

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

**California Independent System
Operator Corporation**

)
)
)
)
)
)
)

Docket No. RT01-85-000

**SUBMISSION OF
THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION,
SAN DIEGO GAS AND ELECTRIC COMPANY, AND SOUTHERN
CALIFORNIA EDISON COMPANY
REGARDING REGIONAL TRANSMISSION ORGANIZATION PLANS**

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	EXECUTIVE SUMMARY	5
III.	THE CAISO'S HISTORY AND OPERATIONS	9
A.	Establishment and Operations	9
IV.	THE CAISO WILL SATISFY THE REQUIREMENTS FOR A REGIONAL TRANSMISSION ORGANIZATION WITHIN THE APPLICABLE TIME FRAMES	15
A.	Order No. 2000's Four RTO Characteristics	16
B.	Order No. 2000's RTO Functions	20
C.	Other Issues	25
V.	THE CAISO INTENDS TO CONTINUE ITS EFFORTS TO ENHANCE REGIONAL COOPERATION ON TRANSMISSION ISSUES, INCLUDING THE ELIMINATION OF RATE PANCAKING, AND WILL CONTINUE DISCUSSIONS REGARDING A WESTERN INTERCONNECTION-WIDE RTO THAT DOES NOT INTERFERE WITH STATE INTERESTS IN MARKET AND RESOURCE ISSUES	28
VI.	CONCLUSION	32

Appendix

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

**California Independent System
Operator Corporation**

)
)
)
)
)
)
)

Docket No. RT01-85-000

**SUBMISSION OF
THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION,
SAN DIEGO GAS AND ELECTRIC COMPANY, AND SOUTHERN
CALIFORNIA EDISON COMPANY
REGARDING REGIONAL TRANSMISSION ORGANIZATION PLANS**

I. INTRODUCTION

Pursuant to the Commission's Order of April 26, 2001,¹ Order No. 2000,² and Rule 207 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.207, the California Independent System Operator Corporation ("CAISO"),³ San Diego Gas & Electric Company ("SDG&E"), and Southern California Edison

¹ *San Diego Gas & Electric Co. v. Sellers of Energy, etc.*, 95 FERC ¶ 61,115 (2001) ("April 26 Order").

² *Regional Transmission Organizations*, Order No. 2000, 65 Fed. Reg. 809 (Jan. 6, 2000), FERC Stats. & Regs. Preambles ¶ 31,089 (Jan. 6, 2000), *order on reh'g*, Order No. 2000-A, 90 FERC ¶ 61,201, FERC Stats. & Regs. Preambles ¶ 31,092 (Feb. 25, 2000) ("Order No. 2000" or the "RTO Rule").

³ Unless otherwise specified, capitalized terms are used in the sense given in the Master Definitions Supplement, Appendix A to the ISO Tariff.

Company (“SCE”) submit this filing updating their plans to comply with Order No. 2000.⁴

SDG&E and SCE join the CAISO in the submission of this filing, support the CAISO’s plans to achieve compliance with Order No. 2000, and are working cooperatively with the CAISO to implement the necessary market design reforms. SDG&E and SCE believe that the implementation details associated with these reforms are important but beyond the scope of this submittal.⁵ SDG&E and SCE support the overall conclusions reached in this filing about the CAISO’s ability to operate as an RTO-compliant institution.

As explained in the CAISO’s Request for Rehearing of the April 26 Order, the CAISO submits this filing under protest, as the Commission cannot lawfully condition the mitigation of unjust and unreasonable wholesale electricity prices on the submission of filings on unrelated matters in other dockets. The Commission’s attempt to condition its duty to protect consumers against unjust and unreasonable prices and to mitigate market power on a filing addressing whether the CAISO meets the requirements of Order No. 2000 is illegitimate and unlawful.

⁴ The Commission’s April 26 Order unfortunately ignored the substance of the CAISO’s January 16, 2001 filing, in which the CAISO explained its plans and efforts to that date in complying with Order No. 2000, as well as the obstacles to such compliance, as required by Order No. 2000. See Order No. 2000, *FERC Stats. & Regs., Regs. Preambles* ¶ 31,089 at 31,222-23. As we explain below, since the January 16 filing, the obstacles to the CAISO’s participation in a regional RTO have only increased.

