sempra at 12.

The CAISO believes the MOO should be a permanent market design feature. As stated above, the MOO is a market power mitigation tool designed to deter physical withholding. Measures against physical withholding should be a permanent indispensable feature of power markets. In Docket No. EL01-118, the Commission has proposed to prohibit physical withholding under suppliers

²⁵ The CPUC, however, supports making the MOO a permanent element of the CAISO's rate design. CPUC at 15.

market-based rate tariff. *Investigation of Terms and Conditions of Public Utility Market-Based Rate Authorizations*, 103 FERC ¶ 61,349 (2003). Specifically, proposed Market Behavior Rule #2 under the Order in that proceeding states that prohibited actions include: “(E) bidding the output of or misrepresenting the operational capabilities of generation facilities in a manner which raises market prices by withholding available supply from the market.” Retention of the real-time MOO is consistent with the Commission’s proposed market behavior rule in Docket No. EL01-118.

The CAISO also believes that the real-time MOO should be a permanent feature of the California market even after a resource adequacy obligation is imposed on load serving entities. As discussed in greater detail in Section II.C above, the purpose of the real-time MOO is to mitigate physical withholding; it is not a resource adequacy measure. Further, the real-time MOO is not an onerous obligation for resource owners. For the reasons set forth in Section II.C, the Commission should retain the real-time MOO even after the State adopts a resource adequacy plan.

Reliant/Mirant argue that the MOO basically constitutes a free option on Energy because the CAISO does not make any capacity payments. Reliant/Mirant at 7; Dynegy/Williams at 9. There is no basis for Reliant/Mirant’s claim that the MOO basically provides the CAISO with a free option on capacity. An option contemplates that one party will make a payment to another party to hold something in reserve for such party, i.e., the second party cannot sell the “reserved” product to someone else. That is not how the MOO works.

Resources subject to the MOO have no opportunity costs because, absent the CAISO's committing the unit, the unit would not be running and earning revenues through other sales. Units that are running at minimum load under the MOO have previously applied for and been denied a Must Offer waiver. This presumably reflects a pre-existing decision by the supplier that the unit could not make money in the market. Thus, the unit would not be participating in the market anyway. As such, the true opportunity costs to owners of units that have been denied are zero, if the waiver had not been denied, the unit would not run, would not incur incremental costs and would not earn any incremental revenues. A capacity payment is unwarranted under these circumstances. Rather, the CAISO is paying the appropriate compensation, i.e., recovery of start-up and minimum load costs. Moreover, once committed (i.e., denied a waiver), the unit owner can market the energy throughout the Western electricity Coordinating Council ("WECC") because there is no obligation to serve only California load.

Under MD02, the RUC availability payment will compensate owners to the extent capacity committed in RUC is not Dispatched (e.g., using Reliant/Mirant's terms, the "option is not called"). If the option is called, the supplier will receive an MCP that is above or equal to its market bid. The supplier understands these rules when it submits both its RUC availability payment bid and its market Energy Bid. There is nothing "free" for the CAISO under this mechanism.

A couple of suppliers contend that because market conditions have improved, there is no need for a MOO. Dynegy/Williams at 11; Reliant/Mirant at 6.

The fact that market conditions have improved does not negate the need for the MOO. As the Commission is well aware, system conditions can change rapidly in ways that create opportunities for the exercise market power. Rules to mitigate against physical withholding should be a permanent feature of the market, not a feature that comes and goes with changing market conditions. The Commission cannot establish a market based only on current conditions. A design must work effectively in all types of conditions. There is no valid reason for suppliers not to submit Energy Bids in real time if they have available Energy and are fairly compensated because there is no other market in which they can sell the Energy, and the Commission has found the MOO pricing to be just and reasonable.

Finally, suppliers must meet the requirements of Section 206 of the Federal Power Act to eliminate the real-time MOO. They have not satisfied those requirements.

SVP argues that (1) must-offer calls should be made judiciously, (2) the details of how to treat entities with “legitimate use limitations” need to be worked out, (3) the prices of must-offer resources shall not be lower than a level that is sufficient to recover all costs of operating those resources plus a fair rate of return, and (4) the must-offer requirements should not require entities to provide Energy to non-creditworthy purchasers. SVP at 8-9, 19-20, 36. SCE states that it generally supports continuation of the MOO and the CAISO’s proposals concerning must-offer resources, However, SCE’s support is conditioned on the following: (1) the MOO should be continued and extended only if Commission

approves the RUC process that is described in the CAISO's proposal and as discussed in SCE's comments on RUC; (2) the CAISO should ensure appropriate treatment of Energy-limited resources, such as the exemption of hydro-electric from the MOO; and (3) the MOO should apply only to physical units and not contracts. SCE at 9-10

With regard to SVP's and SCE's concerns about the treatment of use-limited resources under the MOO, the MD02 design includes explicit accommodations and exceptions for use-limited resources such that the MOO will be imposed in a manner consistent with such units' limitations, subject to reporting requirements to ensure there is no physical withholding under the pretext of a use limitation. With respect to SVP's assertion that the prices of must-offer resources should not be lower than is sufficient to recover all costs of operating those resources, plus a fair rate of return on the resources. The MOO guarantees compensation for all operating costs (start-up, minimum load, Energy). Moreover, because the resource receives the market clearing price (rather than as bid) there are ample opportunities to recover fixed cost through the market. The MOO does not limit resources from receiving more than their variable operating costs. In any event, the Commission has previously found the CAISO's MOO pricing provisions to be just and reasonable. SVP's arguments constitute a collateral attack on prior Commission orders.

With respect to SVP's argument that the must-offer requirements should not require entities to provide Energy to non-creditworthy purchasers, the MOO does not force sellers to sell to non-creditworthy buyers. The CAISO's Tariff

provisions ensure that all Market Participants are creditworthy or are backed by a party that is creditworthy. Thus, if conditions change such that certain Market Participants are deemed to be a non-creditworthy, any MOO payments would have to be backed by a creditworthy counter party.

2. The Proposed Day-Ahead Must-Offer Obligation Is Just and Reasonable

Parties argue that the proposed extension of the MOO into the forward markets is unjust and unreasonable. Duke at 5-7; Dynegy/Williams at 13-14; EPSA at 8; IEP/WPTF at 15-19.²⁶

The CAISO believes that it is appropriate to apply the MOO in the forward market in order to deter physical withholding. The CAISO does not see any reason, other than physical withholding, why a Generator that has available capacity would not be willing to Schedule or offer such capacity into the Day-Ahead Energy market. However, once a resource adequacy capacity obligation is in place, a generic waiver from the Day-Ahead MOO can be considered for all non-participating resources, because adequate capacity should be there to render physical withholding from the Day-Ahead Energy market ineffective. Under those circumstances, the Day-Ahead MOO could be limited to resources under capacity obligation.²⁷

²⁶ On the other hand, the CPUC states that extension of the MOO is a reasonable step. CPUC at 15-16.

²⁷ Sempra argues that if the CAISO believes there is a need for resources in the Day-Ahead Market, the CAISO should proffer an RMR Contract. Sempra at 12. The MOO is intended for an entirely different type of market power mitigation than the RMR resources. RMR Contracts are designed to mitigate economic withholding associated with local reliability; they have not been designed as a measure to prevent system-wide physical withholding. On the other hand, that is the purpose of the MOO.

The Day-Ahead MOO is not an onerous obligation for generator owners to comply with. Under the MD02 design, resource owners are (1) able to submit market bids that reflect their Energy cost (including inter-market opportunity costs), (2) able to schedule or bid their use-limited resources with use limitation constraints so as to preserve inter-temporal opportunity costs (which can be bid based or cost-based), (3) are compensated for start-up and minimum load costs, (4) are free to schedule and sell their power anywhere in the WECC, and (5) are able to submit a market bid that reflects their perceived cost of providing reserve in the event some or all of the unit's capacity is committed in RUC but not ultimately Dispatched (i.e., availability payment). Given these provisions which guarantee recovery of operating costs and provide for numerous opportunities to market Energy throughout the WECC, the CAISO fails to see why a resource owner would not want to bid into the Day-Ahead Market other than to exercise market power through physical withholding.

Generators have argued in the past that they need standby capacity (i.e., capacity withheld from the Real Time Market) to make up for any unpredictable forced Outages of their committed resources. The CAISO has repeatedly clarified that it has designed its Real Time Market in a manner that there is no need for such standby capacity. All the generation owner has to do is to bid its otherwise standby capacity in to the CAISO's Real Time Market. If a scheduled unit for which the stand-by capacity was intended experiences a forced Outage, all the Generator has to do is to inform the CAISO regarding the forced Outage. The Uninstructed Deviation Penalties are avoided once the Outage is reported in

SLIC (i.e., the unit is automatically Dispatched down to its derated level). In other words, the CAISO system will issue a real-time instruction to consider the change in the generator's output as instructed deviation (subject to no real-time penalty). If the otherwise standby resource bid into the CAISO's Real Time Market is not yet called upon by the CAISO, this is an indication that the Real Time Market can supply the power shortfall resulting from the forced Outage at a lower price than that bid by the supplier. If the supplier's otherwise standby resource has been called upon (in economic order) the supplier has to do nothing, it has already used its standby power to meet the shortfall thus avoiding any Uninstructed Deviation Penalties. The Uninstructed Deviation Penalty is avoided because the generator reported its forced Outage. Whether the generator's other available capacity is Dispatched in real time has no bearing on whether Uninstructed Deviation Penalties are applied to the forced out generator. The CAISO also notes that, if the supplier has a long-start-time standby resource, presumably such standby resource would have to be self committed in the forward market anyway. Thus, the MOO imposes no additional requirements on the supplier in these circumstances. In fact, it provides an opportunity for the supplier to guarantee recovery of start-up and minimum-load costs for standing by.

In instances where the supplier would not want to bid in the forward markets because it perceives a revenue inadequacy risk, the MD02 design eliminates such risk with respect to forward market bids. In that regard, RUC

provides for recovery of start-up costs, minimum-load costs, Energy Bids and accommodates all technical constraints of the MOO resource.

Suppliers state that there are circumstances where they would prefer to withhold supplies from the Day-Ahead Market or Day-Ahead RUC in order to pursue other opportunities between the close of the Day-Ahead Market and the operating hour. That is no reason to reject a Day-Ahead MOO. A Day-Ahead MOO would not prohibit a supplier from reflecting such perceived opportunities in its Day-Ahead or RUC Energy Bids.

The CAISO also notes that the MOO is only an obligation to schedule or bid in the CAISO market. It is not an obligation to schedule or bid to serve California load. The latter would merit compensation in the form of some type of capacity payment. To the extent the RUC process is driven by the CAISO's load forecast, the RUC process provides for such a capacity, i.e., availability, payment.

The CAISO also stresses that the Day-Ahead MOO is not a substitute for a resource adequacy plan. The Day-Ahead MOO is a poor substitute for resource adequacy for the following reasons: (1) there is no obligation to serve California load (e.g., a resource, even if it was committed in RUC) could schedule all of its power to Arizona and still be in compliance with the MOO; and (2) the MOO does not provide price certainty for LSEs. For these reasons, the CPUC and LSEs have a strong incentive to pursue a resource adequacy program that ensures that sufficient capacity is "obligated to serve California

load” and that LSEs are sufficiently hedged through forward contracts so that their exposure to spot market volatility²⁸ is minimal.

Finally, because the Commission has deferred Resource Adequacy to the states, and the CPUC has an active ongoing proceeding in which it is attempting to develop a resource adequacy program, the Commission cannot simply reject market design elements such as RUC and the Day-Ahead MOO on the basis that the CAISO does not have a resource adequacy program in place.

G. No Arguments Raised By Intervenors Support Rejection Of The CAISO’s Proposed Local Market Power Mitigation Measures

The CAISO has proposed, as its preferred methodology, local market power mitigation (“LMPM”) measures comparable to those employed by PJM. In the event the Commission does not approve the CAISO’s preferred method of mitigating local market power, the CAISO requests that the Commission, as an alternative measure, lower the existing AMP conduct and market impact LMPM thresholds to protect against the exercise of local market power. Transmittal Letter at 15, 23, 49-66, Attachment A at ¶¶ 13, 36, 39-47, 75, 130-146.

Numerous parties argue that the CAISO’s proposed market power mitigation measures, or measures that are at least as stringent as those proposed by the CAISO are required. CCSF at 4; CPUC at 19-20; EOB at 1-3; PG&E at 5, 7.

²⁸ Some parties have argued that the CAISO’s market power mitigation provisions remove all spot market volatility and those provisions, when coupled with the MOO, essentially eliminate all incentives for loads to forward contract. The CAISO disagrees. The potential for significant spot market volatility will still remain under MD02 due to legitimate market forces (e.g., such as low hydro conditions that result in an increased reliance on high cost thermal units), and unexpected increases in natural gas prices due to legitimate scarcity conditions (i.e., low inventory levels).

1. The CAISO's Proposed Local Market Power Mitigation Measures Are Just And Reasonable

Duke alleges that, in its July 17, 2002 Order in this proceeding, the Commission rejected the CAISO's proposed LMPM measures that are similar to the LMPM measures that the CAISO has proposed in its July 22 Filing. Duke at 15 (citing *California Independent System Operator Corporation*, 100 FERC ¶ 61,060, at 61,247 (2002) ("July 17 Order")). Duke contends that the CAISO has failed to demonstrate changed circumstances that warrant reconsideration of the Commission's prior decision. *Id.* Dynegy/Williams argue that PJM-style LMPM measures are inappropriate in California because, unlike PJM, the CAISO does not have a \$1,000/MWh bid cap or a capacity market. Dynegy at 27.

Duke seeks to apply an inappropriate legal standard. The CAISO is not required to demonstrate changed circumstances that warrant reconsideration of the Commission's July 17 Order. Under section 205 of the Federal Power Act, the CAISO is only required to demonstrate that its proposed LMPM measures are just and reasonable. For the reasons set forth in the July 22 Filing and herein, the CAISO submits that its LMPM proposal is just and reasonable.

In any event, there are changed circumstances since the July 17 Order that support Commission approval of the CAISO's LMPM proposal, and the CAISO has modified its original proposal in response to stakeholder concerns about revenue adequacy. First, the ISO is proposing a LMP-based market and Congestion Management model. The July 17 Order ruled on the justness and reasonableness of PJM-style LMPM measures in a zonal market. In the July 17 Order, the Commission expressly found the PJM-like LMPM measures proposed

by the CAISO to be “inappropriate in light of a three-zone congestion management model.” July 17 Order, 100 FERC at P 90. The Commission approved AMP-style procedures only as an “**interim** measure in order to provide protection from the possible exercise of local market power during the transition to the full network model.” *Id.* (emphasis added). Thus, the Commission has (1) not yet ruled on the justness and reasonableness of PJM-like LMPM measures under a nodal Congestion Management model, and (2) expressly left the door open to approve new and permanent LMPM measures upon implementation of the full network model. The July 17 Order expressly recognized that the AMP measures the Commission was approving were merely interim measures. Accordingly, the Commission must determine what LMPM measures will be just and reasonable under a LMP environment with the full network model.

Second, the CAISO has modified the proposal contained in its May 1 Filing to provide for a 10 percent adder above a unit’s variable costs. This will assist suppliers with cost recovery.

Third, the CAISO has modified its proposal in the following two ways in order to minimize the extent of any mitigation: (1) only the portion of the bid curve Dispatched to resolve non-competitive Congestion will be subject to mitigation for local market power reasons; and (2) the mitigation will be based on the higher of the highest accepted portion of the bid curve or a unit’s Default Bid. Thus, a unit will not be mitigated to its Default Bid if its highest accepted bid in the competitive IFM run exceeds its Default Bid. All other portions of the unit’s

bid curve will remain unmitigated unless such bids are mitigated under system AMP.

Dynegy's arguments that PJM-like LMPM measures are inappropriate because the CAISO does not have a capacity market and has a lower damage control bid cap than PJM are without merit. The Commission did not base its approval of PJM's LMPM measures to the fact that PJM had a \$1,000/MWh bid cap and a capacity market. See *PJM Interconnection, LLC*, 96 FERC ¶ 61,233 (2001); *Atlantic City Electric Company, et al.*, 86 FERC ¶ 61,233 (1999).

Accordingly, the Commission cannot now base its approval (or disapproval) of the CAISO's proposed LMPM measures on the level of the CAISO's bid cap or whether the CAISO has a capacity market.²⁹ These factors are unrelated to a determination of whether the CAISO's proposed LMPM measures are just and reasonable. That decision should be based on whether the proposed measures will effectively protect consumers against the exercise of local market power, while providing generators with adequate revenues for the particular service they are providing. The Commission cannot condone the exercise of "more" local market power simply because the applicable system bid cap is lower in one market than it is in another.

²⁹ Dynegy/Williams fail to mention that the reserve margin in PJM far exceeds the reserve margin in California and the remainder of the Western United States. In that regard, the Commission has recognized that reserve margins in the WECC have fallen to only 10 percent, the lowest in the nation. July 17 Order, 100 FERC ¶ 61,060, at P 2. Under those circumstances, PJM can afford to have a higher bid cap than California. With respect to resource adequacy, the State is in the process of developing a plan as part of the CPUC procurement proceeding, and the Commission has deferred this issue to the States. Thus, Dynegy/Williams cannot rely on the CAISO's current lack of a capacity market as a basis for arguing that the CAISO should not have stronger LMPM measures. Finally, Dynegy/Williams ignore the arguments in the July 22 Filing regarding revenue adequacy for suppliers in the California market, including the fact that the State contracts cover most of the IOUs' net short. Indeed, the protest filed by Dynegy/Williams

In any event, it is imperative that the Commission approves more effective LMPM measures than those currently in place when the CAISO implements LMP. Both the CAISO in its July 22 Filing and the CAISO's Market Surveillance Committee ("MSC"), in its Opinion on the Necessity of Effective Local Market Power Mitigation for a Workably Competitive Wholesale Market (Attachment D to the July 22 Filing), stressed that the existing AMP thresholds are inadequate and that more effective LMPM measures are necessary when the CAISO implements LMP. Although various intervenors raised specific objections to the CAISO's primary and alternative LMPM proposals, not one intervenor specifically rebutted the CAISO's and the MSC's arguments that more effective LMPM measures are appropriate in a LMP-based market.

The CAISO recognizes that LMPM is a contentious issue that must be considered carefully. The Commission must assure that prices are just and reasonable at all times and under all conditions. If the Commission elects to modify the CAISO's proposed LMPM measures, any such modification must provide the CAISO with LMPM measures that are comparable to those proposed herein and which are more effective than the LMPM measures the CAISO has in place today. There has been staunch opposition to LMP in California and many parties, including the MSC, believe that stronger LMPM measures are intricately linked to implementation of LMP. The CAISO is concerned that failure to approve more effective LMPM measures under LMP will call into question the perceived benefits of LMP and will cause certain parties to re-double their efforts

does not even attempt to address any of the revenue adequacy arguments raised in the July 22 Filing.

to block the implementation of LMP in California. That is not a result that the CAISO desires. However, for LMP to be just and reasonable, greater protection must be afforded customers from the exercise of locational market power.

2. Cost-Based Proxy Pricing Is Appropriate

Several suppliers argue that cost-based proxy pricing is inappropriate. In particular, Reliant/Mirant argue that LMPM measures must permit the recovery of fixed costs. Reliant/Mirant at 12-13. They also contend that the cost-based proxy method will create barriers to entry into the market and result in LSEs over-relying on the spot market. *Id.* Duke argues that the price suppression caused by the LMPM measures will dampen LSEs' incentives to invest in new transmission. Duke at 17.