⁵ For SDG&E’s views on the implementation details, see *Submission of San Diego Gas & Electric Company Describing Reforms That The California Independent System Operator Must Make to Qualify Conditionally As A Regional Transmission Organization*, Docket No. RT01-82-000 (January 16, 2001).

As the CAISO explained in its Request for Rehearing of the April 26 order, the Commission's primary responsibility under the Federal Power Act ("FPA") is to protect consumers against excessive wholesale rates.⁶ Wholesale rates must reflect the cost of production, unless clear evidence demonstrates the existence of market conditions that ensure that market-based wholesale charges will remain at just and reasonable levels.⁷ Having found that wholesale power markets in California are not competitive and that price mitigation measures are necessary to prevent suppliers from collecting unjust and unreasonable rates, the Commission may not condition implementation of such measures on the submission of unrelated filings by *wholesale purchasers*. The Commission's policy favoring the *voluntary* formation of regional transmission organizations ("RTOs"), however strongly held, cannot justify the threatened or actual refusal to

⁶ See e.g., *Towns of Concord, Norwood, and Wellesley, Massachusetts, v. Federal Energy Regulatory Comm'n*, 955 F.2d 67, 68 (D.C. Cir. 1992) ("The Federal Power Act . . . vests the Federal Energy Regulatory Commission with responsibility for ensuring that all rates charged by utilities within the Commission's jurisdiction are 'just and reasonable.'") (quoting 16 U.S.C. § 824d(a)); *Sunflower Elec. Coop., Inc. v. Kansas Power and Light Co.*, 603 F.2d 791, 798-99 (10th Cir. 1979) ("[T]he Commission's primary responsibility lies in the area of rates and charges. . . . The Commission may suspend rate charges, determine the just and reasonable rate that is to be charged and fix or establish such a rate.") (quoting 16 U.S.C. § 824d(a), 824d(e) and describing the authority of the Commission's predecessor, the Federal Power Commission); *Maine Public Service Company v. Federal Power Commission*, 579 F.2d 659, 664 (1st Cir.1978) ("The primary purpose of this mechanism is to protect consumers from excessive rates and charges--any protection received by a utility is incidental."); *Natl. Ass'n for the Advancement of Colored People v. FPC*, 520 F.2d 432, 438 (D.C.Cir. 1975) ("Of the Commission's primary task there is no doubt, however, and that is to guard the consumer from exploitation by non-competitive electric power companies."); *Federal Power Commission v. Sierra Pacific Power Co.*, 350 U.S. 348, 355 (1956) ("That the purpose of the power given the Commission by section 206(a) is the protection of the public interest, as distinguished from the private interests of the utilities, is evidenced by the recital in [section] 201 of the Act that the scheme of regulation imposed is 'necessary in the public interest.'").

fulfill its primary statutory mission: protecting customers against unjust and unreasonable wholesale electric rates.

Such a tactic is particularly inappropriate when applied to wholesale purchasers in California, which was the first state in the nation to restructure its electricity markets to encourage greater competition. This restructuring was undertaken in reliance on the Commission's authority to police wholesale rates to prevent the exercise of market power, and in the expectation that the Commission would faithfully exercise that authority.⁸ The urgency of the current situation – in which many billions of dollars have been drained out of California's economy, the business community's confidence has been shaken by exorbitant prices and intermittent blackouts, and some residents have suffered severe financial hardships – calls for a prompt, humane, and non-ideological response in accordance with the Commission's statutory obligations. Moreover, a policy of holding necessary market power mitigation measures hostage to RTO filings is doomed to failure. Few states will wish to undertake restructuring programs to

⁷ See *Elizabethtown Gas Co. v. FERC*, 10 F.3d 866, 870-71 (D.C.Cir. 1993); *Farmers Union Cent. Exchange, Inc. v. FERC*, 734 F.2d 1486, 1510 (D.C.Cir. 1984).