The CAISO's proposed LMPM measures will provide adequate revenues to suppliers under circumstances where prices must be mitigated in order to protect against the exercise of local market power. In that regard, both the primary and alternative LMPM measures provide an adder to ensure the bid mitigation adequately covers a supplier's marginal operating costs.³⁰ Moreover, it is important to note that units will be mitigated only for the positive incremental Dispatch associated with relieving Congestion on the non-competitive constraint, and only to the extent that their incremental bids exceeds the highest bid Dispatched in the prior IFM run in which only competitive constraints are enforced. In other words, the CAISO has taken steps to limit the scope of any mitigation. Further, units that are mitigated are not precluded from earning the

locational marginal price. Thus, to the extent units are infra-marginal, there will be opportunities for additional fixed cost recovery, even during mitigated periods. Moreover, resources will be able to earn revenues in excess of variable costs when prices are set by non-mitigated bids during unconstrained periods.

Prices determined through mitigated bids, replicates a competitive outcome, and should be the benchmark for evaluating the economic benefits of localized investment options for mitigating the Congestion. Moreover, to the extent there is insufficient supply to serve load in a constrained area, the pricing rules under MD02 will set the Market Clearing Price equal to the Damage Control Bid Cap. Thus, the MD02 proposal does provided for pricing that will reflect true scarcity conditions. Finally, the CAISO does not believe that locational prices will be a significant factor in providing incentives for new merchant generation investment because the addition of new generation into a locally constrained area is apt to significantly reduce LMPs and therefore the expected benefits from the investment. Instead, new infrastructure investment (generation and transmission) in a constrained area is more likely to be pursued by the LSEs within that area or by the Participating TO who is responsible for RMR costs, and will be based both on economic and reliability considerations.

3. The Commission Should Not Adopt A CT Proxy Approach

Sempra and IEP suggest that the Commission should approve a CT Proxy approach similar to the one the Commission approved for ISO-NE for purposes

³⁰ CCSF argues that a 10 percent adder above the Default Bid is inappropriate. The CAISO disagrees. PJM provides for such an adder, and the adder adequately addresses concerns that a unit will not be able to recover its costs.

of mitigation local market power. Sempra at 13; IEP at 25. For the reasons set forth below, as well as in the Transmittal Letter and in the MSC's LMPM Opinion, the Commission should not approve the use of a CT Proxy approach.

First, the CAISO notes that the Commission has eliminated the CT Proxy mechanism that it initially approved for ISO-NE. See *Devon Power, L.L.C.*, 103 FERC ¶ 61,082 (2003), *order on reh'g*, 104 FERC ¶ 61,123 (2003) ("*Devon*"). The Commission found that such mechanism was inappropriate because it permitted other generators (i.e., non-peaking units) to bid up to the CT Proxy level. The Commission found that this was unnecessary and could allow generators to exercise market power. For the same reasons, the Commission should not adopt a CT Proxy mechanism in California.³¹

Second, Sempra and IEP fail to note that the Commission has approved two tiers of local market power mitigation for ISO-NE. For chronically constrained areas, known as Designated Congestion Areas ("DCAs"), the Commission has approved a Peaking Unit Safe Harbor ("PUSH") bid mechanism as a replacement for the CT Proxy approach it initially approved.³² See *Devon*, supra. However, for the Commission has approved different LMPM measures for Other Congested Areas ("OCAs"). Specifically, in areas where transmission constraints cause a unit to be Dispatched above the level it would have been Dispatched absent the constraint (i.e., if ISO-NE is required to take a unit out-of-

³¹ A CT Proxy mechanism would allow all units at a node to collect the high price set by a peaking unit, which price (allowed by the Commission) was necessary to allow seldom used peakers to recover their costs. This was an inappropriate and unnecessary result given that the concern being addressed by the Commission was to enable a seldom-used peaker to recover its costs. The CT Proxy mechanism would result in an unjustifiable windfall for units that run on a more regular basis.

sequence due to transmission constraints), such unit will be investigated if its bid exceeds the reference value by the lesser of 50 percent or \$25. *New England Power Pool*, 100 FERC ¶ 61,287, at 62,265 (2002) (“NEPOOL Order”).

Unlike the situation in ISO-NE, in California, RMR Units are used to relieve Congestion in chronically constrained areas, i.e., DCAs. RMR Contracts provide for the recovery of all or most of a unit’s fixed and variable costs. In other words, RMR Contracts essentially perform the same role as the PUSH mechanism that the Commission approved for ISO-NE. Further, RMR Units are not subject to LMPM measures. Because the CAISO is proposing to retain its RMR program, there is no need for a CT Proxy or PUSH mechanism in chronically constrained areas in California. Moreover, as stated in the July 22 Filing, the CAISO is willing to consider the possibility of offering annual capacity contracts to any non-RMR Unit that is frequently mitigated under the LMPM provisions subject to an assessment of the unit’s revenues sources and subject to coordination with the state resource adequacy plan.

The CAISO’s proposed LMPM measures are designed to apply in areas that are less frequently constrained. In other words, the circumstances in which the LMPM measures will apply are more akin to the OCAs in ISO-NE. As indicated above, for OCAs, the Commission has approved thresholds for mitigation equal to the lower of \$25 or 50 percent above a unit’s reference price. These thresholds are half of the CAISO’s existing AMP LMPM thresholds (the

³² The PUSH mechanism enables generators with a capacity factor of 10 percent or less a reasonable opportunity to recover their fixed and variable costs through market bids

lower of \$50 or 100 percent), that apply under similar circumstances.³³ Third, the MSC strongly opposes implementation of any CT Proxy mechanism. LMPM Opinion, Attachment D to July 22 Filing at 5-6. As the MSC indicated, no CT Proxy bid would be equal to what the unit owner would receive in a competitive market. Therefore, allowing such a regulated bid to set the price can result in distorted price signals at the unit's location. The MSC suggests that, if a unit is mitigated so frequently that its owner cannot recover sufficient revenues from selling Energy during non-mitigated hours to recover its fixed costs, then the unit owner should be offered a cost of service option that will compensate the owner for such costs. As indicated in the July 22 Filing, the CAISO is willing to consider the possibility of offering annual capacity contracts to any non-RMR Unit that is frequently mitigated under the LMPM provisions subject to an assessment of the unit's revenues sources and subject to coordination with the state resource adequacy plan. This capacity contract would not necessarily have to be a cost-of-service contract (i.e., it could provided a capacity payment towards annual going forward fixed costs and allow the unit to freely participate in the market). July 22 Filing at 61. In any event, most units in California that might fall into this situation already are under RMR Contracts that allow them a reasonable opportunity to recover all of their fixed and variable costs.

³³ The CAISO's AMP LMPM measures apply in circumstances where a unit must be taken out-of-sequence in order to relieve local transmission constraints. July 17 Order, 100 FERC at PP 77-78, 93. Thus, the AMP LMPM measures essentially apply in the same circumstances that the ISO-NE's OCA LMPM measures apply. Because both LMPM measures apply in similar circumstances, at a minimum, the CAISO should have comparable thresholds to those which the Commission approved for ISO-NE.

4. The CAISO's List Of Non-Competitive Paths Is Just And Reasonable

Dynegy/Williams argue that the CAISO has not provided any support for its list of “non-competitive paths” to which the CAISO will apply its “primary” and “alternative” LMPM measures. Dynegy/Williams at 27. They suggest that such paths are not load pockets to which LMPM should apply. *Id.* Dynegy/Williams also suggest that non-competitive paths are akin to DCAs in ISO-NE. *Id.* at 30. Reliant/Mirant argue that the “non-competitive path” proposal merely perpetuates the dichotomy between inter- and intra-zonal transmission. Reliant/Mirant at 12.

Until LMP is implemented and a historical record is built on the prices and degree of competition across Congestion paths, a prudent approach is to assume initially that competitive paths are only those paths for which the ISO has experience to demonstrate they are workably competitive (i.e., the existing inter-zonal paths). As the CAISO gains experience under LMP and acquires the necessary nodal data to assess the competitiveness of other paths, additional paths may be designated as “competitive.” Under a looped network topology, it is a misnomer to assume that only resources within a load pocket are capable of exercising local market power.

In any event, the aforementioned intervenors misunderstand the CAISO's proposal. The CAISO is not proposing to mitigate every bid on every path that the CAISO has initially deemed to be “non-competitive.” The first step for determining which resources might **potentially** be subject to LMPM is to identify transmission paths where Congestion typically can be resolved competitively. The CAISO will not seek to apply LMPM on these paths. The CAISO will only

seek to apply LMPM on paths that are deemed to be “non-competitive.” Thus, the “competitive” versus “non-competitive path’ designation is intended **solely** as a “screen” to specify the paths on which bids **might** be subject to LMPM. Similarly, the CAISO will only seek to apply LMPM on “non-competitive” paths. The CAISO will not attempt to apply LMPM on competitive paths. Whether any bids on “non-competitive paths” will actually be mitigated under the LMPM will depend on the results of the two daily Pre-IFM runs and application of the specified criteria. If a resource is Dispatched up to resolve Congestion on a non-competitive path in the second pre-IFM run and has a market bid that is equal to its accepted bid in the first pre-IFM run, its bid will not be mitigated.

ISO-NE applies OCA mitigation measures when transmission constraints cause a unit to be called on out-of-sequence. As discussed above, the CAISO LMPM measures will apply in similar instances where there are transmission constraints on “non-competitive paths,” and the CAISO must take a unit out-of-sequence. RMR Contracts are intended for use in areas comparable to DCAs in ISO-NE.

H. The CAISO’s Proposal Concerning Congestion Revenue Rights Is Just and Reasonable

As noted in the July 22 Filing, “[a]dopting the LMP paradigm requires the CAISO to replace the existing Firm Transmission Rights (‘FTRs’), which are defined in terms of specific transmission paths, with a ‘source-to-sink’ (often referred to as ‘point-to-point’) congestion hedging instrument.” Transmittal Letter at 66.

The CAISO determined that the best CRR design to meet the needs of the California market would have the following characteristics:

1. CRRs will allow Market Participants to hedge the risk of Congestion charges in a manner consistent with the LMP Congestion Management design;
2. CRR Obligations will be allocated to all loads in the CAISO Control Area that pay the embedded costs of the transmission grid;
3. CRRs will be allocated in sufficient quantities to protect loads in the Control Area from Congestion charges fully,³⁴ if such quantities are determined to be simultaneously feasible;
4. The CAISO will offer CRRs for any transmission capacity remaining after the initial allocation process in an auction open to all qualified participants;
5. The CAISO will offer both one-year and one-month CRRs through allocation and auction processes to be conducted annually and monthly. One-year CRRs will be available on a rolling two-year basis so that parties may obtain these rights for a period of up to two years into the future.
6. The CAISO will offer distinct peak and off-peak CRRs.
7. Allocated CRRs will follow load in the event that any end-use consumers switch to a different LSE;
8. The Demand side of initially balanced CRR Schedules will have a Scheduling priority in the Day-Ahead Market;

³⁴ As explained below, using an instrument such as CRRs to provide a “full” hedge against Congestion costs requires thinking about congestion costs on an average basis over a given period of time (such as a month or a year), rather than on an hour-by-hour basis. It simply is not

9. Sponsors of new transmission capacity will receive CRRs for such capacity provided the sponsor of the new capacity does not receive regulated rate recovery of its investment costs, such as through the CAISO's transmission Access Charge.

Transmittal Letter at 13, 17, 66-80, Attachment A at ¶¶ 7, 70, 76-97.

As also described in the Proposal, the CAISO is currently engaged in a study to determine the amount of CRRs that will be available to LSEs. This study, which is being conducted in cooperation with the CPUC, the LSEs, and other Market Participants, will aid the CAISO in determining how to proceed with regard to CRR allocation. Transmittal Letter at 17.

Finally, as stated in the July 22 Filing, the CAISO will work in close collaboration with Market Participants in the State of California to develop the details of the CRR allocation process. This is consistent with the directives in the Commission's White Paper. See White Paper at 5.

Many of the concerns expressed by parties regarding both the design of CRRs (e.g., obligations versus options, Day-Ahead applicability only, special needs of Energy-limited resources and non-conforming loads)³⁵ and whether CRRs will be available in sufficient quantities³⁶ are based on the notion that, to be an effective hedge, CRRs must match parties' actual Schedules on an hour-by-hour basis. Even assuming *arguendo* that there were no limitation based on

possible for the CRR instrument, which is characterized as a fixed MW quantity and fixed source and sink points over a given time period, to match an entity's actual schedules in every hour.

³⁵ CCSF at 10; CERS at 8-11; CMUA at 20-23; Duke at 4; FPLE/AWEA at 8-13; PG&E at 8; Redding at 15; SCE at 10; SMUD at 20-21; Southern Cities at 6-8; SVP at 28, 30; SWP at 12-13.

³⁶ InterGen at 7; PG&E at 8; Reliant/Mirant at 17; SCE at 11; Southern Cities at 6-8; Strategic at 4; SVP at 13-14; TANC at 12.

the quantities of available CRRs, this notion would be impossible to achieve with an instrument whose MW magnitude and defined source and sink points are fixed over a period of time. There will always be mis-matches between such an instrument and parties' use of the CAISO Controlled Grid in individual hours. The CAISO has consistently explained that the appropriate way to think about CRRs is in terms of dollar-adequacy rather than MW-adequacy, and over a period of time rather than for each hour. This concept was further clarified for CAISO Market Participants by representatives of PJM, the NYISO, and MISO at a workshop at the CAISO on August 25, 2003. Specifically, in order to serve as an "adequate" hedge, the CRRs held by a LSE should provide a stream of Congestion revenues that offsets that LSE's Congestion charges on average over a period of time, leaving the LSE in roughly the same financial position with respect to Congestion costs as it was prior to LMP. The CAISO realizes that this concept represents a significant change in how California Market Participants manage Congestion risks. The CAISO is committed to working with Market Participants and will provide detailed examples of how such a concept will work in practice. This effort will be supported by evidence from the CAISO's ongoing CRR and LMP studies to demonstrate that such an approach is feasible.

1. The CRR Study and Allocation Process

TANC complains that the CAISO has not completed the CRR study, and fears that the completed study "may not support moving forward with this proposal." TANC at 6.

The CAISO has built flexibility into both its Proposal and its contemplated CRR software design, in recognition of the fact that the results of the CRR study are not yet available and that such results could vary from the CAISO's expectations. In particular, the development of the CRR software does not require resolution of CRR allocation issues. Rather, the CRR software engine the CAISO intends to procure will accommodate the allocation rules and results as inputs. That being the case, the CAISO will be able to accommodate the results of the study in finalizing the CRR allocation rules without being constrained by the CRR software.

2. Inferiority to Current FTRs

SVP and InterGen believe CRRs should place Market Participants in the same position as the current FTR system. SVP further criticizes the Proposal because, it argues, there will not be enough transmission capacity to serve all customers, and the system will be overly complex. SVP at 13-14; InterGen at 7. The apparent complexity of CRRs is a direct result of performing forward Congestion Management using a FNM, because CRRs will now be required to hedge source-to-sink Congestion charges based on nodal price differences. The only ways to simplify CRRs would be to either (a) not match the CRR design to the LMP approach, or (b) not use the FNM in the forward markets. Both of these would severely undermine the integrity of the Proposal and defeat the purpose of the CAISO's market redesign. Therefore, such options are unacceptable.

With regard to the issue of whether there will be sufficient CRRs to provide all customers with a full Congestion cost hedge, the answer depends on several

factors and cannot be answered definitively until the Commission rules on some of the key elements of this proposal, the study is completed, and the CAISO procures and begins to test the actual software that will be used for the CRR allocation and auction processes. As noted in the Transmittal Letter, however, it is the CAISO's intention to provide such a complete hedge, provided the capacity is available. Adequacy will depend on: (a) the Commission's ruling on the CAISO's proposed CRR design features (e.g., CRR obligations initially); (b) the Commission's ruling on the CAISO's proposed method for honoring ETC rights (i.e., not reserving un-scheduled transmission capacity for ETCs in the forward markets); (c) realistic modeling of the CRR allocation process based on Commission-approved design features; and (d) the approach used to define the "adequacy" of the CRR hedge, as discussed above. Once the Commission provides direction on items (a) and (b) the CAISO can proceed with the modeling program and work with Market Participants and the State in determining the most effective CRR allocation approach. It is important to realize, however, that Commission approval of the Proposal is a necessary prerequisite to determining a definitive answer to the question of CRR adequacy.

3. Tax-Exempt Debt

Both CMUA and Southern Cities voice doubts as to whether the CRR proposal would be compatible with their tax-exempt debt requirements. CMUA at 20-23; Southern Cities at 6-8. These parties have not provided any explanation or examples to illustrate how CRRs might create such a problem, and the ISO is not aware of any such problems created by CRRs.

The CAISO notes that Section 2.1.3.1 of its Tariff precludes imposing any requirements that would conflict with the tax-exempt debt provisions of participants. Specifically, Section 2.1.3.1 of the ISO Tariff prohibits the CAISO from violating the restrictions applicable to facilities that are part of a system that was financed in whole or in part with Local Furnishing Bonds or other Tax Exempt Debt or the contractual restrictions and covenants regarding the use of any transmission facilities specified in the Transmission Control Agreement.

If the parties can identify a particular problem caused by the CAISO's CRR and LMP proposals, the CAISO is willing to discuss it and explore possible solutions.

4. CRR Design Issues

a. CRR Obligations vs. Options

Some parties expressed a preference for the Options model of CRRs, rather than the Obligations model proposed by the CAISO. Some parties argue that Obligations will not fully hedge their Congestion costs (*see, e.g.*, SWP at 12-13). SCE asserts that in order for LSEs fully to hedge servicing their loads and not take the additional risks presented by "Obligation" CRRs, the CAISO should offer "Option" CRRs to all LSEs, absent a showing by the CAISO that they are technically infeasible. SCE at 10. Other parties complain that the Obligations model will not allow for seasonal or other time-related variations in the level of CRRs needed, such as with Energy-limited resources. *See, e.g.*, CMUA at 20-23; Redding at 15; SVP at 28. CCSF states that the costs of this model could outweigh the benefits, due to new scheduling and financial risks. CCSF at 10.

PG&E argues that given the uncertainties associated with LMP, CRRs should be developed as both Obligations and Options, and notes that PJM is experimenting with such a design. PG&E at 8. Finally, FPLE/AWEA argues that sponsors of transmission upgrades should receive CRR Options, not CRR Obligations. FPLE/AWEA at 8-13.

Duke, on the other hand, would allocate Obligations to ETCs (which, under the CAISO Proposal, are eligible for Options if they convert their rights) because providing them with Options would reduce the number of CRRs available to the market. Duke at 4. Duke otherwise supports the Obligations proposal, and notes that obligations are used in other LMP markets. Duke at 10.

Obligations will allow for a more efficient and extensive allocation of CRRs than would the “Options” model because Obligations make a more efficient use of the transmission system. As such, this approach will lend itself more easily to the CAISO’s goal of providing sufficient CRRs to hedge fully the Congestion costs of all LSEs. Moreover, the CAISO has sought throughout the MD02 process to rely as much as possible on design elements that have been proven in other CAISO markets. Obligations have proven to be successful in other markets. Therefore, the CAISO is hesitant to commit to a combined Options and Obligations CRR model until such a model has been well tested and proven in practice. In any event, the CAISO has expressed its willingness to provide Options CRRs in the future, consistent with Commission guidance in the SMD NOPR (see SMD NOPR at P 248), when it determines that such instruments are feasible, and when the benefits of doing so are demonstrably greater than the

costs. The CAISO submits that it is appropriate to provide Obligations first, however, in order to ensure greater coverage.³⁷

b. Physical Scheduling Priority For CRR Holders

Certain parties express disapproval of the CAISO's proposal to retain a physical scheduling priority element for CRRs, contending that it would be superior to design CRRs as financial instruments only. See, e.g., Reliant/Mirant at 18; Sempra at 4. Dynegy/Williams want a physical priority is absent from the NYISO and ISO-NE systems. Dynegy/Williams at 30-31. Several parties complain that the physical scheduling priority is discriminatory. Duke at 4; IEP/WPTF at 20-22; Morgan Stanley at 7. Morgan Stanley and Sempra assert that the CAISO should manage Congestion through Redispatch of loads and/or resources on the basis of participants' bids and offers. Morgan Stanley at 7; Sempra at 14. Sempra also argues that the physical scheduling priority makes CRRs too complex and thus that it is difficult to value in auctions and secondary markets. Sempra at 16.

SCE, on the other hand supports the scheduling priority proposed by the CAISO. In the event the CAISO's Proposal is not accepted in its entirety, SCE supports a CRR Scheduling priority for both the Generation and Demand components of a balanced self-schedule. SCE at 6.

Most of the arguments against the CAISO's Scheduling priority proposal ignore the fact that the priority would apply only to the Demand side of an initially Balanced Schedule. As described in the Proposal, the CAISO determined that

³⁷ As a limited exception to this principle, the CAISO has given converting ETCs the option of selecting either CRR Obligations or Options.

providing a physical scheduling priority only on the Demand side of CRR schedules would not constrain the CAISO's ability to perform Congestion Management by Redispatch of supply resources, while accommodating Market Participants' desires to use their own resources to serve their loads. In particular, the CAISO acknowledged the concern that absent the proposed Demand-side priority, a non-fully-resourced load-serving Scheduling Coordinator could come into the CAISO's Day-Ahead Market and effectively "buy" the supply resources that were brought to the market by a fully-resourced load-serving Scheduling Coordinator. The Demand-side-only priority effectively prevents this. However, as discussed in the July 22 Filing, applying the same priority to the supply side of a CRR schedule would create substantial risk of having severe shortages of bids for performing Congestion Management, thereby forcing the CAISO to resort to non-economic adjustments with high regularity.

As noted by Dynegy/Williams, the SMD NOPR contemplates that there would be physical scheduling priority for CRRs. See SMD NOPR at P 243; see *also* White Paper at 10 (articulating principles for allocating FTRs). Therefore, the CAISO's proposal is consistent with the Commission's pronouncements regarding CRRs.

c. CRRs Will Not Serve As A Hedge Against Losses

TANC argues that CRRs should provide a hedge against losses, and that surplus Congestion revenue, rather than being given to Participating TOs, should be used to reduce the cost of losses. TANC at 12.

As discussed in the Proposal, the CAISO determined that CRRs should not serve as a hedge against losses. This determination arose out of concern that “allowing CRRs a hedge on losses could result in a systematic revenue shortfall under an LMP paradigm” Transmittal Letter at 73. Moreover, the CAISO’s proposal that CRRs not serve as a hedge against losses is consistent with the SMD NOPR and with the approaches used by ISO-NE and the NYISO.

With respect to the refund of surplus Congestion revenues, it is important to recognize that giving these funds to Participating TOs offsets a portion of their Revenue Requirement, thereby reducing transmission access charges for all loads in their service territories. Because losses are charged for all loads on a similar (per MWh) basis, refund of excess Congestion revenues to Participating TOs has the indirect effect of offsetting some of the cost of transmission losses.

5. CRR Allocation Issues

a. General

i. Fairness

Parties argue that the CAISO’s Proposal is unfair or discriminatory towards new customers (Reliant/Mirant at 17); unfair or discriminatory towards ESPs (Strategic at 4); or preferential towards converted ETCs (SCE at 11).

The CAISO will allocate CRRs to all loads within the ISO Control Area, including load served by ESPs and municipal utilities, with the possible exception of load served under non-converted ETCs. Moreover, there will be no reduction in the amount of CRRs provided due to internal generation(i.e., greater amounts

of CRRs will be provided).³⁸ The issue of CRR allocation to ETC loads will be a topic for discussion with stakeholders in connection with discussions regarding the cost allocation aspects of the CAISO's ETC proposal. This will not affect the market design for which the CAISO is seeking Commission approval or the CRR software that the CAISO proposes to utilize.

ii. Providing a Full Hedge

Several parties express the view that CRRs should provided a full hedge of Congestion costs. See, e.g., PG&E at 8; Southern Cities at 6-8.

As described in the Proposal, the CAISO intends to allocate CRRs in quantities necessary to protect loads fully from Congestion costs, as long as such CRRs are simultaneously feasible. Transmittal Letter at 74. The CAISO will not know how best to accomplish this objective until the Commission rules on certain key elements of this design proposal, and the CAISO is able to complete the necessary CRR studies and resolve allocation issues. However, the CAISO must reiterate its comments at the beginning of this section: to the extent parties define a "full hedge" as an instrument that results in zero Congestion costs in every hour, that is not possible. Alternatively, if a "full hedge" means zero net Congestion costs over a year, this is (1) consistent with the design of Congestion hedging instruments (in conjunction with an LMP Congestion Management approach), and (2) the approach taken by other independent system operators that utilize LMP. Assessment and demonstration of the feasibility of such an approach will be incorporated into the CAISO's ongoing CRR and LMP studies.

³⁸ The CAISO's May 1 Filing stated that LSEs would receive CRRs only as needed to serve load that was not served by supply resources located near the load or internal to a load pocket.

iii. Auctions Preferable to Allocation

Several parties have expressed the view that CRRs should be provided entirely through the auction process, rather than allocated directly to LSEs. See, e.g., Dynegy/Williams at 32; Morgan Stanley at 6; Reliant/Mirant at 17. SVP and the CPUC stress the importance of providing for future load growth. SVP at 28; CPUC at 12. SVP also argues that any remaining auction revenue, rather than being given to Participating TOs, should be given to LSEs that didn't receive CRR coverage for 100 percent of their load. SVP at 33.

Short-term load growth will be accommodated by adjusting allocation quantities in the monthly CRR allocation process as needed, and will be incorporated into the quarterly determinations one-year CRR allocations on an annual basis.

The CAISO considered the alternatives of allocation and auction of CRRs for loads and concluded that allocation is appropriate at this time because it will be a simpler process for California Market Participants who are unfamiliar with LMP and CRRs. A complete auction of CRRs would increase both the complexity of the process and the uncertainties for LSE participants. The complexity would increase because LSEs and the CAISO would have to engage in a two-step process, the first of which would be to determine the allocation of CRR auction revenues. As described by the NYISO representative at the CAISO's CPUC-sponsored workshop on August 25, the allocation of CRR revenues follows all the parameters of an actual allocation of CRRs. That is, it requires specification of MW quantities and source and sink points based on

This "net" of local or internal generation concept was dropped in the July 22 Filing.

historic use of the grid, just as an allocation process does. With an allocation, the process for LSEs is done after the CAISO runs the simultaneous feasibility test. However, with a full-scale auction, all LSEs must participate in the second step of the process, i.e., the auction itself. Until more experience is gained in California with using CRRs under LMP, the CAISO sees no clear benefit in taking on the added complexity of requiring LSEs to engage in this two-step process. In addition, if the CAISO were to adopt an auction approach, uncertainties for LSEs would increase because they would have to develop auction bidding strategies for a process in which the behavior of other bidders is a factor in the outcome. The CAISO does not oppose considering a full-scale auction process at some point in the future provided the clear benefits appear to outweigh the costs. At this time, however, the added complexity and uncertainty do not appear to be compensated by such benefits.

Finally, the CAISO notes that, in its White Paper, the Commission stated that any final SMD rule “will eliminate any requirement that FTRs be auctioned.” White Paper at 5.

b. Determination of Entities Entitled to Receive CRRs

Several parties contend that ETC rights should be fully protected in the allocation of CRRs. MWD at 9-12; SVP at 24; 27.

SMUD contends that CRRs should be allocated to all entities that pay the embedded costs of the transmission system, including that portion of load situated outside of the CAISO Control Area that pays the embedded costs of the system through the Wheeling Access Charge. SMUD contends that the

Commission has found that any entity that contributes materially to the embedded costs of the transmission system should have a right to any associated Congestion revenues irrespective of whether it serves load within the Control Area of the RTO. SMUD at 17-18.

As noted in the Proposal, the CAISO “proposes to allocate CRR obligations to all loads within the CAISO Control Area, potentially including those loads served under ETCs.” Transmittal Letter at 74. With regard to ETCs, the CAISO is committed to working with affected parties to determine how to achieve this goal. *Id.* at 74 n.93.

Only loads *within* the CAISO Control Area that pay the embedded costs of the CAISO Controlled Grid will be allocated CRRs.³⁹ Transmittal Letter at 74. Historically, transmission facilities were built to serve the native loads within the territories of the transmission-owning utilities. The availability of transmission capacity for wheel-through transactions has been an ancillary benefit. However, this does not merit the same priority as the capacity that is used to serve native loads. Entities who wish to hedge the Congestion costs associated with wheel-through schedules may acquire CRRs through the auction process or the secondary market.

In the event the Commission finds that CRRs should be allocated to load situated outside of the CAISO Control Area, the CAISO acknowledges that it would need to work with stakeholders to address the issue. In no event should

³⁹ The question of whether to hedge and allocate costs associated with ETCs is a major topic for future discussions. If it is determined that ETC rights holders should receive allocations of CRRs for this purpose, then the principle of allocating CRRs only to loads within the CAISO

the Commission adopt SMUD’s proposal that all customers paying a wheeling charge should receive CRRs. In the Order concerning the New England market that SMUD cites, the Commission found that only parties taking long-term transmission service (*i.e.*, for at least one year) should receive Auction Revenue Rights (“ARRs”). In that regard, the Commission reasoned that only parties making a *significant* contribution to embedded costs should receive ARR. NEPOOL Order, 100 FERC at P 85. Native load that pays the CAISO’s Transmission Access Charge takes service on a daily basis. To the extent a party pays the Wheeling Access Charge on a daily basis, consistent with the NEPOOL Order, it too may be entitled to CRRs. However, to the extent a party does not pay the Wheeling Through access charge every day, it should not be entitled to CRRs. For example, a party that engages in “wheel-throughs” on a sporadic basis should not be entitled to CRRs because that party is not making a significant contribution to embedded costs, and it certainly is not making a contribution to embedded costs equal to that of native load customers that use the grid every day. Because the CAISO does not have long-term service agreements, the Commission would need to impose some different standard (other than a long-term contract requirement) to ensure that only parties making *significant* contributions to fixed cost recovery receive CRRs.

6. CRR Use for Ancillary Services

TANC argues that LSEs should be entitled to CRRs to cover their Ancillary Services requirements. TANC at 13.

Control Area may need to be modified to encompass the use of ETCs consistent with their contractual rights.

The CAISO proposes that A/S schedules that utilize the inter-ties will have a priority equal to Energy schedules in terms of securing transmission capacity on the inter-ties and, when there is Congestion on the inter-ties, such A/S schedules will pay Congestion costs. These costs should be taken into account by an external A/S provider which bids into the CAISO A/S markets, and by a SC who is deciding whether to self-provide from an external resource or purchase A/S through the CAISO's markets. Other than the A/S provided over the inter-ties, there will be no exposure to A/S Congestion charges. A/S procured or self-provided from internal resources will not be subject to Congestion costs because internal A/S resources are not procured or priced on a nodal basis or scheduled on a source-to-sink basis as Energy is. Thus, the Congestion costs associated with Ancillary Services are limited in applicability and are not consistent with the design of CRRs. That is why it is not appropriate to allocate CRRs to LSEs to cover their A/S obligations. Parties, including LSEs that wish to hold CRRs as an offset to their potential exposure to Congestion costs associated with Ancillary Services, will be able to secure CRRs in the auction process or the secondary market, but will not be allocated CRRs in the manner of Control Area loads.

7. CRR Terms and Release Quantities

SVP contends that CRR terms should vary, as “one size does not fit all.” SVP at 31. MWD and SCE express the concern that the terms of CRRs should be as long as the commitments emerging from the CPUC Resource Adequacy proceeding. SCE at 11; MWD at 9-12. SWP states that CRRs appear ill-suited

to SWP's system. SWP's loads vary by huge amounts in different years and different seasons, and complains that the CAISO has provided no explanation how its view of "historical quantities and geographic distribution" will protect SWP load from an insufficient allocation of CRRs and Congestion charges. SWP at 12-13.

The CAISO is proposing to limit CRRs to two single-year terms initially. This is due to the uncertainties expressed by virtually all parties about how the new LMP structure will operate, and the ability for Participating TOs to provide notice under the Transmission Control Agreement that they are withdrawing their transmission from the ISO Controlled Grid. Market Participants expressed concerns that such uncertainties would make it difficult to determine the level of CRRs that would be necessary to hedge Congestion costs. When the CAISO obtains greater experience with the new paradigm, and a mechanism is in place to address the withdrawal rights of Participating TOs, it will consider whether longer-term CRRs are feasible.

The CAISO is aware that certain Market Participants might be disadvantaged if only a standard "24-by-7" CRR is offered. Therefore, the CAISO is proposing to make on-peak and off-peak CRRs available based on the WECC definition. In addition, because CRRs will be available in both one-month and one-year durations, it will be possible for Market Participants such as SWP to tailor the amount of CRRs they acquire for their estimated needs over the course of a given year when more knowledge is available concerning hydro-electric conditions.

Finally, as noted in the Proposal, for purposes of secondary trading, “CRRs may be unbundled into any specific hours of the day, days of the week or seasons that parties desire” Transmittal Letter at 78.

8. CRRs For Third-Party Transmission Expansions and Incorporation of New Transmission Capacity into CRR Release

SCE argues that, in order to prevent double payments, the CAISO should clarify that entities that pay for transmission upgrades and that receive transmission credits are ineligible to receive CRRs (or, as Amendment No. 48 specifies, CRR auction revenues) for that portion of their upgrade for which they receive transmission credits. SCE at 11.

FPLE/AWEA assert that the CAISO proposes to reduce the amount of compensation for third-party transmission expansions from the standard recently set in the Amendment No. 48 proceeding. FPLE/AWEA also express the view that project sponsors should be allowed to identify their CRR elections at the earliest possible opportunity during each allocation (annual or monthly), and that other Market Participants should not be able to elect CRRs that were created by project sponsor investments. Lastly, CRRs should be determined, if not allocated, in advance of operation. FPLE/AWEA at 8-13.

The CAISO confirms that owners or sponsors of transmission upgrades will receive CRRs only if they do not recover the cost of the upgrade through a regulated cost recovery mechanism such as the CAISO’s transmission Access Charge or a transmission credit from an existing Participating TO.

Consistent with Amendment No. 48, the project sponsor will receive CRRs commensurate with the full amount of physical capacity added to the system. *California Independent System Operator Corporation*, 102 FERC ¶ 61,278, at P 21 (2003). The Commission is not deviating from the standards approved by the Commission in its Order on Amendment No. 48.

As described in the Proposal, the CAISO is sympathetic to the desires of investors to obtain CRRs in advance of the facility actually going into operation. However, this would be ill-advised because if the facilities did not come on-line as scheduled, too many CRRs would be released. This does not preclude an advance determination by the CAISO of the quantity of CRRs that will be allocated to the transmission investor and become effective when the new facility goes into operation. Transmittal Letter at 80.

I. The CAISO's Proposal Concerning the Ancillary Service Markets Is Just and Reasonable

The CAISO has incorporated A/S procurement into the Day-Ahead and Hour-Ahead forward markets and will select resources using an integrated approach that co-optimizes Energy and A/S procurement costs. Transmittal Letter at 80-84, Attachment A at ¶¶ 48-56.

Reliant/Mirant contend that all Ancillary Services should be permitted to be imported and exported to prevent seams issues. Reliant/Mirant at 20-21.

The CAISO agrees. As stated in the July 22 Filing:

A/S may be provided via imports up to limits pre-specified by the CAISO. Imported A/S will require transmission allocation in the IFM, which means that A/S capacity and energy will compete for transmission capacity across inter-control area interfaces. If A/S imports contribute to congestion at an inter-tie, the supplier of the

A/S import will be charged the applicable congestion usage charge. A scheduled A/S import does not create a counter-flow for an energy export schedule since the A/S import has no associated energy flow schedule.

Transmittal Letter at 81. With respect to the export of Ancillary Services, the July 22 Filing provided that:

Under MD02, the CAISO proposes to support A/S exports through the CAISO's current "On-demand Obligation" feature. See Paragraph 53 of the amended Comprehensive Market Design Proposal. Under this approach, market participants will be able to export A/S and will be subject to transmission congestion charges. The CAISO believes that this feature of MD02 will facilitate a robust Western market, promote reciprocity and minimize seams issues.

Under the CAISO's proposal, on-demand obligations would be submitted by SCs as part of the scheduling process, and such obligations would be added to the relevant SC's overall Operating Reserve obligation (the applicable SC may self-provide to satisfy its A/S obligations) and to the CAISO's Operating Reserve requirement at the relevant Scheduling Point. On-demand obligations would be met optimally by Operating Reserve imports at the same Scheduling Point and Operating Reserves procured from within the control area. On-demand obligations would compete with energy schedules in the export direction in the forward market and thus may face congestion charges.

Transmittal Letter at 83. Thus, Reliant/Mirant's concerns with respect to Market Participants' ability to import and export A/S are addressed in the July 22 Filing.

In addition, Reliant/Mirant argue that the CAISO should procure the majority of its A/S needs in the Day-Ahead Market. Reliant/Mirant at 21. Moreover, according to Reliant/Mirant, the flexibility the CAISO seeks for itself in acquiring Ancillary Services in the Hour-Ahead Market is denied sellers through Amendment No. 55 to the ISO Tariff, thus permitting the CAISO to exercise

“monopsony power to suppress prices in the Hour-Ahead market.” Reliant/Mirant at 21-22.

Reliant/Mirant’s arguments are without merit. First, as stated in the July 22 Filing, the CAISO has every intention of satisfying the bulk of A/S requirements in the Day-Ahead timeframe:

The CAISO may defer satisfying all of its projected Day-Ahead A/S requirements until the Hour-Ahead market if the CAISO believes that its load forecast (and, thus, A/S requirement) is likely to change. This will allow the CAISO to minimize the risk of over-procuring A/S. Deferral of A/S procurement also allows the CAISO to adjust Day-Ahead A/S procurement to account for SC self-provision of A/S in the Hour-Ahead market. Finally, the CAISO may defer procuring A/S if it anticipates that the price of A/S may be lower in the Hour-Ahead market. This is consistent with the CAISO’s obligation to procure A/S at least cost. The CAISO will not defer Hour-Ahead A/S procurement to Real-Time unless there are insufficient A/S bids in the Hour-Ahead market.

Transmittal Letter at 83. Moreover, the CAISO explained that:

The ISO may defer satisfying its total A/S obligations until the Hour Ahead IFM. As specified in Operating Procedure M-402, sections 1.1 and 2.1.4 (posted on the ISO website), the ISO may defer satisfying all of its projected Day Ahead A/S requirements until the Hour Ahead IFM if, among other reasons, the ISO believes that its load forecast (and thus the A/S requirement) is likely to change. In this way, the ISO can minimize the risk of over-procuring A/S. Deferral also allows the ISO to adjust Day Ahead A/S procurement to account for SC self-provision of A/S in the Hour Ahead market. The ISO may also defer purchasing A/S if it anticipates that the price of A/S may be lower in Hour Ahead. This provision is consistent with the ISO’s obligation to procure A/S at least cost.

Attachment A at ¶ 55.