⁸ Indeed, the CAISO would respectfully suggest that the Commission itself has played an unwitting part in exacerbating the crisis. For example, in *California Independent Sys. Operator Corp.*, 90 FERC ¶ 61,006, *reh'g denied*, 91 FERC ¶ 61,026 (2000), (Amendment No. 23 to the CAISO Tariff), the Commission denied the CAISO's requested authority to mitigate locational market power, forcing the CAISO and California utilities to pay up to \$750 per MWh for Energy. More recently, the Commission has limited the CAISO's ability to require Generators to produce Energy, resulting in blackouts during some hours. See *California Independent Sys. Operator Corp.*, 94 FERC ¶ 61,132 at 61,510 (2001). And, as the CAISO has argued in its May 26 Request for Rehearing on the April 26 Order, the Commission has yet to formulate an adequate strategy for addressing market power problems in California. *Motion for Clarification and Request for Rehearing of the California Independent System Operator Corporation*, Docket Nos. EL00-95-12, et al. May 25, 2001.

expand the role of competition in the electricity supply sector if they perceive that the Commission is unwilling to support their efforts by fulfilling its responsibility to ensure conditions in the wholesale power markets are and remain competitive.⁹

Without waiving these or any of its other objections to the April 26 Order, the CAISO describes in this submission its plans to continue to function as a state-wide regional transmission organization, its proposals for the promotion of inter-regional cooperation on transmission issues, and its intention to promote near-term steps to eliminate transmission-related impediments to the access of consumers throughout the Western Interconnection to reasonably priced power. The CAISO reserves its right to withdraw this submission if, in addition, to considering the reforms needed to bring the CAISO into full compliance with Order No. 2000 and the near-term steps described above, the Commission were to order the CAISO to join another regional transmission organization or otherwise fundamentally alter this proposal. The CAISO also reserves all of its rights to challenge the objectionable portions of the April 26 Order and to withdraw any part or all of the proposal described in this filing in the event that relief is granted on its protest.

II. EXECUTIVE SUMMARY

The CAISO has operated the combined California transmission grid and related markets since its inception on March 31, 1998. In place of three separately-operated control areas and transmission systems with pancaked transmission rates and separate access requirements, the CAISO exercises

⁹ In fact, Nevada has recently repealed its restructuring statute. See AB 369, April 18, 2001. Rhode Island's legislature is considering a similar step. See H 6402.

integrated operational control over the approximately 25,526 circuit miles of transmission facilities owned by the four Participating Transmission Owners.¹⁰

This assures open and non-discriminatory transmission access on the basis of non-pancaked rates to a grid that is by many measures larger than that of any of the other functioning independent system operators. The CAISO also operates open markets for balancing energy, congestion management, and ancillary services that attempt to make maximum use of market mechanisms to assure reliability.

As explained below, the CAISO satisfies, or will satisfy upon completion of ongoing reform efforts, the requirements that Order No. 2000 establishes for RTOs. The CAISO has acknowledged needed improvements to its markets and institutions. Processes, to put these improvements are underway even though most of the necessary improvements relate to market functions that Order No. 2000 does not require RTOs to perform. The CAISO continues to strive to meet the challenges facing California, including implementing these improvements.

The CAISO recognizes that the Western transmission system generally would benefit from greater cooperation among system operators and utilities to

¹⁰ The three original Participating Transmission Owners are Pacific Gas and Electric Company, San Diego Gas and Electric Company, and Southern California Edison Company. Effective January 1, 2001, the City of Vernon, California became the fourth Participating Transmission Owner. Originally, California included the Control Areas of the three original Participating Transmission Owners, and the Los Angeles Department of Water and Power, the City of Pasadena, and the Imperial Irrigation District. In July 1999, the City of Pasadena's Control Area became part of the CAISO Control Area, as well. Furthermore, Sierra Pacific Resources, PacifiCorp, and the Western Area Power Authority are Control Area operators that have portions of their control areas in California.

resolve “seams” issues, enhance regional planning for grid enhancements, and eliminate impediments to regional trading; indeed, such transmission issues are the principal focus of Order No. 2000. However, many of the urgent challenges facing California are not primarily related to regional transmission issues. While some of these issues occur throughout the entire West (e.g. shortfalls in generating capacity), other issues are addressed most effectively in the near term through reforms and ongoing processes in the existing California electricity markets (e.g., flaws in certain market rules, financial weakness of utilities responsible for serving loads, and the need for mechanisms to enhance the ability of loads to respond to high prices). In addition, as the Commission is aware, an agreement in principle has been reached for a State agency to acquire significant transmission facilities currently operated by the CAISO. Accordingly, any effort undertaken to promote greater regional coordination on transmission issues must be structured to accommodate public ownership of transmission facilities and to permit State authorities and the representatives of California’s consumers to continue to play a key role in addressing the challenges presented by California’s electricity markets.