As noted above, this practice is fully consistent with the CAISO’s existing practice, wherein, historically, it has procured most of its requirements in the Day-Ahead timeframe. Moreover, Section 2.5 of the ISO Tariff (and in particular

Section 2.5.3) currently affords the CAISO operators the discretion to modify the amount and location of procured Ancillary Services. With respect to Reliant/Mirant's concern that the CAISO will exercise "monopsony" power, the CAISO responds that it has no such power. Although the CAISO has an obligation to procure Ancillary Services at least cost, the quantity of A/S it must procure are set by the WECC (*i.e.*, MORC") from which the prices are determined by suppliers' bids. Within these constraints, the CAISO optimally procures Ancillary Services to satisfy its Control Area Operator responsibilities and its obligations as the provider of last resort using the only flexibility it has to minimize total costs, namely, the ability to defer to the Hour-Ahead market a portion of its total A/S requirements.⁴⁰ Reliant/Mirant also contend that the CAISO should clarify the role of opportunity cost pricing in the co-optimization of Ancillary Services. Reliant/Mirant at 23. They assert the CAISO provided no rationale for excluding capacity bids and the MCP from the Real Time Ancillary Services market. Reliant/Mirant at 23.

As stated in the July 22 Filing, the CAISO proposes to incorporate opportunity cost into the pricing of Ancillary Services:

The ASMP determined in the IFM for each service will implicitly include the opportunity cost associated with providing the A/S instead of being scheduled for energy in the same market, if such opportunity cost exists.¹⁰⁴

⁴⁰ See *Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, Order No. 888, 61 Fed. Reg. 21,540 (May 10, 1996), FERC Stats. & Regs., Regs. Jan. 1991-June 1996, Regs. Preambles ¶ 31,036 (1996), at 31,715-16 ("Order No. 888").

¹⁰⁴ The opportunity cost to the marginal resource is determined as the difference between its LMP and its bid at the optimal dispatch point of its energy schedule. The opportunity cost exists only if the available capacity is limited and both the A/S bid and the energy bid of the resource compete for the use of the available capacity.

Transmittal Letter at 82 & n.104.

With respect to Real Time Ancillary Services, the CAISO does not consider capacity bids for the procurement of Ancillary Services in Real Time because they are not relevant. In Real Time, a unit may be designated to provide additional Operating Reserves (Spin or Non-spin which are the only Ancillary Services the CAISO will procure in Real Time) if it has an energy bid in the Real Time market. A unit so bid has no expectation of receiving a capacity payment if it is dispatched for energy. If a unit is designated for A/S instead of being dispatched in merit order to provide energy, the unit simultaneously foregoes the nodal energy price at its location and avoids its incremental operating cost. The CAISO's proposal to pay the unit's opportunity cost is designed to make the unit indifferent to being dispatched for energy or designated for A/S. Similarly, the CAISO does not propose to pay a MCP for A/S procured in Real Time because each unit's payment for Real Time A/S is based on the nodal energy MCP at its location, which is the appropriate payment to make the unit indifferent between providing energy and A/S.

CERS states that it is unclear from the Proposal whether the CAISO intends to allow a resource both to self-provide Ancillary Services and to offer capacity into the CAISO's A/S markets. CERS at 19.

As stated in the July 22 Filing, the CAISO will permit entities to both self-provide Ancillary Services as well as bid into the CAISO's Ancillary Services markets to buy a portion of their A/S requirements:

A resource will be able to both self-provide A/S and offer capacity into the CAISO's A/S markets (e.g., use a portion of its capacity to self-provide A/S and bid for the same service using the remaining portion of its capacity). In addition, for must-offer units, any capacity associated with "over" self-provision will be available for optimization in the energy market. For non-must offer units that over self-provide A/S, the CAISO will offer a "flag" so that the Scheduling Coordinator can indicate what, if any, left over capacity should be optimized in the energy market.

Transmittal Letter at 81 n.101. In addition, the capacity of a particular resource may partially be used for A/S self-provision and partially bid into the A/S markets, as long as its total provision of A/S is consistent with its performance capability. This aspect of the Proposal should address CERS concerns.

SCE asserts that, where the CAISO gives instructions to "Reg Down" Generating Units, those units should be permitted to purchase replacement Energy at: (1) a \$0 price, or (2) their Energy Bid price, and in either case the CAISO should treat any revenue shortfalls as uplift. SCE states that eastern independent system operators explicitly incorporate opportunity costs when a unit is "reg-ed" down. SCE at 12.

Regulating Energy is Instructed Imbalance Energy settled at the MCP. Therefore, negative regulating Energy in particular is charged the MCP. MD02 is an improvement on the current settlement where Regulating Energy is settled as Uninstructed Imbalance Energy, hence negative regulating Energy is charged the incremental MCP. If the resource has submitted Energy Bids in the Imbalance

Energy market, these bids would be called if they are competitive and they do not interfere with the regulating capacity. Regulating Energy is not included in the bid cost recovery mechanism for the simple reason that it is not Dispatched through the Imbalance Energy market, *i.e.*, competitively based on economics, but through the action of AGC, which Dispatches units on AGC based on technical criteria irrespective of any bids that they may have submitted. Therefore, regulating Energy cannot be subject to bid recovery. The risk of the exposure to the ex post price can be internalized in the capacity reservation bid for the service in the forward markets.

J. The CAISO's Proposal Concerning the Residual Unit Commitment Is Just and Reasonable

The CAISO's RUC proposal is designed to ensure that resources not scheduled in the forward markets, but which the CAISO believes will be needed in real time to meet the CAISO's load forecast, will be available. As part of its RUC proposal, the CAISO developed a capacity procurement target; an optimization process, recommendations with respect to cost-recovery, an availability payment for suppliers, and a methodology for allocating costs. Transmittal Letter at 13-14, 87-100, Attachment A at ¶¶ 8, 74, 98-113. The CAISO also revised its earlier RUC proposal to provide resources with the choice to elect either a cost-based or bid-based option with respect to their start-up and minimum-load components of the bid. If an entity were to select the market-based option, it would be required to keep the start-up and minimum load cost components of the bid fixed for a six-month period. Transmittal Letter at 95-97, Attachment A at ¶¶ 19, 20, 21, 22. Moreover, the CAISO proposed that, when

the CAISO committed resources that were not otherwise self-committed, the CAISO would pay their start-up and minimum load costs over the unit-specific commitment period net of market revenues. Transmittal Letter at 95-98, Attachment A at ¶ 61.

1. The Need for a RUC Process

Numerous parties agree that a RUC mechanism is an important mechanism in order to maintain reliable operations on the CAISO Controlled Grid; although, many of these parties object to specific elements of the RUC proposal. CPUC at 17; SCE at 8; IEP/WPTF at 22; Dynegy/Williams at 19. For example, Dynegy/Williams “support the addition of a RUC to the California market and acknowledge that this proposal has improved in some respects since it was introduced in the CAISO’s May 1, 2002 filing.” Dynegy/Williams at 19. Further, the SMD NOPR contemplates that independent transmission providers must have a mechanism whereby they can commit units when the ITP’s forecasted load exceeds Day-Ahead schedules. SMD NOPR at PP 298-301. Moreover, all of the eastern independent system operators have unit commitment procedures in place. Accordingly, the Commission should approve a RUC mechanism for California. The CAISO believes that there should not be any modifications to its proposal. In the event the Commission finds that the RUC proposal is not just and reasonable as proposed, the CAISO urges the Commission to make appropriate modifications to the proposal, rather than to simply reject it. RUC is an integral component of the new market design, as well

as a much-needed reliability tool to ensure that sufficient Generation is on-line to meet the CAISO's forecast.⁴¹

Some parties argue that a RUC process is not required (or at least not required with regard to all units). For example, MWD argues that RUC is unnecessary because several mechanisms are already in place to ensure adequate short-term supply (Operating Reserves, the Ancillary Services market, and RMR Units). Further, MWD states that nothing has changed to require RUC since Commission last rejected it. MWD proposes the following alternative to RUC: in the unlikely event that resources are not available for emergency Dispatch, under-scheduled Scheduling Coordinators should be required to shed load. Moreover, according to MWD, hydro-electric resources should remain exempt from the MOO and not be subject to RUC. MWD also asserts that RUC should be limited to on-peak periods. Finally, MWD states that load-serving Scheduling Coordinators, rather than the CAISO, are the most cost-effective entities to determine the appropriate load forecast. MWD at 12-19.

First, the alternative mechanisms that MWD identifies (*i.e.*, Ancillary Services markets and RMR Units) are not substitutes for RUC. Ancillary Services are not a substitute for RUC for the following reasons: (1) the resources procured under RUC are expected to be needed to provide Energy in Real Time, whereas resources procured for A/S are expected to remain unloaded in Real Time consistent with MORC criteria, to be available in the event of a contingency; (2) RUC procures both energy from imports and capacity from internal resources whereas Ancillary Service Markets procure only capacity; and (3) RUC

⁴¹ The CAISO's forecast is typically within one-to-two percent of actual Demand.

requirements are based on the difference between scheduled and forecasted load and are locational specific, whereas A/S requirements are regional specific and based on forecasted load. In other words, A/S markets and RUC perform totally different functions.

To replicate the features of RUC into the forward energy and A/S markets, the CAISO would essentially have to drastically alter the financial nature of the IFM and impose a requirement that the IFM clear based on forecasted load rather than based on submitted bids and schedules. The CAISO does not believe it is appropriate for it to interject these requirements into the IFM, and doing so would undermine the purpose of having a voluntary forward energy market. Although the CAISO may commit units under the RMR Contract for local reliability purposes, the terms of the RMR Contract prohibit the CAISO from calling on units under the terms of the RMR Contract (*i.e.*, calling them as RMR Units) to meet system needs.⁴² Thus, the CAISO needs a distinct unit commitment mechanism to ensure that it can meet system needs when the CAISO's load forecast exceeds the Day-Ahead Schedules for Energy.

MWD's proposal to require under-scheduled Scheduling Coordinators to shed load has a deceptively simple appeal, but is not workable. Although the CAISO has the authority in System Emergencies (see Section 4.5.3 of the ISO Tariff), the CAISO is proposing to use a RUC mechanism to prevent getting to this stage. In essence, because of the technical impediments to targeting load

⁴² Section 5.6.1 of the CAISO Tariff permits the CAISO to call on RMR Units – in their role as units subject to Participating Generator Agreements – to meet system reliability needs in order to prevent an imminent or threatened System Emergency or to retain Operational Control over the ISO Controlled Grid during an actual System Emergency.

shedding at the customers of a specific SC, the CAISO's proposal applies an economic measure – allocation of RUC procurement costs – to under-scheduled SCs rather than trying to shed their load.

With respect to MWD's claim that the Commission has previously rejected RUC and nothing has changed, the CAISO notes that the Commission rejected the CAISO's "interim" RUC proposal, *i.e.*, the unit commitment mechanism that was to be in place pending implementation of LMP. The CAISO's May 1 Filing also contained a permanent RUC proposal that the Commission did not address. In any event, MWD fails to acknowledge that, in its order rejecting "interim" RUC, the Commission invited the CAISO "with input from stakeholders to develop a long-term residual unit commitment proposal." *California Independent System Operator Corporation*, 101 FERC ¶ 61,061, at P 73 (2002) ("October 11 Order"). The CAISO is doing just that with its current proposal. Indeed, Dynegy/Williams acknowledge that the CAISO has made improvements to its RUC proposal. Dynegy/Williams at 19. MWD fails to recognize that the CAISO has made several revisions to its RUC proposal in response to stakeholder comments, including, *inter alia*, the following changes: (1) accommodation of both market-based and cost-based start up and minimum load bids; (2) a bid-based availability payment; and (3) changes to the factors the CAISO will consider in determining the capacity procurement target under RUC.

The Commission should ignore MWD's claim that RUC is inappropriate because LSEs are in a better position than the CAISO to make cost-effective

forecasts.⁴³ Even assuming *arguendo* that LSEs are better positioned to make forecasts than independent system operators are, the design of the CAISO's IFM does not require LSEs to schedule in the Day Ahead to fully meet their forecasts. Similar to the forward markets of the other independent system operators, the CAISO's proposal allows load serving SCs the flexibility to distribute their spot purchases across the Day-Ahead, Hour-Ahead and Real-Time timeframes. In order for the CAISO to ensure reliable Real Time operations in the context of such scheduling flexibility for SCs, a Day-Ahead reliability unit commitment procedure such as RUC is essential. The Commission recognized this fact in the SMD NOPR by concluding that a unit commitment-type mechanism is needed because Day-Ahead schedules can be less than the independent system operator's forecasted load. Reliant/Mirant assert that RUC prevents efficient arbitrage between the Day-Ahead and later markets, and that justifying RUC based on reliability is a "red herring," because there is adequate generation available to the market (as indicated by lower Hour-Ahead prices). Reliant/Mirant at 7-8.

If there were any evidence that Real-Time prices serve as an incentive to encourage new generation – which is a dubious proposition at best – then those price signals should reflect a true scarcity of supply, not a mere temporary mismatch between supply and demand created by having insufficient resources committed and operating to serve load (even though those resources may exist

⁴³ MWD's proposal that RUC be limited to peak periods would result in an arbitrary restriction and could undermine the purpose of RUC by making it unavailable in circumstances when it could be needed the most. The RUC process should be available in all hours, not just peak hours, to ensure reliable operations and meet CAISO forecasted Demand.

but are not operating). By itself, arbitrage is not an undesirable activity. Arbitrage may stimulate equilibrium between two equivalent markets. However, the forward market and the Real Time Market are not equivalent markets. A shortfall in the forward market is a financial event. A shortfall in the Real Time Market is a physical event with potentially serious consequences in addition to high prices. The Real-Time Imbalance Energy market should be as its name implies – a market to handle imbalances left over from prudent forward market activity, not a market of choice unto itself. Moreover, the CAISO currently has over 3,000 MW of Generating Units that are Condition 2 under the RMR Contract that are prevented, in accordance with the RMR Contract, from market transactions absent an RMR Dispatch; although, they can be called as PGA units in out-of-market transaction, or System Emergency circumstances.

SWP contends that the CAISO provides no assurance that the proposed IFM and RUC unit commitment will not perpetuate infeasible Dispatch of SWP's dedicated-purpose hydro-electric and Demand-based resources. SWP argues that if MD02 is to promote efficiency in California power operations, the CAISO's treatment of Energy-limited resources such as SWP's must not include unilateral CAISO adjustment of SWP schedules. SWP states that, if extraordinary emergency circumstances require exigent calls upon SWP resources, the CAISO should be required to Dispatch SWP resources in out-of-market transactions. SWP also contends that because the market mechanism in California is vulnerable to manipulation, the CAISO should be ordered to allow self-provision of RUC and to facilitate bilateral transactions outside CAISO Markets.

As non-must offer resources, SWP's hydro-electric resources are not required to participate in RUC; so, the CAISO cannot unilaterally adjust such resources through RUC. Moreover, Scheduling Coordinators can effectively "self-provide" RUC and reduce possible RUC charges by accurately forecasting their Demand and then fully Scheduling that Demand against Generation in the Day-Ahead Market. The CAISO acknowledges that fully-resourced Scheduling Coordinators will bear some RUC charges in some circumstances such as when the CAISO commits resources through RUC that are then not needed because Real-Time Demand did not reach the CAISO's forecasted levels. Costs associated with Demand forecasts that ultimately fail to materialize are a normal part of electric system operations, as is the prudent practice of ensuring that there are sufficient resources committed to serve forecast Demand.

SVP contends that MSS Operator resources should be excluded from RUC, unless MSS Operator resources opt to bid into RUC markets. SVP at 16. As noted in the transmittal letter, MSS Operators may elect annually to opt in or opt out of RUC. Transmittal Letter at 123.

Southern Cities state that it is implicit and explicit in various CAISO statements that LSEs now are serving loads primarily through long-term contracts and short-term bilateral contracts. Southern Cities state that if this is correct, it is not clear that the RUC process is necessary or efficient. Southern Cities argue that it would be more efficient to adopt instead a structure that clearly places on LSEs the responsibility for procuring resources sufficient to serve the loads for which they are responsible and, if there are LSEs that fail to

meet their resource procurement responsibilities, such structure would impose on those entities alone the costs for any resources the CAISO is required to purchase as a result. Southern Cities at 11-12.

The CAISO essentially has proposed to allocate RUC costs as Southern Cities propose. In that regard, RUC costs will be primarily allocated to entities whose Day-Ahead or Hour-Ahead Schedules are less than their Real-Time Demand. RUC costs will be allocated to the broader market only when the amount of under-scheduled Demand is insufficient to recover such costs. This is consistent with the allocation of above-Market Clearing Price costs, which was approved by the Commission in its Order on Amendment No. 42 to the CAISO Tariff. See *California Independent System Operator Corporation*, 98 FERC ¶ 61,327, at 62,379-80 (2002).

As discussed in Section II.C, above, a RUC mechanism is needed even if there is a resource adequacy program in place. In that regard, the SMD NOPR contemplates the co-existence of both a resource adequacy plan and a unit commitment procedure. Similarly, the eastern independent system operators have resource adequacy plans in place, but they still need their Commission-approved unit commitment mechanisms to operate the grid reliably.

The CPUC states that it supports the CAISO's RUC proposal "with the understanding that the CAISO will commit to review the performance of RUC." CPUC at 17-18.

As indicated on page 123 of the Transmittal Letter, the CAISO expressed its commitment to monitor market performance under the new market design

including, *inter alia*, the performance of the RUC mechanism. Thus, the CAISO's proposal addresses the CPUC's concerns.

2. RUC and Resource Adequacy

A few parties make arguments concerning RUC and resource adequacy. Reliant/Mirant contend that a unit commitment process works efficiently only with a forward contracting requirement or some other form of resource adequacy program to ensure market stability. Reliant/Mirant at 3-4. Reliant/Mirant also contend that, if the CAISO needs to procure reserve capacity because it does not know with certainty what generation and load will be on the following day, the CAISO should put in place a process through which it pays resource owners to commit their units, or it simply should purchase reserves as is purportedly done in other markets. Reliant/Mirant at 8.

RUC does pay resource owners to commit their units. In that regard, RUC pays start-up and minimum load costs, as well as a market-based availability payment for capacity from which Energy is not later Dispatched. Further, as indicated *supra*, and in the Transmittal Letter (at 93 n.116), the CAISO's Ancillary Services markets were not designed as and cannot be effective as unit commitment markets.

In addition, Reliant/Mirant argue that no unit commitment process should be approved prior to the outcome of the state resource adequacy proceeding. Reliant/Mirant at 8-9. IEP/WPTF also assert that they would not be opposed to the concept of RUC if that concept was directly coupled with a resource adequacy requirement ("RAR"). IEP/WPTF at 22-23.

As indicated *supra*, the CAISO needs an effective unit commitment mechanism regardless of whether there is a resource adequacy plan in place. In the White Paper, the Commission deferred the issue of resource adequacy to the states, and the CPUC is actively addressing that issue. The Commission cannot allow the CAISO's RUC proposal to be held hostage to the State's resource adequacy process under these circumstances. The CAISO needs a Commission decision on RUC. RUC is an integral component of the proposed market design. Transmittal Letter at 92.

IEP/WPTF argue that the Commission should reject or preclude the use of RUC for local reliability needs, and instead instruct the CAISO to sign RMR Contracts for this particular service. IEP/WPTF at 22-23. The CAISO annually designates RMR Units based on criteria approved by the CAISO Governing Board and reflected in the ISO Tariff. See ISO Tariff, §§ 5.2.3, 5.2.5. The CAISO is proposing to designate 10,152 MW of RMR capacity for 2004 based on such criteria – which is more than was designated for 2003. Of that capacity, more than 3,000 MW are already RMR Condition 2. Parties must recognize that local reliability requirements often result from temporary situations, such as generator Outages or transmission maintenance, that fall outside of the RMR designation criteria. Expanding the RMR criteria to provide for extraordinary circumstances or trying to anticipate the special situations that may require that the CAISO call a non-RMR Unit to provide local reliability service could require that every Generating Unit in the CAISO Controlled Grid be designated as an RMR Unit. It is not reasonable for the CAISO to designate every unit that might

one day be required to provide local reliability service on a non-recurring basis even though that unit does not meet the approved criteria as a RMR unit. It is far more reasonable for the CAISO to call on Generating Units to provide local reliability service through the RUC process – and compensate them for their costs through RUC when doing so – for these extraordinary situations.

3. The RUC Capacity Procurement Target

Several parties assert that the CAISO has not demonstrated or explained the need for procurement of 100% of the capacity and 95% of the Energy required to meet forecasted load, and suggest that these RUC purchasing targets should be revised downward. MWD at 19-20; PG&E at 10; SCE at 9. In contrast, Dynegy/Williams assert that the CAISO should provide for a procurement of 100% of Energy needs in the Day-Ahead or, at a minimum, provide that RUC resources selected Day-Ahead are eligible to set the Day-Ahead MCP. Dynegy/Williams at 23-24.

It is clear from the various protests that Market Participants serving Demand want as much flexibility as possible to serve Demand up until Real Time, while suppliers would like to mandate that the CAISO purchase as much generation as far in advance as possible. The CAISO's 100% capacity and 95% Energy targets were intended to strike a balance between over-committing Generating Units on the one hand and failing to procure sufficient generation resources in the forward markets and getting caught short in Real Time on the other. The five percent margin is intended to allow for load forecast error, to

minimize the risk of over procurement⁴⁴ and to avoid creating an incentive for load to under-schedule in the Day-Ahead Market and rely on RUC. Moreover, the CAISO's capacity procurement target for the Day-Ahead RUC will take into account a forecast of expected incremental Hour-Ahead Schedule changes and a forecast of additional Supplemental Energy Bids expected on the operating day for the relevant operating hour. These modifications to the CAISO's RUC proposal were made in response to the desires of LSEs that they have a little more flexibility. The CAISO does not believe that any additional flexibility is either appropriate or necessary.

4. The RUC Cost-Recovery Mechanism

Several parties argue that the CAISO's proposal concerning cost recovery under RUC is unreasonable, and suggest alternative mechanisms. CMUA at 24; Duke at 4, 10-14; Dynegy/Williams at 21-23; IEP/WPTF at 24; Reliant/Mirant at 9-10. As explained in the Transmittal Letter, the CAISO's proposed RUC payment mechanism is intended to provide reasonable compensation for the Generator without making RUC payments attractive enough so as to encourage participants to withhold supplies from the forward market or discourage suppliers from seeking bilateral contracts with LSEs. Trying to re-design RUC to "squeeze" in all of the perceived lack of fixed cost recovery mechanisms in the California electricity market is not reasonable and will not lead to a prudent or

⁴⁴ Because the RUC procedure is based on forecasts, the CAISO cannot assure parties that RUC will never result in over-procurement. However, the CAISO takes seriously its objective of achieving reliability at minimum cost and will continuously monitor the RUC procedure and adjust procurement as appropriate.

balanced market design. It certainly will not lead to an effective, efficiently designed unit commitment mechanism.

The CAISO's RUC proposal provides more than adequate compensation for the service provided. There is no need for more. The CAISO is providing for the recovery of start-up and minimum load costs, as well as Energy costs, and a bid-based availability payment in the event a RUC unit is called upon to provide Energy or Ancillary Services. Further, the CAISO is permitting suppliers to elect either cost-based or bid-based start-up and minimum load costs.

Suppliers argue that the cost-based options for the start-up and minimum load components of a supply bid should include a daily gas price index and a variable O & M cost adder for start-up costs. Duke at 10; Reliant/Mirant at 9-10; IEP/WPTF at 24.

Duke's claim that the CAISO is not proposing to provide for a variable O & M component as part of its cost-based option for start-up and minimum load costs is incorrect. The CAISO is proposing a \$6/MWh for presumed O & M costs. See Transmittal Letter at 96. As the Commission has previously recognized, a \$6/MWh O & M adder "should permit generators in the California Market full recovery of **all** non-fuel expenses." *San Diego Gas & Electric Company v. Sellers of Energy and Ancillary Services Into Markets Operated by the California Independent System Operator and the California Power Exchange*, 95 FERC ¶ 61,418, at 62,563 (2001) ("June 19 Order") (emphasis added). In any event, if suppliers object to the cost-based option, they are free to select the bid-based option.

The Commission has rejected the use of a daily gas index (rather than a monthly index) on several occasions and should again reject such arguments. *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 Corporation*, 99 FERC ¶¶ 61,159, at 61,642 (2002) (“May 15 Order”); June 19 Order, 95 FERC at 62,561, *order on reh’g*, 97 FERC ¶¶ 61,275, 62,204 (2001) (“December 19 Order”). The Commission expressly found that use of a monthly gas price methodology “will not impede suppliers’ recovery of operating costs.” December 19 Order, 97 FERC at 62,204. The Commission has also found that the average pricing formula “represents a reasonable price for the marginal costs that generators will incur since they can pre-buy their gas requirement for the month at this price.” June 19 Order, 95 FERC at 62,561.⁴⁵ Moreover, the average monthly gas price has consistently been within a reasonable range of the daily spot market price. May 15 Order, 99 FERC at 61,642. In addition, the Commission has rejected suppliers’ proposals to receive compensation for intrastate gas transmission costs. December 19 Order, 97 FERC at 62,204. The Commission has pointed out that if suppliers believe they are not fairly compensated for their gas costs, they may file under cost-of-service rates as to their portfolios. *Id.*

Finally, Reliant/Mirant dispute the CAISO’s statement that the eastern independent system operators utilize a net-of-market approach with respect to

⁴⁵ The Commission has noted correctly that the use of the average gas price is reasonable because Generators generally pre-buy their monthly gas requirement rather than purchase gas on the daily spot market. May 15 Order, 99 FERC at 61,642. Any suggestion that Generators

the recovery of start-up and minimum load costs. Reliant/Mirant at 10-11.

Interestingly, Reliant/Mirant cannot cite to a single Commission Order or any tariff provision showing that these independent system operators do not “net” out start-up and minimum load costs. Further, no other supplier disputes the fact that the eastern independent system operators “net” out such costs.

In its Transmittal Letter, the CAISO provided some citations to instances in which the eastern independent system operators “net” start-up and minimum load costs. The CAISO also offers the following reference to ISO-NE’s Manual 28, Section 5.2.1.1 as evidence of “netting” by ISO-NE.⁴⁶

It should be noted that ISO-NE does not use the word "uplift" but, rather the term "Operating Reserve Credits" for the payment (net of market profits) of startup and no-load.⁴⁷ The directly relevant steps in ISO-NE’s “netting” procedure are as follows:

(2) The ISO calculates the generating Resource’s hourly Day-Ahead offer amount based on its Day-Ahead Offer Data that was utilized by the ISO in making the initial commitment decision and the generating Resource’s cleared Day-Ahead MWh for that hour.

(a) The ISO accounting process applies the Start-Up Fee and hourly No-Load Fee if the start-up and no-load switch is set in the Resource Offer Data and if the Start-Up Fee is applicable for the MWh and status of the Resource. The Start-Up Fee is not applicable in the case where a Participant has initially Self-Scheduled a generating Resource Day-Ahead and the ISO subsequently schedules this generating Resource as a Pool-

purchase spot gas for their generation units that operate on a regular basis is unfounded and illogical.

⁴⁶ See

http://www.isone.com/smd/market_rule_1_and_NEPOOL_manuals/NEPOOL_Manuals/M-28_Market_Rule_1_Accounting/M-28_Market%20Rule%201%20Accounting_%28Revision%205%29_08-01-03.doc. Manual M-28 is a New England Power Pool (“NEPOOL”) Manual for Market Rule 1 Accounting.

⁴⁷ It should be noted that ISO-NE and PJM use "no-load" rather than "minimum-load" as part of their three-part bid system.

Scheduled Resource once the Self-Schedule is terminated by the Participant.

(b) Day-Ahead Operating Reserve Credit calculations reflect the Start-Up Fee for the appropriate hot, intermediate, or cold state of the generating Resource as it was scheduled in the Day-Ahead Energy Market.

(3) The ISO calculates the generating Resource's hourly Day-Ahead value as: $\text{Generator cleared Day-Ahead MWh} * \text{Day-Ahead LMP}$

(4) The ISO calculates the daily Day-Ahead Credit for each generating Resource as follows:

(a) Sum hourly Day-Ahead offer amounts, including applicable No-Load Fees and Start-Up Fees, for the day.

(b) Sum hourly Day-Ahead values for the day

(c) Day-Ahead Credit equals any portion of the generating Resource's total Day-Ahead offer amount in excess of its total Day-Ahead value.

PJM has exactly the same process as ISO-NE because ISO-NE borrowed theirs directly from PJM. See "PJM Manual for Operating Agreement Accounting" (Manual M-28), at 31-33.

It is appropriate to accord the CAISO the same treatment as the eastern independent system operators with respect to "netting." Failure to require "netting" means that suppliers, having been guaranteed recovery of their start-up and minimum load costs through RUC, can freely participate in bilateral agreements and CAISO markets, retaining all of the profits by selling the Energy derived from their capacity through their market-based rates. This essentially causes consumers to subsidize the supplier's other out-of-market activity or pay twice for the same Energy. That is an inappropriate result.

5. The RUC Availability Payment

Dynegy/Williams argue that the CAISO has not justified the level of the availability payment or the proposal to rescind the availability payment.⁴⁸ They assert that the Commission should require the CAISO to set an availability payment that is paid regardless of whether the power is taken, should consider carefully the prudence of the proposed \$100/MWh RUC availability payment bid cap, and should, at a minimum, require the availability bid cap to be set at the same level as the Damage Control Bid Cap (“DCBC”). Dynegy/Williams at 20-21.

SCE asserts that, while a RUC process is useful insofar as it will enable the CAISO to acquire sufficient resources to reliably operate the system, no permanent availability or capacity payment should be included in that process. Instead, the RUC availability payment should be eliminated once a state resource adequacy requirement becomes operative. SCE at 8. In addition, SCE asserts that the CAISO may need to monitor and/or reduce the \$100/MWh price cap for the RUC availability payment once the new RUC process is implemented. SCE at 8-9.

The CAISO agrees that the Availability Payment should be reviewed once a resource adequacy program has been implemented, and may be eliminated provided the resource adequacy program is effective in ensuring that capacity procured by LSEs under their capacity obligations will be available to the CAISO for commitment in RUC and dispatch in Real Time. With respect to the level of the cap on availability payment bids the, CAISO’s intent was to balance the competing interests of various Market Participants. This is highlighted by the fact

⁴⁸ IEP/WPTF make a similar assertion. IEP/WPTF at 23-24.

that, while SCE is proposing that the CAISO reduce the \$100/MWh Availability Payment, Dynegy/Williams support increasing the cap on payment to the level of the DCBC. The CAISO stresses that RUC is not intended to be a market. It is intended to be a reliability backstop mechanism that enables the CAISO to procure resources to meet forecast load that the forward markets do not provide. The CAISO would be delighted to never use the RUC mechanism; in fact, a measure of the overall health of the California electricity market may well be measured by how **few** resources the CAISO needs to commit under RUC. Given RUC's purpose, it is not appropriate (or necessary) to include elements applicable to CAISO markets, i.e., a \$250/MWh bid cap, or else RUC will begin to take on the appearance of a market and, therefore, potentially and inappropriately compete with the actual forward markets.

The CAISO stated clearly and concisely in the Transmittal Letter (at 99-100) why it is appropriate to revoke the RUC availability payment when a unit is Dispatched to provide Energy or awarded Ancillary Services capacity. It is not necessary to repeat such arguments here because no party offers a valid reason why the availability payment should not be rescinded in the aforementioned circumstances. The CAISO reminds the Commission that, under the CAISO's existing Replacement Reserve mechanism, the capacity payment is rescinded when a unit is Dispatched. Similar treatment for the RUC availability payment is necessary in order to remove the incentives for suppliers to attempt to bypass the Day-Ahead Market in order to receive a guaranteed RUC availability payment (even if their unit is not Dispatched).

CERS asserts that the CAISO's RUC proposal does not address if and how RUC integrates with the state contracts. It contends that a supplier who has a state contract and has been made subject to RUC should not receive a capacity payment, because that would amount to being compensated twice. CERS at 19.

The CAISO agrees that a resource that is recovering its fixed costs through a bilateral contract should not also recover those same fixed costs through another market mechanism. Accordingly, the CAISO has proposed that the RUC Availability Payment be terminated when a resource adequacy program is put in place. However, until a resource adequacy program is put in place and resources are designated as capacity resources (thereby providing some assurance that the supplier and purchaser have agreed on an appropriate level of fixed cost recovery), the CAISO cannot simply conclude that just because a unit has a CERS contract it should not receive the RUC Availability Payment.

6. RUC Cost Allocation

A number of parties assert that the CAISO's proposed allocation of RUC costs violates cost causation principles or is otherwise unreasonable, and suggest alternative methods for allocating RUC costs. CMUA at 23-25; PG&E at 10; SMUD at 19-20; Strategic at 7-8; TANC at 15.

The CAISO maintains that allocating RUC costs first to Scheduling Coordinators who impose additional demands on the real-time Imbalance Energy market and then, if necessary, to the broader market, is consistent with cost causation and accepted current practice.

In addition, CMUA complains that the CAISO proposes no evaluation process or metrics to judge the CAISO's performance in this area. CMUA at 25.

Despite criticizing the CAISO for not proposing any performance standard for allocating excess RUC costs, CMUA proposes no alternative performance standard in its protest. No forecast program is perfect. The CAISO has every expectation that its own staff as well as Market Participants will evaluate the accuracy of load forecasting and RUC Dispatches, which should moot CMUA's concerns about evaluation metrics.

K. The CAISO's Proposals Concerning Scheduling, Bidding, and Settlement Are Just and Reasonable

1. Issues Concerning the Proposed Scheduling Timelines

In its July 22 Filing, the CAISO withdrew its prior proposal to move the Hour-Ahead Market up to T-60 and, instead, proposed to return to the original T-120 timeframe.⁴⁹ The CAISO still anticipates performing at real-time pre-Dispatch for the Supplemental Energy market at approximately T-45. Transmittal Letter at 14, 111-113, Attachment A at ¶¶ 114, 116. As the CAISO explained in the Transmittal Letter, the decision to retain the T-120 closing was based on (1) input from several stakeholders who argued for a re-bid period between the CAISO's publication of final Hour-Ahead Schedules and the deadline for submission of real-time Supplemental Energy bids, and (2) the CAISO's own determination that compressing the period between the close of the Hour-Ahead Market and real time to anything less than 90 minutes would be impossible.

⁴⁹ Currently, the CAISO closes the Hour Ahead market at T-135 as ordered by the Commission at the request of Mirant. *California Independent System Operator Corporation*, 101 FERC ¶ 61,084, at PP 7, 8 (2002).

A few parties argued that the close of the Hour-Ahead Market must be closer to real time (i.e., T-60) to enable them to revise their Final Schedules more effectively to minimize their exposure to Real-Time prices. CMUA at 11-14; Redding at 12; RPPE at 3-6; SVP at 35.

The Commission should reject these parties' position. Anything less than 90 minutes is just not possible. Today, the CAISO averages 1,300 Schedule changes in the Hour-Ahead Market. To allow for computing time and Control Area check-outs, the CAISO believes T-120 is the appropriate alternative. It is crucial for these parties to realize that the other independent system operators have only day-ahead and real-time markets, and settle all deviations between day-ahead and real-time at real-time prices. The very existence of an Hour-Ahead settlement market, whether it closes at T-60 or T-120, provides a much greater ability for participants to limit exposure to Real-Time than they would have under a two-settlement system. In this regard, it is important to recognize that having a three-settlement system is considerably more complex and costly than a two-settlement system. One party, SVP, argues that the CAISO's recent decision to allow for a 30-minute re-bid period is inadequate, and that closing the Hour-Ahead Market 60 minutes before real time is necessary to enable more accurate load following. SVP at 35. The CAISO believes that SVP may be confused on this point. As an MSS, SVP will have a load-following option within a tolerance band that provides insulation from real-time prices, so the timing of the Hour-Ahead Market should not be an issue. To date, the MSSs have been able, in most instances, to remain within the band width.

2. Self-Scheduling Issues

The revised market design makes provision for Scheduling Coordinators who want to self-schedule by submitting preferred quantities of supply or demand without associated bids. Transmittal Letter at 109-111, Attachment A at ¶¶ 31-35.

NCPA argues that without some way to preserve balanced load and resource Schedules submitted by MSS entities, the MSS entities risk triggering the substantial penalty clauses in the MSS Agreements for not covering their loads. NCPA asserts the Commission should require that the CAISO hold MSS Operators harmless from penalties incurred for operating outside of the deviation band when the CAISO adjusts MSS Balanced Schedules, whether the adjustments are for Congestion or resource adequacy, and should require the CAISO to explain how MSS requirements will be upheld in order to respect (and not undermine) the resource adequacy contributions of the MSS. NCPA at 17-19.

NCPA and TANC argue that the CAISO should use a contingency “flag” to protect Schedules.⁵⁰ NCPA asserts that existing contingency flags that the CAISO seeks to reject in the Proposal serve purposes beyond allowing an LSE its preference to use its own units. NCPA at 17-18. TANC contends a flag or similar mechanism is needed to protect the load/resource schedule and to allow

⁵⁰ The term “contingency flag” in this context is somewhat confusing. The CAISO does currently have, and proposes to retain, a contingency flag that suppliers of Operating Reserves can set if they want to designate their Operating Reserve capacity for Dispatch under contingency conditions only and not to be included in the normal real-time economic Dispatch. Commenting parties seem to be using “contingency flag” to mean something else here.

Market Participants to make their own resource portfolios without being responsible for others. TANC at 15-16.

While the CAISO does not agree that NCPA should be held harmless from penalties, the CAISO does agree that the implementation of MSSs under the new market design needs to be further addressed.

As noted in the Transmittal Letter, the CAISO considered using a flag system for balanced self-schedules, but dismissed the idea as being not only unnecessary, but also as essentially constituting retention of the market separation rule, which has led to inefficiencies in the past. This issue was exhaustively discussed in JAD sessions at the end of 2002 and in subsequent conference calls with Market Participants. There generally was support for the CAISO's proposals regarding treatment of self-schedules, Day-Ahead scheduling priority for CRR Schedules, and allocation of CRRs to all CAISO Control Area loads sufficient to meet identified needs. In consideration of these factors, the majority of Market Participants rejected the use of such flags. Transmittal Letter at 110-111. Indeed, most Market Participants have not protested this aspect of the CAISO's filing.

SCE asserts that the CAISO should modify the language of paragraphs 33-34 of its proposal to reflect that: (1) self-schedules are not price-takers, (2) self-scheduled generation is not an Energy sale to the CAISO Market, and (3) self-scheduled load is not an Energy purchase from the CAISO Market. SCE at 6-7.

The clarifications SCE requests are not logically possible in an integrated Congestion Management and Energy market. For example, because there is no distinction between Energy Bids and Congestion Adjustment Bids, a Scheduling Coordinator either bids its supply or load into the IFM and participates in this integrated market, or submits a self-schedule without bids and is a price taker. There is no way to self-schedule (submit a preferred quantity without bids) and not be a price taker. In other words, bids are the device for limiting the Scheduling Coordinator's exposure to price; absent bids, the Scheduling Coordinator is a price taker. Similarly, because self-schedules may be submitted either as balanced or unbalanced, SCE's statement that "self-scheduling is a process whereby the SC takes delivery of its own resources" is not true in all cases. SCE at 7. By submitting a balanced self-schedule, the Scheduling Coordinator may Schedule its own resources to serve its own load, but because charges for Congestion and Transmission Losses are based on the same nodal prices as charges for Energy, the full quantity of MWh on both sides of a balanced self-schedule will be valued at the relevant nodal prices for determining the Congestion and loss charges for that Schedule.