The CAISO submits that formation of an Interconnection-wide RTO would not be prudent at this time. There are practical difficulties facing the formation of such an organization that preserves an appropriate role for state authorities.. Such an RTO would either have to accommodate all the different market structures that likely will develop in the region, or await an agreement among all affected entities on a common market structure. It simply would be counter-

productive for the Commission to focus on such long-term institutional issues to the exclusion of urgent efforts to restore just and reasonable rates to California and near-term steps to facilitate regional transmission access and improved coordination.

At the same time, the CAISO recognizes the benefits to California and the entire West of easier transmission access and greater coordination in the planning and operation of the transmission systems in the Western Interconnection. Progress in these areas, however, need not await the formation of an Interconnection-wide RTO. The ISO is already in discussions with Desert Star and RTO West and will continue to meet with these entities on seams and other issues that involve coordination among control areas. Moreover, the CAISO intends to propose several specific measures designed to address these issues in the near term:

- First, the CAISO will work with various California parties and other proposed RTOs to develop a proposal that will waive, under appropriate circumstances, wheeling charges for deliveries from resources located on the CAISO Controlled Grid for other operating RTOs offering reciprocal relief. This measure, if reciprocated by other RTOs, would remove pancaked transmission rate and accomplish the creation of an integrated regional transmission system.
- Second, the CAISO intends to enter into discussions with other proposed RTOs to investigate means of eliminating inconsistent scheduling rules or practices that impair interstate transactions, and to promote joint regional expansion projects that could be of mutual or region-wide benefit.
- Finally, the CAISO proposes to begin discussions with other western RTOs regarding the feasibility and desirability of using a common approach to facilitating access to the transmission services offered by each RTO. Consistency in approach, if achieved, will harmonize and integrate the transmission services that are needed to support an efficient regional wholesale electricity market in the West. The ISO will provide the Commission with semi-annual progress reports on this issue.

If there is ever to be a robust and truly competitive market in the West, all participants in that market must be assured of open and non-discriminatory transmission access under comparable terms and conditions. Absent a level playing field throughout the West, the market anomalies that have occurred throughout the West, but particularly in California, will continue. Competitive electricity markets can flourish only when built upon a solid foundation that consist of adequate generation and transmission infrastructure and comparable treatment of all participants. However, building a new, level playing field that satisfies the diverse interests throughout the West will take time, as well as the investment of financial, political, and intellectual capital. The Commission cannot mandate the creation of such markets or the participation by individual States in the development of regional institutions by regulatory fiat. Rather, the Commission should work cooperatively with the affected States to create conditions that will assure them that the creation of the Western Interconnection-wide RTO is consistent with their own interests and will not increase their consumers' exposure to run-away wholesale prices.

III. THE CAISO'S HISTORY AND OPERATIONS

A. Establishment and Operations

On March 31, 1998, the CAISO took on the challenge of managing the most heavily-populated Control Area in the United States, in an electricity generation market making the transition from regulation to competition. Created by the State of California as part of its first-in-the-nation electricity market restructuring program, the CAISO is a California nonprofit public benefit

corporation charged with securing reliable electric service on the "CAISO Controlled Grid", which represents 75 percent of California's electric transmission grid,¹¹ or approximately 25,526 circuit miles.¹²

Geographically, the ISO Controlled Grid is the second largest regionally-operated transmission grid in the country, covering approximately 124,000 square miles.¹³ This is two-and-a-half times the size of the three-state PJM grid, and about 70% larger than the six-state ISO-New England grid. Prior to the formation of the CAISO, California had six separate Control Areas, three of which belonged to the original Participating Transmission Owners and three of which were public power Control Areas. Today, four of the original Control Areas have been combined to establish the CAISO's Control Area.¹⁴ The CAISO is the only ISO in the country formed by combining Control Areas that were not already substantially integrated, or by restructuring a pre-existing tight power pool. Instead, the CAISO started with a patchwork of geographical monopolies, both investor-owned and governmental, each comprising a separate, vertically integrated system of generation, transmission, and distribution facilities. The diversity and lack of integration between these Control Areas and the utilities

¹¹ See <http://www.caiso.com/aboutus/infokit/PowerGrid.html>; <http://www.caiso.com/aboutus/infokit/map/>

¹² 2000 CAISO Annual Report at 2.