The CAISO understands SCE's desire to distinguish between loads and supply resources that buy and sell Energy in the CAISO's Energy market, versus balanced self-schedules that do not participate in the Energy market but simply use the CAISO Controlled Grid to transmit supply to load. However, in the context of an integrated Energy and Congestion Management market, this distinction is not meaningful. In any event, the CAISO is willing to explore the

underlying concerns that give rise to SCE's desire to make this distinction to see if any accommodation can be worked out when the design details are finalized.

In addition, SCE argues that the CAISO should clarify that balanced self-schedules must receive scheduling priority over unbalanced self-schedules (e.g., in an over-gen situation). SCE at 7.

As described in the July 22 Filing, there are two cases to be considered. First, if the Scheduling Coordinator wishes to invoke the Day-Ahead Demand-side scheduling priority associated with CRRs, the Scheduling Coordinator's Schedule must be initially balanced at the time it is submitted. More precisely, the supply side of the schedule must be adequate to cover the Demand side (because any excess of supply can be ignored for the purpose of invoking Demand-side scheduling priority). In this case, balanced self-schedules have priority over unbalanced self-schedules because the unbalanced (i.e., supply deficient) CRR schedule may not invoke the scheduling priority for the uncovered portion of the load.

The second case is more pertinent to the over-generation situation SCE mentions, which has to do with the priority of self-scheduled generation, rather than self-scheduled Demand. The CAISO's filing makes it clear that the priorities among supply resources are not a function of whether the submitted schedule is balanced or not; rather, they are a function of whether the supply resource is designated must run or must take. As explained in the CAISO's Transmittal Letter (at 109-111), the reason for this approach is the concern that, with a high level of supply self-scheduling, the volume of bids for Congestion Management

could frequently be very thin, thereby requiring the CAISO to resort to non-economic adjustment of resources in which must run or must take resources would be indistinguishable from other self-scheduled resources. Clearly, forward adjustment of must-run or must-take resources would be “artificial” because such resources would likely operate at their self-scheduled levels regardless of the CAISO’s Congestion adjustments. Perhaps more to the point, throughout the extensive discussions of scheduling priority, SCE and others expressed concern about the ability to prevent their own Demand from being curtailed while their supply resources are Dispatched to serve other load. The CAISO’s proposals regarding self-scheduling and Demand-side CRR priority adequately addresses this concern without retaining vestiges of the problematic Market Separation Rule.

It is important to recognize that the mere fact that the CAISO is allowing for self-schedules creates inefficiencies in the market. That is why many stakeholders opposed retaining self-schedules in any form. Thus, the CAISO’s self-scheduling proposal reflects a compromise solution. It results in some inefficiencies, but accommodates the desires of several Market Participants to schedule their own resources to meet their own loads. Transmittal Letter at 110. The CAISO believes that its proposal strikes a reasonable balance between competing interests.

Lastly, SCE asserts that proceedings to develop data requirements for use-limited resources be initiated only for resource owners, be expanded to make such proceedings open to all interested stakeholders, not just resource

owners. SCE at 8. The CAISO will engage all interested parties in such proceedings.

3. Bidding Issues

a. Issues Concerning Bidding Rules

The CAISO proposed to use a three-part bid structure, including start-up, minimum load, and incremental Energy curve. The CAISO proposed that resources may also submit capacity bids for Ancillary Services and availability bids for RUC. The CAISO has also developed re-bidding activity rules.

Transmittal Letter at 101-106, Attachment A at ¶¶ 11, 18-21, 23, 24, 25, 27, 28, 119-122.

Reliant/Mirant argue that the bidding rules place a *de facto* cap on the Supplemental Energy market, because it will limit the prices in each subsequent market to those in the prior market. According to Reliant/Mirant, this will undermine price signals and market efficiencies. Reliant/Mirant at 24.

Reliant/Mirant's assertion is incorrect. The CAISO regards bids that are accepted to be contractual commitments; for this reason, they cannot be altered. Transmittal Letter at 105 & n.129. This rule only impacts bids that are accepted. If Energy or capacity is offered in one market but not accepted, it may be offered in a later market at a higher price. This proposal is consistent with the Commission's ruling in the October 11 Order (101 FERC at P 54); See also Transmittal Letter at 106.

CERS states that the Transmittal Letter explains the Energy Bid curve will be composed of not more than 20 segments, but that the Amendment No. 54

Phase 1B filing limited the Energy Bid curve to increase the maximum number of bid curve segments. CERS contends it is unclear whether the CAISO intends to increase the maximum number of bid curve segments. CERS at 20. The CAISO wishes to clarify at this time that the Energy Bid curve under LMP and the full network model will consist of at most ten segments, consistent with Phase 1B.

b. Issues Concerning Bid Caps

The CAISO proposed that market power at the system level continue to be mitigated by a Damage Control Bid Cap (“DCBC”) of \$250/MWh and a bid floor of -\$30/MWh. The CAISO also proposes to extend the AMP procedures currently in effect for the Real Time Market to the IFM and RUC procedures and to imports (which are currently exempt from AMP in the Real Time Market). Transmittal Letter at 21, 37-38, 40, 57, 102-104, 107, Attachment A at ¶¶ 13, 37, 38.

SCE asserts that while it supports the continuation of a soft DCBC of \$250/MWh for Energy with a lower limit of -\$30/MWh, it contends that the proposed A/S capacity cap of \$250/MWh is insufficient. SCE argues that the \$250/MWh A/S capacity cap should be instituted along with the unit-specific Energy Bid reference level under AMP to more accurately reflect the costs associated with a unit. SCE at 13.

The CAISO believes the \$250 bid cap for A/S capacity bids strikes the proper balance between providing adequate protection against market power and ensuring incentives for A/S market participation, particularly during peak demand periods when capacity is relatively scarce. Ancillary Services costs represent a

relatively small portion of total wholesale Energy costs (typically less than three percent of the total wholesale Energy costs). Moreover, during the past two years, LSEs have self-provided a significant share of their A/S requirements, which has further reduced their cost exposure. Finally, given the relatively minor cost exposure in this market, the CAISO believes that extending AMP to the Ancillary Services market would provide little additional market power mitigation benefit, but would add significant complexity to the proposed market design. Having separate A/S capacity bid reference levels for each Generating Unit and A/S market and performing conduct and impact test for each A/S type, coupled with integrating the AMP procedures with the rational buyer algorithm, would be extremely complicated. If market conditions deteriorate such that A/S prices become unreasonable over a sustained period, the CAISO would have the option to seek Commission approval for lower A/S bid caps. Moreover, parties would have recourse by making a Section 206 filing at the Commission seeking a lower A/S cap.

Sempra argues that the \$250 DCBC is too low, will prevent hydro-electric and other Energy-limited resources from bidding opportunity costs, and is unnecessary in light of the prevalence of longer term contracts. Once MD02 is in place, Sempra asserts, the CAISO could function under a \$1,000 bid cap like the eastern independent system operators have. Sempra at 14.

As the CAISO noted in its comments on the SMD NOPR, the level of the bid cap should reflect market conditions in the particular region where the bid cap will apply. CAISO SMD NOPR Comments, Docket No. RM01-12-000 (filed Feb.

19, 2003), at 103 (“SMD Comments”).⁵¹ The CAISO stated that, to the extent there are structural deficiencies in the market and/or a supply-demand imbalance that enable suppliers to exert market power on a sustained basis or otherwise engage in market power abuse, the bid cap must be set at a level low enough to provide adequate protection to consumers, but not so low as to dull price signals for new generation investment and demand response. The existing \$250/MWh DCBC achieves these objectives. In that regard, the Commission has found that the imbalance of supply and demand in California was a major cause of the unjust and unreasonable prices experienced in California. *San Diego Gas & Electric Company v. Sellers of Energy and Ancillary Services into Markets Operated by the California Independent System Operator and the California Power Exchange*, 93 FERC ¶¶ 61,121, at 61,349 (2000); June 19 Order, 95 FERC at 62,546, 62,549. As recently as the July 17 Order, the Commission recognized that there is insufficient generation capacity in California, and that additional generation is necessary. July 17 Order, 100 FERC at PP 1-14, 33. Although some additional generation has been built in California, the supply-demand imbalance that the Commission found to exist in California remains. Indeed, not one intervenor proffered any specific evidence that the supply-demand conditions in California have permanently and significantly changed to support increasing the DCBC.

The current market conditions and structures in the eastern markets continue to be far different from those in California. Even when MD02 is

⁵¹ The CAISO’s SMD Comments set forth in detail why a \$1,000/MWh DCBC is inappropriate in California. See SMD Comments at 103-07. There is no need to repeat all of

implemented in its entirety, there will remain significant differences between the regions. As the Commission has recognized, the reserve margins in the WECC are only about 10 percent, the lowest in the nation. July 17 Order, 100 FERC at P 2. The reserve margins in the eastern markets are significantly higher than those in California. Because there is a supply demand imbalance in California, there exists a greater opportunity for suppliers to exercise market power than exists in the east.⁵² Further, there is a greater reliance on hydro-electric resources in California than in the eastern markets. When there is an adequate supply of hydro-electric resources, prices can remain competitive; when hydro-electric conditions are low, suppliers have increased opportunities to exercise market power. In the last year-and-a-half, California has been the beneficiary of good hydro-electric conditions and that has helped to moderate prices. However, the fact remains that there is still a supply-demand imbalance in California and, until that imbalance is permanently corrected, there will be a need for a lower DCBC than exists in the east.

Strategic contends that there should be a plan to lift the DCBC when the new market design has been demonstrated to work as intended and the conditions that require strict price mitigation no longer exist. Strategic at 10. The CAISO views the DCBC as an essential part of its market design. The energy crisis is not so remote that the CAISO feels sanguine about removing (or reducing) this essential protection for consumers. Indeed, it was only when the

those arguments here, and the CAISO hereby incorporates its SMD Comments by reference.

⁵² In its SMD Comments, the CAISO cited references to the Annual Reports of the eastern independent system operators indicating that their markets were competitive. No one is making those comments about California, although conditions have improved somewhat.

bid cap was put into place that the crisis conditions in California were alleviated. Should market conditions improve dramatically in the future, of course, the DCBC issues can be revisited. Indeed, as indicated in the July 22 Filing, the CAISO has made the commitment to work with the MSC to undertake an ongoing evaluation of the new market design. Transmittal Letter at 123. This evaluation will examine, *inter alia*, the effectiveness of the CAISO's market power mitigation measures. Thus, the CAISO anticipates that, if market conditions become more favorable, it will explore with the MSC the possibility of raising the DCBC.⁵³

CERS requests clarification on whether the CAISO intends to apply the bid cap floor of -\$30/MWh. CERS believes nodal prices should be capped at both ends. CERS at 20. Additionally, CERS requests clarification on whether the CAISO intends to cap generator nodal prices. CERS at 21. The CPUC states that negative decremental bids should be prohibited, but if they are not prohibited, a bid cap for negative bids should be imposed. The CPUC asserts that such a bid cap should be no lower than the current bid cap for decremental bids of -\$30. CPUC at 25-26.

The CAISO clarifies that it intends to keep in place the existing -\$30/MWh bid cap. The CAISO notes that this negative bid cap is a soft cap. Thus, Market Participants must provide cost justification for bids that fall below the cap.

⁵³ The CAISO also noted in its SMD Comments that:

The ISO does believe that over time, as market conditions improve, the safety net bid cap could eventually be raised. In no event should a safety net bid cap automatically (and arbitrarily) be imposed absent an evidentiary finding that competitive conditions exist in California to justify such an increase.

SMD Comments at 105.

**c. Issues Concerning Incorporation of RMR
Pre-Dispatch into the New Bidding Structure**

The CAISO proposed that system and local market power mitigation procedures and determination of RMR Dispatch levels would be performed in a sequence of pre-processing IFM runs in the Day-Ahead and Hour-Ahead timeframes. Transmittal Letter at 106-109, Attachment A at ¶¶ 39-47, 75. The CAISO also proposed that it would continue to rely on RMR Contracts for units that are critical for local reliability and to offer each RMR Unit a one-time opportunity to modify its current RMR Contract to declare that its RMR Contract ramp rate is effectively equal to its bid-in Operational ramp rate. Moreover, the CAISO proposed changes to the manner in which RMR Units can participate in the revised market. Transmittal Letter at 106-109, Attachment A at ¶¶ 39, 59, 142, 143-146.

Reliant/Mirant argue that eliminating the contract and market path payment options for RMR is an impermissible change to the RMR Agreements that the CAISO is not authorized to make. Reliant/Mirant also assert that if the terms of the ISO Tariff conflict with the RMR Agreements, the RMR Agreements govern. In addition, Reliant/Mirant argue, the CAISO's proposal could deny adequate revenue for Condition 1 RMR Units if the MCP is lower than their running costs. Reliant/Mirant at 19-20.

As noted in the Transmittal Letter, the current RMR bidding and scheduling provisions were instituted under a zonal Energy market, and they do not lend themselves to the proposed nodal system. Under the nodal system, the current RMR provisions would provide RMR Unit owners with too great an

opportunity to exercise market power (which is the very problem that RMR Contracts were designed to address). While it is true that RMR Condition 1 Unit owners will be unable to submit bids above their contract variable costs, under the CAISO's proposal, they will be able to earn and keep market revenue that are above these costs. This compromise represents a reasonable solution to the question of how to adapt RMR Contracts to a nodal paradigm. Moreover, the CAISO's proposal does not violate the RMR Contracts. The Contract Energy and market Energy payment options are provisions of the CAISO Tariff (see Sections 2.2.12.2.2 and 2.2.12.2.3); therefore, a tariff amendment is the appropriate venue for altering them.

4. Settlement Issues

NCPA argues that it interprets the Proposal to provide that all transactions will be settled through the CAISO financial settlement systems, including bilateral transactions, self-schedules, and Scheduling Coordinator-to-Scheduling Coordinator trades. NCPA asserts that the Commission should require the CAISO to provide to all Market Participants examples of how the settlements system would work as applied to bilateral contracts, self-schedules, and Scheduling Coordinator-to-Scheduling Coordinator trades, and how any shortfalls would be allocated to the market. In addition, according to NCPA, the Commission should require the CAISO to describe, in detail, its credit policies and escrow requirements for every class of Market Participant as well as how those policies and escrow requirements will have to change from the current

market design in order to assure Market Participants that their interests will be protected. NCPA at 20-22.

SCE states that the CAISO should clarify that, in the event of a Scheduling Coordinator's financial default in the CAISO's Energy market, revenue shortfalls should be allocated among those participating in the CAISO's Energy market, i.e., shortfalls should not be allocated to self-schedules. SCE at 7.

The CAISO has not proposed changes to its current credit policies as part of the MD02 filing. The CAISO is currently reviewing these policies and may propose revisions to these policies in a separate future filing with the Commission. Accordingly, NCPA's and SCE's issues with respect to creditworthiness are beyond the scope of this proceeding.

L. The CAISO's Proposal for Honoring Existing Transmission Contracts Is Just and Reasonable

The CAISO proposes to: (1) honor fully ETC rights of access to the CAISO Controlled Grid, but without today's Day-Ahead reservations of unscheduled transmission, which is the cause of "phantom Congestion"; (2) require the Participating Transmission Owner to certify that the submitted ETC Schedules are in accordance with their contractual rights; and (3) treat all ETC Schedules and Real-Time deviations the same as those of any other user of the CAISO Controlled Grid in the Settlement Process. Transmittal Letter at 15-16, 18, 115-122, Attachment A at ¶¶ 66-70, 85; and Attachment G.

As discussed in the July 22 Filing, the CAISO is committed to holding additional discussions with stakeholders to determine the best way to address cost allocation issues and whether it is feasible for the Participating TO

responsible for certifying the validity of ETC schedules to transfer this responsibility to another capable Scheduling Coordinator. Therefore, at this time, the CAISO is requesting that the Commission (1) approve the key design element of honoring ETC rights without reserving unscheduled transmission capacity in the forward markets, and (2) affirm the principle that certification of the validity of ETC Schedules is the responsibility of the Participating TO that is a party to the contract.

In support of this request, the CAISO submits that it intends, and will be able, to honor the rights of ETC holders to utilize the CAISO Controlled Grid consistent with the terms of their contracts. Some parties argue that the CAISO's proposal will reduce the benefits ETC rights holders enjoy today under the CAISO's current approach. It is important to recall that at the time of CAISO start-up the CAISO became responsible both for honoring ETC rights of access to the ISO Controlled Grid and for managing ETCs on a day-to-day basis. The latter includes tracking compliance of ETC reservations and Schedules with a myriad terms of diverse contracts to which the CAISO was never a party. In order to ensure its ability to honor ETCs at start-up, the CAISO had to simplify the problem of contract diversity by constructing a "least common denominator" approach that would sufficiently cover all contracts. However, in the process, this approach provided many contracts with greater benefits than they enjoyed under the pre-CAISO regime. The CAISO submits that, in considering whether the Proposal appropriately honors ETCs, the Commission should examine the fundamentals of the contracts themselves and refer to the way such contracts

were honored in the pre-CAISO regime for purposes of determining whether the CAISO is failing to honor existing rights. Moreover, in recognition of the diversity of contract terms, the Commission should place responsibility for certifying the validity of ETC Schedules upon the parties best able to perform this function, namely, the Participating TOs who negotiated the contracts consistent with the Commission's October 30, 1997 Order concerning the CAISO. *Pacific Gas and Electric Company, et al.*, 81 FERC ¶¶ 61,122, at 61,464 and 61,473 (1997) ("October 1997 Order"). In proposing this new approach for honoring ETCs, the CAISO is pursuing a longer-term goal that goes beyond the more immediate need to eliminate phantom Congestion and simplifying CAISO's day-to-day role with respect to ETC management. This longer term goal is to create a framework for transitioning from the existing dual system of transmission access and allocation to a single set of rules and procedures, including a standard scheduling time line for all parties and full inclusion of all Schedules into the market optimization and pricing procedures. The CAISO believes that a single set of rules and procedures for all CAISO Controlled Grid users will make each Schedule's impact on the grid more transparent and quantifiable, thereby allowing the nodal price signals of LMP to better reflect the grid infrastructure and maximizing the efficient and rational use of transmission facilities. At the same time, the CAISO fully recognizes the need to continue to honor ETC holders' contractual rights. Hence, the proposal will guarantee their access to the CAISO Controlled Grid by granting them scheduling priority in the Day-Ahead Market, but will (1) represent them in the IFM and in final forward schedules just like any

other Scheduling Coordinator Schedules, not as reservations of capacity to be withheld from the IFM optimization; and (2) process them through the CAISO's settlement system just like other Scheduling Coordinator Schedules, and allocate all associated charges to the appropriate parties.

The CAISO acknowledges that its proposal for honoring ETCs as filed on July 22, 2003 represents a significant change from the original proposal contained in the May 1 Filing, and that there needs to be further discussion between the CAISO and the stakeholders regarding the merits of this proposal and how it will work. As noted in the CAISO's filing and reiterated above, the CAISO is committed to continuing such discussions, particularly with regard to potential cost impacts and the options for mitigating them. Nevertheless, all CAISO Market Participants are well aware of the CAISO's desire over the past several years to improve upon the procedures for honoring ETCs that were instituted at the time of CAISO start-up. The issues are not new. The need for improved procedures is in two areas: elimination of phantom Congestion, and reducing the CAISO's responsibilities for managing ETCs on a day-to-day basis. Both of these problems will have greater impacts under LMP than they do today, as discussed in more detail below.

- 1. Excessive Cost, Complexity, and Burden on the CAISO of Continuing Today's System of Day-Ahead Reservations Under the LMP Framework**

Under the LMP framework, the current practice of Day-Ahead transmission capacity reservation for ETCs will become particularly problematic because of the use of the FNM in the forward markets. Under the present zonal

framework, there is no need to consider specific injection and withdrawal points associated with ETCs; all that matters is the transmission modeled in the forward Congestion Management process, i.e., the inter-ties, Path 15, and Path 26. In particular, ETCs that utilize only intra-zonal transmission do not need to be considered at all in today's forward markets. However, under LMP the CAISO would have to Schedule the full amount of capacity reservations for all ETCs – even those that are fully intra-zonal today – on a source-to-sink basis, determine the collective impact on the CAISO Controlled Grid of these Schedules and remove the associated transmission capacity from the forward market before allocating transmission to non-ETC parties. The CAISO would have to do this in the Day-Ahead Market for every operating hour of every day. Moreover, if the CAISO continues its current day-to-day ETC management role, it would have to create a system for tracking whether ETC reservations are consistent with their contractual rights, and for calculating the impacts on ETC rights (and the consequent impacts on capacity available for other grid users) whenever there is a transmission facility derate. These functional requirements will add significant cost and complexity to the implementation of MD02.

Some parties argue that the CAISO should not revise the practice of ETC capacity reservations at this time because substantial numbers of ETCs will be expiring over the next several years, and the problem of phantom Congestion will decline.⁵⁴ What these parties miss is the difficulty and cost of setting up the systems needed to perform capacity reservations under LMP. This leads to

⁵⁴ Many ETCs continue far into the future, some past 2040. Moreover, the capacity that is involved is significant. See Attachment 4 to the present filing.

exactly the opposite conclusion that these parties draw. As ETCs expire, the beneficiaries of such systems will decline and, as such, the CAISO will have incurred additional cost and complexity for a much smaller problem than exists today. The CAISO therefore submits that it is far better not to re-create the apparatus needed to maintain today's approach for honoring ETCs, and instead to treat them within the same framework and using the same systems being developed for the market as a whole, while still honoring the rights of ETC holders to use the ISO Controlled Grid. This is the basis of the CAISO's revised proposal.

2. The Need to Remedy Phantom Congestion

A number of parties express doubts about the need to remedy phantom Congestion, arguing that the CAISO has not shown that it is a problem sufficient to justify the ETC proposal, that it is a problem of the CAISO's own making, or that the CAISO has exaggerated its consequences. CMUA at 16-17; LADWP at 9-10; MWD at 25-26; MID at 12-13, 16-17.⁵⁵

The Commission has already considered and rejected the suggestion that phantom Congestion is a problem of the CAISO's own making. In its May 31, 2000 order in Docket No. ER00-2019-000, the Commission rejected the argument that the CAISO's Congestion Management software was the problem and that the CAISO should redesign it to better accommodate ETCs. The

⁵⁵ On the other hand, Dynegy/Williams state that they have concerns with the CAISO's proposal, but nonetheless "share the desire of improving the efficiency of utilization of ETCs (i.e., reducing 'phantom' congestion)." Dynegy/Williams at 34. Further, the CPUC states that it "applauds the ISO's goal of eliminating the 'phantom congestion' problem." CPUC at 26.

Commission correctly focused on the non-conforming scheduling time lines of ETCs and explained that:

Software that perpetuates the non-conforming schedules will not fix the problem of “Phantom Congestion.” We believe that this approach simply suggests an iterative scheduling process that will not allow sufficient time for the market to respond and will leave the ISO with insufficient time to manage the grid reliably. Furthermore, while [parties] contend that their scheduling flexibility is a valuable asset, it results in overall market inefficiencies due to scheduling time lines that do not conform to the time lines of the overall markets. It is difficult to justify the scheduling flexibility advantage in light of the congestion these rights cause the ISO. Therefore, “Phantom Congestion” is a market inefficiency that must be addressed and rectified as quickly as possible.

California Independent System Operator Corporation, 91 FERC ¶ 61,205, at 61,727 (2000).

Certain parties argue that the CAISO has exaggerated the consequences of the phantom Congestion problem. This issue is being litigated in the ongoing proceeding in Docket No. ER00-2019-000, in which the CAISO has filed Direct and Rebuttal Testimony. Moreover, it is important to realize that assessments of the past impacts of phantom Congestion are not sufficient to estimate the likely impacts under LMP. Under the present zonal design based on a radial network model, the CAISO does not consider the impact of an ETC reservation on any particular inter-tie on the rest of the transmission system, much less the simultaneous impacts of multiple ETCs using various inter-ties and major internal pathways. However, under LMP, each ETC reservation will be modeled as a source-to-sink schedule and will flow through the entire CAISO Controlled Grid. Thus, the complete set of ETC reservations for a given operating hour will have collective impacts on the capacity throughout the grid that is available to non-

ETC users. Clearly, to the extent any of these reservations result in phantom Congestion because the associated capacity is not fully utilized, this will also be a grid-wide phenomenon. Moreover, as discussed in the CAISO's MD02 filings, to the extent significant quantities of ETC reservations go unused in Real Time, this undermines the crucial consistency between market time frames that have been an explicit driving objective of MD02 and encourages parties to rely more on the Real Time Market rather than Schedule as fully as possible in the forward markets.

A number of parties suggest solutions to the problem of phantom Congestion as alternatives to the CAISO Proposal. They assert that the CAISO could, as possible alternatives: (1) offer and schedule non-firm service products; (2) flag the ETC capacity being used by the Market Participants and allocate any Re-dispatch costs to the Scheduling Coordinator using such flagged capacity, but not the ETC rights holder; (3) accommodate ETCs in a financial manner through CRRs, rather than through physical priority rights or free options that could affect nodal prices for the rest of the market; (4) create a Recallable Transmission product; (5) make unscheduled ETC capacity available on a non-firm or recallable basis, permitting a Scheduling Coordinator to bid for non-firm service, subject to the attendant risk that an ETC holder could exercise its right to Schedule Hour-Ahead or real-time; (6) adopt the RTO West model for dealing with ETCs; or (7) purchase the ETC capacity from the ETC rights holder in the Day-Ahead Market timelines. CMUA at 17-18; LADWP at 10-12; Morgan Stanley at 7-8; MWD at 26-28; SCE at 3; SWP at 9-11; TANC at 8.

Virtually all of the above proposals involve the CAISO creating some kind of non-firm, recallable, or otherwise distinct transmission product based on unscheduled ETC rights. The CAISO reminds parties that this option was debated extensively during discussions arising in the context of the Morgan-Stanley complaint in Docket No. EL01-89-000, and was rejected because of the intractability of certain cost allocation issues and the complexity of implementing it in the current zonal design. It should be no surprise that implementing such a recallable service under LMP would be even more complex, due to the source-to-sink (rather than path-specific) nature of Schedules and transmission rights. The CAISO has considered developing a non-firm or recallable transmission product, but has found only limited support that has not justified going forward with the service. The WECC requires the party taking non-firm service to obtain and maintain Operating Reserves in the Control Area sufficient to account for the full amount of capacity that might be interrupted. This requirement has further limited the utility of the non-firm product.⁵⁶

It is equally important to realize that although parties contend that the CAISO's proposal is incomplete, it in fact achieves a remarkable balance

⁵⁶ A CAISO non-firm transmission product would also have the potential to create a curtailment nightmare when the ETC rights holder reclaims its rights in a later market or if there is a derate after the Day-Ahead Market. To take a simple example, on the COI interface the CAISO and BPA, the neighboring Control Area operator, must agree on the interchange capacity for any given hour. Suppose that capacity is 2,000 MW in the Day-Ahead Market, of which 1,000 MW on the CAISO side is unscheduled ETC. Suppose Scheduling Coordinator #1 buys 1,000 MW of firm transmission service within BPA up to COI, then Schedules non-firm transmission service on the unscheduled ETC within the CAISO. At the same time, Scheduling Coordinator #2 buys 1,000 MW non-firm transmission service from BPA and Schedules firm transmission service within the CAISO. Now suppose COI is derated to 1,000 MW after the Day-Ahead Market. Based on the firm/non-firm Day-Ahead Schedules, the CAISO would curtail Scheduling Coordinator #1 and BPA would curtail Scheduling Coordinator #2, resulting in 2,000 MW of curtailment, clearly not a desirable outcome. This problem is avoided if the CAISO offers only

between potentially competing objectives by accomplishing the following: (1) fully honoring ETC rights of access to the ISO Controlled Grid; (2) making unscheduled ETC capacity available to non-ETC participants in the forward markets (thus preventing phantom Congestion); and (3) not compromising the firmness of non-ETC forward schedules. The design feature that accomplishes this balance is the rule that Hour-Ahead ETC Schedule changes will be accommodated in the Hour-Ahead Market only to the extent that they do not require modifying final Day-Ahead Schedules, with the provision that any remaining portion of submitted Hour-Ahead ETC Schedules will be accommodated in the Real Time Market through the real-time economic Dispatch process. The CAISO believes that this design feature effectively eliminates the need to implement a recallable transmission product to deal with ETC impacts, and thus avoids the associated complexity and cost of doing so.

3. The CAISO's Proposal Honors ETCs

Parties argue that the CAISO's proposal will (1) dishonor ETCs, thereby violating the *Mobile-Sierra* doctrine, (2) violate the CAISO Tariff, (3) undermine Commission precedent, proceedings, and statements concerning ETCs, (4) confiscate the parties' rights and property, and (5) undermine the market stability engendered by parties' reliance on the terms of their ETCs. CCSF at 10-12; CMUA at 15-16, 18-20; LADWP at 4-9, 12-18, 20-24; MID at 11-14, 17-19; MWD at 21-24; Redding at 13-14; RPPE at 7-9; SMUD at 12-16; SVP at 7, 24-26; TANC at 9.

firm transmission service, as it has done since the beginning and proposes to continue doing under MD02.

As explained above, the CAISO strongly disputes the assertion that its ETC proposal will abrogate the rights of parties to Existing Contracts. Parties to such contracts will continue to receive delivery of power to meet their needs. As Judge Harfeld noted in a recent decision:

Similarly, SVP argues that the Commission did not abrogate existing contracts when the CAISO began operations. SVP I.B. at 23. This is true, but SVP, like NCPA, has failed to show that it has been denied access to transmission service that is sufficient to serve its load. Had SVP been able to show that, following the September 1, 2002 effective date of its MSS with the CAISO, it has been denied access to transmission service which is sufficient to move its load, then evidence would exist to show that the CAISO transmission service does not fulfill PG&E's obligation under the Commitments. To the contrary, as stated *supra*, SVP has acknowledged that the CAISO does have the physical capability to provide transmission service that meets the same characteristics and qualities as that previously provided by PG&E. Here, the bottom line is that SVP just does not believe that it should have to pay for any congestion charges.

In sum, the CAISO transmission service fulfills PG&E's obligations under the Commitments since it provides comparable transmission service to NCPA and SVP on par with PG&E's retail customers.

Pacific Gas and Electric Company, et al., 104 FERC ¶ 63,029, at P 44-45 (2003).

In sum, the parties with Existing Rights will continue to receive the transmission service for which they contracted. Thus, TANC is incorrect in arguing that the CAISO proposal conflicts with the South of Tesla Principles ("SOTP"). TANC at 9-10. The proposal does not vitiate the Existing Rights, but, to the contrary, continues to provide high-quality transmission service.

Moreover, MID incorrectly argues that preventing ETC holders from selling unused transmission capacity themselves "has interfered with ETC rightsholders' [sic] obligation to comply with the open-access requirements of Order No. 888

and the Energy Policy Act of 1992, to make unused transmission capacity available to third-parties on an open and non-discriminatory basis.” MID at 14.

MID is confused on this issue. In fact, the CAISO’s current proposal fosters compliance with federal open-access requirements by allowing other parties to establish Day-Ahead Schedules utilizing all CAISO Controlled Grid capacity that is not actually scheduled by the ETC rights holder. What MID actually seems to be seeking is for the CAISO to operate a separate transmission market for unscheduled ETC capacity or for capacity in the CAISO Control Area that is not part of the CAISO Controlled Grid. As the CAISO has argued in the July 22 Filing and elsewhere in this document, the point of the current proposal is to bring all transmission allocation under a single market structure rather than operate two separate and parallel systems. It is inaccurate for MID to argue that the CAISO’s unwillingness to create such complexity prevents it from complying with federal law.

Moreover, nothing in MD02 prevents an ETC rights holder from engaging in a bilateral transfer of its contractual transmission usage rights and receiving compensation for such transfer from a third party. As long as the ETC schedule is submitted to the CAISO in a manner consistent with this proposal and is certified by the PTO to be in compliance with the contract, the schedule will be accepted and treated by the CAISO as a valid ETC schedule.

With regard to any entitlement to compensation by the CAISO for accepting schedules utilizing unscheduled ETC capacity, Commission precedent

demonstrates that ETC rights holders have no such entitlement. In the October 1997, the Commission stated:

We disagree with DOE/OAK, TANC, Western and others who argue that the ISO should compensate those entities with existing capacity Entitlements for the use of that capacity in the hour-ahead market. Traditionally, if a customer did not utilize all of its transmission entitlement, the transmission provider and other third-party customers could utilize that capacity on a non-firm basis. In this instance, the ISO does not provide traditional non-firm transmission service. The ISO will only receive revenues for that capacity if there are Wheeling transactions that utilize the capacity or through Usage Charges. To the extent a rights holder has converted its rights to ISO rights, then it would receive its share of any Wheeling and Usage Charge revenues that arise from the use of its unused transmission entitlement. However, if a rights holder does not convert its rights over to the ISO, then that entity will not be entitled to any such Wheeling or Usage Charge revenues, to the extent that its Non-Converted Rights do not provide for such compensation.

October 1997 Order, 81 FERC at 61,471 (footnote omitted). On rehearing, the Commission stated that TANC, Cities/M-S-R and Palo Alto appealed the above conclusion, arguing that the October 1997 Order:

was based on the mistaken premise that the issue was limited to unused contract rights to transmission service. Proponents contend that, in addition, the ISO has taken an expansive view of its authority (under Section 2.4.4.5.1.6 of the ISO Tariff) to use, without compensation, transmission facilities owned by non-Participating TOs.

The ISO answers that Proponents are mistaken. Section 2.4.4.5.1.6 of the ISO Tariff applies only to contractual reservations of capacity on transmission facilities and Entitlements of Participating TOs. Thus, the provision only authorizes the ISO to make available to other Market Participants unused transmission capacity associated with Existing Rights, i.e., idle transmission capacity on the ISO Controlled Grid that had been reserved under an Existing Contract. Section 2.4.4.5.1.6 does not permit the ISO to make available to other Market Participants capacity on transmission facilities or Entitlements that have not been turned over to its Operational Control. Rather, ISO "control" over such

facilities is limited to the implementation of operating instructions contained in Existing Contracts between investor-owned utilities that were operating control areas in California prior to the start-up of the ISO and non-Participating TOs. According to the ISO, former control area operators have provided operating instructions to the ISO with respect to these contracts, under which the ISO has carried out scheduling and other responsibilities.

The Proponents reply that they "accept the ISO's explanation" of its authority under Section 2.4.4.5.1.6 of the ISO Tariff, and ask the Commission to accept this explanation as the proper interpretation of the provision.

Commission Response

Based on the representation of the parties noted above, we consider this matter resolved and will not be addressed here.

California Independent System Operator Corporation, et al., 101 FERC ¶ 61,219, at PP 84-87 (2002) ("Unresolved Issues Order").

Accordingly, the intervenors in this matter are raising the same concerns that have been previously decided in the Unresolved Issues Order. The Commission has a consistent policy disfavoring relitigation of issues. As the Commission has explained:

Historically, the Commission's policy against relitigation of issues is not constrained by the limits of the judicial doctrine of collateral estoppel. The Commission's position on relitigation of issues is one where in the absence of new or changed circumstances requiring a different result, "it is contrary to sound administrative practice and a waste of resources to relitigate issues in succeeding cases once those issues have been finally determined."

Alamito Co., 41 FERC ¶ 61,312, 61,829 (1987), *reconsideration denied*, 43 FERC ¶ 61,274 (1988) (quoting in part *Central Kansas Power Co.*, 5 FERC ¶ 61,291 at 61,621 (1978)).

4. The CAISO's Proposed Approach Is Reasonable and Well-Supported, and the Proposed Alternative Solutions to Phantom Congestion Should Not Be Adopted

Several parties assert that the CAISO has not proposed a reasonable, well-supported, and complete approach. Dynegy/Williams at 33-34; LADWP at 18-19; MID at 15, 19-20; Morgan Stanley at 7-8; SWP at 6-9; TANC at 7-8. The CAISO's proposed approach is based on certain well-founded principles and objectives; specifically: (1) to continue to honor fully the rights of ETC holders to use the ISO Controlled Grid; (2) to honor these rights in such a way as to minimize the adverse impacts on other grid users and any distortion of CAISO market incentives; (3) to treat ETC Schedules in a manner consistent with the treatment of non-ETC Schedules as far as possible, consistent with principle (1), so that there are not two completely different sets of rules and procedures governing transmission access by two different sets of grid users; (4) to minimize the impact of ETC rights on MD02 implementation in terms of cost and complexity; and (5) to make the impacts of ETC Schedules on CAISO markets and transmission availability as transparent as the impacts of other Schedules. As to concerns that the proposal is not complete, at the request of numerous parties the CAISO has agreed to take more time to work out the settlement details to best comport with the business practices and concerns of the parties to ETCs. The CAISO views this as a positive aspect of its proposal, not a detriment.

Several parties also make arguments concerning cost allocation under the ETC proposal. SCE asserts that if the Commission approves the CAISO's

proposal, it should not be implemented until the Commission ensures that the Scheduling Coordinators for the ETCs may pass through to the ETC holders all new CAISO charges that result from MD02, without having to litigate the matter on a contract-by-contract basis, regardless of whether the ETC contains Section 205 rights. SCE at 3-5. PG&E states that the ETC proposal should not be implemented until the allocation of implementation costs is made clear and the Commission determines in a “final ruling” that the implementation costs will be recoverable. PG&E at 4, 5, 6.

In addition, the CPUC states it is concerned that investor-owned utility ratepayers will be allocated the Redispatch costs that will occur due to accommodating ETCs in real time, and requests that the CAISO consider alternative mechanisms for allocating the Redispatch costs. CPUC at 26-27. Dynegy/Williams state that it is unclear who bears responsibility for the cost of Redispatch due to a change to an ETC holder’s schedule.

The CAISO is committed to working with affected parties to resolve the cost impact and allocation concerns of the ETC proposal, as discussed in the filing and elsewhere in this answer. Moreover, in the July 22 Filing the CAISO stated, “to the extent PTOs are exposed to CAISO charges associated with ETC schedules, the CAISO will support Participating TO filings at the Commission for recovery of all costs prudently incurred in connection with the scheduling and management of ETCs.” Transmittal Letter at 120. The CAISO recognizes that the ETC proposal is a work in progress and that more needs to be done with stakeholders to address issues such as cost allocation. Nevertheless, the

fundamental approach of honoring ETCs without reserving unscheduled capacity in the forward markets is sound, achieves the objectives stated earlier, and does not impair the transmission service of the Existing Rights holders. The Commission should therefore approve this crucial design feature and the CAISO's proposal for continuing to work with stakeholders to resolve the cost impact issues.

5. Other Issues

Contrary to the arguments of NCPA, the CAISO's proposal is not unduly discriminatory against the ETCs of municipal entities relative to the bilateral Energy purchase contracts held by CERS. See NCPA at 22-25. ETC schedules will have first priority against curtailment in all ISO Markets, i.e., ahead of any non-ETC schedules including the state's bilateral Energy contracts. Nor is it discriminatory for the CAISO to settle ETCs on a nodal level, rather than on an aggregated basis. See TANC at 10. In fact it is completely appropriate in light of the scheduling priority enjoyed by ETC rights holders. Because ETCs enjoy first rights of access to the CAISO Controlled Grid, it is extremely important to represent these Schedules accurately on the grid, with their injection and withdrawal points accurately specified and verifiably consistent with their contractual rights.