¹³ On June 1, 2001, ERCOT (Texas) will commence operation as a single control area, making it first in size.

¹⁴ As previously noted, Sierra Pacific Resources, PacifiCorp, and the Western Area Power Authority are Control Area operators that have portions of their Control Areas in California.

serving them had presented barriers to the development of a competitive electricity market. The Participating Transmission Owners' transfer of operational control over their transmission facilities to the CAISO transformed these disparate systems into a single, large, operationally-integrated transmission grid. As a result of its efforts in effecting this integration, the CAISO has more real-world experience than any other ISO in overcoming the challenges of unifying diverse, non-integrated, non-pooled regions, as an RTO must do.

CAISO operates its transmission grid from a primary control center at its headquarters in Folsom, California, with a backup control center at its satellite operations center at Alhambra, California. The CAISO oversees the dispatch of more than 1143 power plants, about 300 more than are interconnected to the national grids of England and France combined, and more plants than are coordinated by any other ISO.¹⁵ These plants supply up to 45,000 MW of capacity at peak, or nearly 7% of the nation's peak load.¹⁶ The CAISO has an annual load of approximately 239 billion Kwhs, which represents close to 30% of the load in the WSCC.¹⁷ Electricity is delivered by the CAISO each year to serve the annual energy needs of approximately 34 million people (*i.e.*, about 12% of the population of the United States).¹⁸ The CAISO handles 43 million MWh or up

¹⁵ 1998 CAISO Annual Report at 2.

¹⁶ *See Id.*

¹⁷ 2000 CAISO Annual Report at 3.

¹⁸ *Compare* 2000 CAISO Annual Report at 1 (CAISO estimate of population served) *with* <http://www.census.gov/population/estimates/nation/intfile1-1.txt> (U.S. Census Bureau estimate of total U.S. population in 2000).

to 3.5 million transactions per month,¹⁹ and settled more than \$1.7 billion in market transactions in 1999, and about \$6.1 billion in 2000.²⁰ As one of three WSCC Security Coordinators, the CAISO also monitors transmission security for the most populous portion of a 16-state area.²¹

The CAISO discharges its responsibilities by operating and managing the transmission grid system so as to ensure system reliability. While circumstances have changed dramatically in recent months, the CAISO continues to operate six discrete markets: (1) real-time Imbalance Energy; (2) Spinning Reserve; (3) Non-Spinning Reserve; (4) Regulation Service; (5) Replacement Reserves; and (6) Congestion Management. The purpose of the real-time Imbalance Energy market is to match the variance of Generation to Load on a moment-to-moment basis by dispatching, in real-time, Generation bid into the market for that purpose. Market traders, called Scheduling Coordinators, are paid the market-clearing price if their bids to supply this Generation are accepted, or are charged the market clearing price if they need extra Energy to meet their Load (subject to certain mitigation rules adopted by the Commission).²²

¹⁹ 2000 CAISO Annual Report at 14.

²⁰ 1999 CAISO Annual Report at 1, 2000 CAISO Annual Report at 24.

²¹ See <http://www.caiso.com/aboutus/infokit/ControlCenter.html>.

²² As discussed below, the Commission has directed changes in the pricing rules for the ISO's markets to mitigate high prices that prevail under certain circumstances. See April 26 Order, 95 FERC at 61,360.

The CAISO conducts both day-ahead and hour-ahead Ancillary Services markets. The CAISO facilitates such markets in order to procure competitively, on behalf of Scheduling Coordinators, the reserves necessary to satisfy the WSCC Minimum Operating Reliability Criteria. The Ancillary Services markets enable Scheduling Coordinators who choose not to self-supply their pro rata shares of the Control Area's obligations, to competitively procure Regulation, Spinning Reserves, Non-Spinning Reserves, and Replacement Reserves services. The CAISO is the only ISO that operates separate competitive markets for these Ancillary Services.