PG&E argues that ETC Schedules should be considered Final Schedules, and that the Scheduling Coordinator for an ETC should not be subject to deviation charges or other penalties as a result of the CAISO's proposal. PG&E at 6-7. It is not appropriate to treat as Final Schedules any ETC changes that

have not been accommodated in the Hour-Ahead Market. The problem is that such changes can have significant impacts on real-time Dispatch and prices, and treating them as Hour-Ahead Schedules after the fact will either compromise the transparency of the Real Time Market or, if they are actually incorporated into the Final Hour-Ahead Schedule, result in a fictitious Final Hour-Ahead Schedule which then compromises the transparency of the Hour-Ahead Market. Rather than try to capture real-time ETC changes as final Hour-Ahead Schedule changes, the CAISO proposes to include this topic in the continuing discussion of the settlement treatment of ETC Schedules, to explore ways to resolve parties' concerns through the settlement process without distorting the accuracy of the Hour-Ahead or real-time Dispatch and prices.

M. The CAISO Acted Reasonably in Not Including Virtual Bidding in the Proposal

Several parties argue that the Commission should require the CAISO to implement virtual bidding at the outset of the new market design.

Dynergy/Williams at 33; IEP/WPTF at 27-28; Morgan Stanley at 8-9;

Reliant/Mirant at 24-25. For example, Dynergy/Williams contend that virtual bidding eliminates the incentive for load to underschedule in the market.

Dynergy/Williams at 33. As the CAISO indicated in its Transmittal Letter, the issue of virtual bidding was discussed in the Integrated Forward Market ("IFM") Working Group. Transmittal Letter at 124. Parties were extremely polarized on this issue without the possibility of reaching a consensus.

Although the CAISO acknowledges that, in theory, there might be benefits to virtual bidding, the CAISO does not believe that it would be prudent to

implement virtual bidding at the outset of the new market design. The CAISO is completely overhauling its market, and the proposed modifications represent a dramatic and fundamental change in the way in which the CAISO and Market Participants have been doing business. Given the problems that have plagued California and the CAISO's lack of experience in operating a forward market, the CAISO believes that it makes more sense to get the new market up and running before the CAISO implements virtual bidding.

Dynergy/Williams suggest that virtual bidding is necessary to eliminate the incentive for load to under-schedule. As the Commission has recognized, however, under-scheduling of load is not a problem in the ISO Market and has not been for some time. July 17 Order, 100 FERC at P 151; October 11 Order, 101 FERC at P 63. Thus, there is no urgent need to implement virtual bidding. Finally, the CAISO notes that no other independent system operator implemented virtual bidding at the outset of its markets; the CAISO should not be required to do so, either.

Although the CAISO did not include explicit virtual bidding as an element of the new market design, the CAISO's new software and systems will be designed to accommodate the potential implementation of virtual bidding in the future.⁵⁷ Further, the CAISO has made a commitment to work with the MSC and stakeholders to conduct an evaluation of the new market design once it is implemented and to determine, *inter alia*, when it might be appropriate to implement virtual bidding. Transmittal Letter at 123, 126.

N. Other Issues

1. Demand Response

The CAISO has explained that it has developed means for Demand resources to participate in the ISO Markets. Transmittal Letter at 122, Appendix A at ¶¶ 127-129.

SWP argues that the CAISO's Demand response proposal here does not accommodate the wholesale Demand response that SWP provides under ETCs. It asserts that either the CAISO should accommodate such resources, or they should be permitted through self-provision or through bilateral transactions outside of RUC, IFP, or other CAISO mechanisms, consistent with provisions in Order No. 888 mandating that Ancillary Services may be self-provided. SWP at 15-16.

The Commission has previously indicated that the CAISO should work with SWP to resolve these issues, and discussions have taken place.

CAISO staff met with SWP operations personnel on January 9, 2003 to consider and resolve the SWP's concerns with aqueduct pump load participation in the CAISO Markets under MD02. The respective staffs discussed 11 specific SWP concerns. Of these 11 concerns, six were related to load or demand participation in the CAISO Markets under MD02. This working session resulted in all issues being resolved to SWP's satisfaction.

Recent CAISO market design modifications and prior meetings with SWP Operations staff, had addressed these SWP concerns, so as to accommodate

⁵⁷ Some parties argued that the new software and systems should not even accommodate the virtual bidding functionality. Thus, the CAISO's actions reflect a middle ground between the

continued participation by the State's aqueduct pumps, and others similarly situated. In March 2001, the CAISO changed its bidding and dispatch procedures to allow A/S bidders to flag their resources for dispatch in grid contingency situations only, as opposed to dispatch for provision of balancing Energy. This dispatch option, in conjunction with operating agreements, related to the aggregation of individual aqueduct pumps into groups of pumps for market bids, satisfied most of the SWP's concerns relative to excessive dispatch of their aqueduct pumps.

Notes from this working session, which recapped the resolution of each issue, were sent to SWP for confirmation on January 27, 2003. To the CAISO's knowledge, all outstanding SWP concerns regarding demand participation were addressed and resolved at that time. To the extent specific issues still remain, the CAISO is prepared to sit down with SWP and resolve such issues. The CAISO notes that these are complex issues and should not be dealt with in a generic manner in this policy stage of the proceeding. If necessary, the issues can be worked out in the course of finalizing the specific business rules that will ultimately lead to a tariff filing.

2. Impact of MD02 On Metered Subsystems

The CAISO has incorporated the Metered Subsystem ("MSS") concept into the Proposal. Transmittal Letter at 16, 122-123, Attachment A at ¶¶ 10, 112, 147-157.

NCPA contends that depending on how the Commission rules relative to the CAISO's broad load aggregation under LMP, the Commission or the CAISO

"extreme" positions taken by parties in the IFM Working Group on the issue of virtual bidding.

should identify that a mechanism to ensure the protections recently mandated by a Commission order relative to Unaccounted for Energy (“UFE”) is maintained. NCPA at 19-20.

The CAISO does not disagree with NCPA’s contention, and additional mechanisms should not be needed. UFE is calculated for each MSS based on Generation, imports, exports, loads, and losses. The cost or the location does not impact the UFE calculation.

SVP expresses concerns that important MSS components and principles, (e.g., the MSS Agreement between SVP and the CAISO) will be jeopardized by the Proposal. SVP at 7, 17, 35, 40-45.

As stated in paragraph 147 in Attachment A to the July 22 Filing, the CAISO is making special accommodations for MSS Operators under the new market design. The CAISO agrees that additional discussions with MSS Operators will be needed to integrate the MSS concepts into the new design. However, the CAISO intends to honor the MSS Agreements and is attempting to promote the concept with additional governmental entities.

3. Interaction Between the Proposal and the Participating Intermittent Resource Program

FPLE/AWEA assert that a number of features of the Proposal (Day-Ahead must-offer, RUC, CRR design changes, and settlement changes) will interfere with the CAISO’s Participating Intermittent Resource Program (“PIRP”) established by Amendment No. 42, and proposes procedures to deal with this supposed interference. FPLE/AWEA at 13-14.

FPLE/AWEA raise an important issue. The CAISO understands the importance of intermittent resources to the California supply portfolio and has recognized the special needs of these generators. For example, the CAISO filed special provisions covering intermittent resources with regard to the Uninstructed Deviation Penalties filed in Phase 1B of MD02 (Amendment No. 54).

The CAISO recognizes the need to accommodate the special features of intermittent resources in developing the details of the market design. These issues will be addressed in the stakeholder process proposed herein. In any event, the CAISO's intent is to encourage additional participation and not have the market design be an impediment to intermittent generators.

4. Reason the Proposal Does Not Address Load Following

Reliant/Mirant state that the Proposal does not address load following, and asserts that buyers and sellers should have the ability to contract for load following service. Reliant/Mirant at 31. The CAISO disagrees that it is necessary or advisable to develop a discrete load following service at this time.

First, it is important to remember that the Proposal contemplates retention of the CAISO's Hour-Ahead Market. Thus, Market Participants already have an additional opportunity to adjust their portfolios closer to real time to recognize changes in Demand. The Hour-Ahead Market already is an additional level of complexity absent from many of the eastern independent system operators or RTOs.

Second, the CAISO has entered into MSS Agreements with certain load-serving governmental entities. These agreements have specific provisions

allowing the MSSs to load follow using their own resources within certain parameters. Third, the Market Participants have the option of increasing their supply resources above the submitted schedules to meet real-time needs.

While the CAISO does not wish to foreclose future debate on this issue, the CAISO considers a discrete load following service to be an additional complication that does not provide sufficient benefits to warrant implementation at this time.

5. Reason the Proposal Does Not Address the Capacity Benefit Margin

Reliant/Mirant also fault the Proposal for not addressing how it will treat the Capacity Benefit Margin (“CBM”). Reliant/Mirant at 31. The Proposal focuses on changes necessary to incorporate the new market structure. CBMs are used under certain conditions to ensure the reliability of the ISO Controlled Grid. The CAISO has not proposed any changes to the manner in which it would need to set CBMs. Accordingly, the issue is outside the scope of this proceeding.

III. CONCLUSION

Wherefore, for the foregoing reasons, the CAISO respectfully requests that the Commission accept the Proposal in its entirety. The Proposal represents a sound a balanced program for improving the California electricity market. Accordingly, the CAISO urges the Commission to act expeditiously to enable the CAISO to continue with the detailed implementation of the redesigned market.

Respectfully submitted,

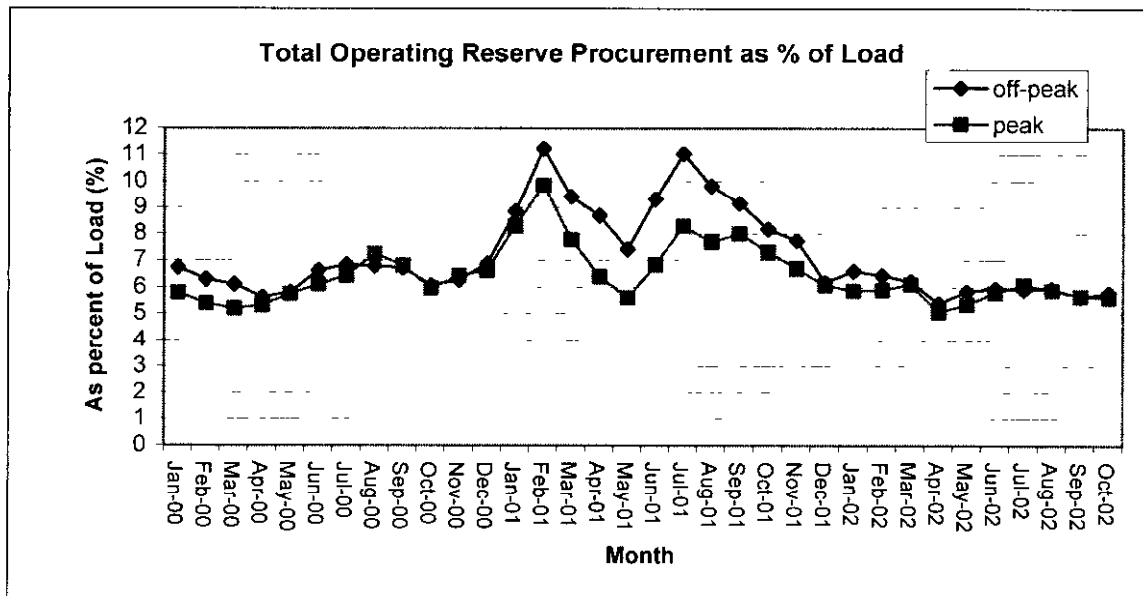
Charles F. Robinson
General Counsel
Anthony J. Ivancovich
Senior Regulatory Counsel
The California Independent System
Operator Corporation
151 Blue Ravine Road
Folsom, CA 95630
Tel: (916) 608-7049
Fax: (916) 608-7296

David B. Rubin
Julia Moore
Bradley R. Miliauskas
Swidler Berlin Shereff Friedman, LLP
3000 K Street, Suite 300
Washington, DC 20007
Tel: (202) 424-7500
Fax: (202) 424-7643

Date: September 17, 2003

ATTACHMENT 1

Operating Reserve (Spin and Non-Spin) procurement levels as a percentage of load in 2002 were consistent with those in 2000. In 2001, ISO operators had altered their purchasing patterns in response to changing levels of AS self-provision. Beginning approximately February 2001, scheduling coordinators began self-providing AS at a rate higher than that seen previously. Over time, the ISO Operators gained confidence in the extent of actual self-provision through observation and experience with the market, and were able to adjust market-purchasing levels accordingly. While there were changes in operating reserve requirements (and procurements) during 2001, the ISO's purchases of operating reserves were consistent on a percentage-of-load basis before and after 2001, as shown in Figure 7.



ATTACHMENT 2

Average A/S Prices

Period	Regulation Up	Regulation Down	Spin	Non-Spin
Sep 99 - Apr 00*	\$15.09	\$16.09	\$5.33	\$2.18
May 00 - Jul 01	\$96.75	\$68.50	\$70.23	\$54.81
Aug 01 - Dec 01	\$22.63	\$18.84	\$36.79	\$8.48
Jan 02 - Dec 02	\$13.37	\$14.60	\$9.68	\$4.80
Jan 03 - Aug 03	\$19.78	\$20.98	\$10.90	\$6.69

* Data prior to Sep 99 pre-dates Rational Buyer and separate pricing for Regulation Up and Down and therefore would be inappropriate for comparison.

ATTACHMENT 3

Summary of Existing Contracts Number and Capacity of Existing Contract Terminating

	Transmission Control Agreement Filing March 31, 1997					
	PG&E #	MW ^{1/}	SCE #	MW MW	SDG&E #	MW ^{1/}
1994						
1995						
1996						
1997	1		1	24		
1998			5	101		
1999	4		3	475		
2000	1		6	100 ^{2/}		
2001						
2002	2					
2003	1		1	422		
2004	3		5	1913		
2005	12		2	310		
2006						
2007	4		8	2223		
2008	2					
2009	1		6	594		
2010	1		2	208		
2011						
2012						
2013	2					
2014	1					
2015	2					
2016	2		1	60		
2017	1		7	425		
2018						
2019			1	3 ^{3/}		
2020+	2		12	905 ^{4/}	5	
Unknown	52		16	1871 ^{5/}	1	
Total	94		76	6755	6	

NOTES.

- PG&E listed the WSPF Agreement with 137 parties
- 1/ PG&E and SDG&E did not include capacity amounts for their agreements
- 2/ Only one contract had capacity amount listed
- 3/ Capacity amount not listed
- 4/ Two contracts did not list capacity
- 5/ Three contracts did not list capacity

	Transmission Control Agreement Filing December 1997					
	PG&E #	MW ^{1/}	SCE #	MW MW	SDG&E #	MW ^{1/}
1994	1					
1995						
1996	1					
1997	6					
1998			6	151		
1999	4		3	240		
2000	2		2	100 ^{2/}		
2001			2	55		
2002	1		3	578		
2003	1		9	490		
2004	3		9	3012 043		
2005	12		2	310		
2006			2	3 ^{3/}		
2007	4		8	2223		
2008	2					
2009	1		3	898		
2010	1		3	253		
2011						
2012			1	100		
2013	2					
2014	1		1	24		
2015	1					
2016	3		1	60		
2017	1		6	173 ^{4/}		
2018						
2019			1	5 ^{5/}		
2020+	3		11	1186 ^{6/}		
Unknown	67		24	1762 ^{7/}		
Total	117		97	8394 043		

NOTES.

- PG&E listed the WSPF Agreement with 172 parties
- 1/ PG&E did not include capacity amounts for their agreements
- 2/ Only one contract had capacity amount listed
- 3/ Capacity amount not listed
- 4/ Two contracts did not list capacity
- 5/ Capacity amount not listed
- 6/ Two contracts did not list capacity
- 7/ Four contracts do not list capacity

**Summary of Existing Contracts
Number and Capacity of Existing Contract Terminating**

Transmission Control Agreement Filing February 20, 1998				Transmission Control Agreement Filing December 21, 2000			
1994	#	MW	#	PG&E		SDG&E	
				MW	#	MW	#
1994	1						
1995							
1996	1						
1997	6						
1998		151	6				
1999	3	240	3				
2000	2	100 ^{2/}	2				
2001	2	55	2				
2002	2	578	3				
2003	1	490	9				
2004	3	3012 043	9				
2005	12	310	2				
2006		2	2				
2007	4	2223	8				
2008	2	898	3				
2009	1	898	3				
2010	1	253	3				
2011							
2012	2	100	1				
2013			2				
2014	1	24	1				
2015	1		1				
2016	3	60	1				
2017	1	173 ^{4/}	6				
2018							
2019	2	1186 ^{6/}	1				
2020+	5	1762 ^{11/}	11				
Unknown	68	1762 ^{11/}	24				
Total	117	8394 043	97				

NOTES:
 PG&E listed the WSPF Agreement with 175 parties
 1/ PG&E and SDG&E did not include capacity amounts for their agreements
 2/ Only one contract had capacity amount listed
 3/ Capacity amount not listed
 4/ Two contracts did not list capacity
 5/ Capacity amount not listed
 6/ Two contracts did not list capacity
 7/ Four contracts do not list capacity

Transmission Control Agreement Filing December 21, 2000				Transmission Control Agreement Filing February 20, 1998			
1994	#	MW	#	PG&E		SDG&E	
				MW	#	MW	#
1994	1						
1995							
1996	1						
1997	6						
1998		151	6				
1999	4	240	3				
2000	2	100 ^{2/}	2				
2001	2	55	2				
2002	1	578	3				
2003	1	490	9				
2004	3	3012 043	9				
2005	12	310	2				
2006		2	2				
2007	4	2223	8				
2008	2	898	3				
2009	1	898	3				
2010	1	253	3				
2011							
2012	1	100	1				
2013	2		2				
2014	1	24	1				
2015	1		1				
2016	3	60	1				
2017	1	173 ^{4/}	6				
2018							
2019	1	1186 ^{6/}	1				
2020+	3	1762 ^{11/}	11				
Unknown	67	1762 ^{11/}	24				
Total	117	8394 043	97				

NOTES:
 PG&E listed the WSPF Agreement with 175 parties
 1/ PG&E and SDG&E did not include capacity amounts for their agreements
 2/ Only one contract had capacity amount listed
 3/ Capacity amount not listed
 4/ Two contracts did not list capacity
 5/ Capacity amount not listed
 6/ Two contracts did not list capacity
 7/ Four contracts do not list capacity

Summary of Existing Contracts Number and Capacity of Existing Contract Terminating

ER00-2019-006
Exhibit No. —

Transmission Control Agreement Filing November 25, 2002																								
	PG&E			SCE			SDG&E			Vernon			Anahelm			Azusa			Banning			Riverside		
	#	MW	#	#	MW	#	#	MW	#	MW	#	MW	#	MW	#	MW	#	MW	#	MW	#	MW		
1994																								
1995																								
1996																								
1997																								
1998																								
1999																								
2000	1																							
2001	1																							
2002		3	228																					
2003	1	14	125																					
2004		12	3901.043																					
2005	9	3	810																					
2006	1	2	1076																					
2007	3	7	1993									121												
2008	2																							
2009	3																							
2010		1	215																					
2011																								
2012		1	100																					
2013																								
2014	1																							
2015	1																							
2016	4																							
2017	1	3	136 ^{2/}																					
2018																								
2019		1																						
2020+	3	9	1098 ^{4/}																					
Unknown	7	14	1675																					
Total	38	70	10123.043	8								2	121	1	20	1	10							20

NOTES:

- 1/ PG&E and SDG&E did not include capacity amounts for their agreements
- 2/ One contract did not list the capacity amount
- 3/ Capacity amount not listed
- 4/ Two contracts did not list capacity

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in the above-captioned proceeding, in accordance with Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, CA, on this 17th day of September, 2003.

/s/ Anthony J. Ivancovich
Anthony J. Ivancovich