CAISO also operates a separate Congestion Management market that settles day-ahead and hour-ahead, and assigns use of constrained transmission facilities to the users that value such access the most, as reflected by their "Adjustment Bids." The CAISO uses the Adjustment Bids submitted to price capacity on congested transmission interfaces at its marginal value and to assign it to those users who will pay this price.²³

The CAISO offers transmission services on a uniform, non-discriminatory, non-pancaked basis; facilitates the safe, reliable, efficient operation of the ISO Controlled Grid as a single transmission system; and performs integrated transmission planning. Given three years of discharging its ISO responsibilities under the challenging conditions that have faced it, including ongoing efforts to design and implement improved market structures (e.g. a new facility interconnection policy, a long-term grid planning policy and reform of its market

²³ The CAISO's Congestion Management system will undergo a major overhaul to improve its efficiency and the accuracy of its price signals.

coordination protocols), the CAISO is closer to compliance with Order No. 2000 than most of the groups and entities that have submitted RTO proposals to the Commission so far. The CAISO also conducts market operations to a far greater extent than required of RTOs by Order No. 2000.

The CAISO acknowledges that it has faced unprecedented challenges since last spring. These challenges have multiplied since the CAISO's initial submission regarding its RTO plans. As the Commission has emphasized, competitive conditions do not prevail in the California electricity markets, a situation that undermines a critical foundation of the restructured electricity markets that depend upon the CAISO's operation of the grid. The lack of enough new generating capacity to serve increased load and the ability of suppliers to exercise market power and the exercise of market power by suppliers, combined with other factors, has led to unprecedented price increases, to periodic curtailments of firm load, to the collapse of the California Power Exchange and the transparent forward markets that it operated, and to the severe weakening of the financial condition of California's major investor-owned utilities. Creditworthiness and insolvency concerns have interfered with the CAISO's efforts to obtain commitment of adequate generation resources, and the filing for bankruptcy protection by Pacific Gas and Electric Company has greatly increased the uncertainty surrounding California's electricity markets. These unprecedented circumstances have created a crisis situation that has placed unforeseen stresses on the CAISO's markets and infrastructure. The CAISO has been compelled to take on responsibilities that go well beyond the role it was

intended to play, using tools designed for other purposes. The primary challenge currently facing the CAISO, in addition to maintaining reliability within the ISO Control Area, is to work with affected regulatory agencies and market participants to create a solid foundation for a new market design that will restore stability to the California electricity markets and the prices paid by consumers. The enhancements that the CAISO makes in the course of meeting this challenge will also facilitate its continued operation as a regional transmission organization.

IV. THE CAISO WILL SATISFY THE REQUIREMENTS FOR A REGIONAL TRANSMISSION ORGANIZATION WITHIN THE APPLICABLE TIME FRAMES

In its omnibus Order regarding the CAISO issued October 30, 1997, the Commission found that “the ISO meets the Commission’s eleven ISO principles set forth in Order No. 888.”²⁴ These eleven ISO principles are similar in many ways to the principles set forth in Order Nos. 2000 and 2000-A governing the establishment of RTOs.²⁵ While the Commission and the CAISO have identified a number of areas where improvements are needed in the CAISO’s market design and structure, the CAISO is already in substantial compliance with Order No. 2000. In this section we provide a summary analysis demonstrating the CAISO’s compliance with Order No. 2000’s RTO requirements, and describe the

²⁴ *Pacific Gas and Electric Co. et al*, 81 FERC ¶ 61,122 at 61,435 (1997).

²⁵ The eleven ISO principles include: (1) fair and nondiscriminatory governance structure; (2) no financial interest in market participants; (3) open, nondiscriminatory transmission access at non-pancaked rates; (4) primary responsibility in ensuring short term grid reliability; (5) control over operation of transmission facilities within its region; (6) identify and relieve system constraints; (7) appropriate efficiency incentives; (8) pricing policies promote efficient system use and investment; (9) provides timely transmission information; (10) coordinates with neighboring control areas; and

work that is underway to improve the CAISO's operations in the functional areas required of RTOs. This work represents part of the CAISO's effort to meet the challenges presented by current conditions. This summary briefly examines the CAISO's current status with regard to each of Order No. 2000's four required characteristics and eight required functions, as well as other requirements of the Rule. A more detailed discussion of the CAISO's compliance with the Commission's RTO standards is presented in Appendix to this submission.

A. Order No. 2000's Four RTO Characteristics

Independence. Order No. 2000 requires that an RTO be independent from Market Participant influence. The CAISO's institutional and governance structures were designed to provide such independence. After observing more than two years of CAISO operations, the Commission concluded that CAISO's original stakeholder Board of Governors did not provide a sufficient degree of independence.²⁶ In its November 1 and December 15 Orders, the Commission ordered that the current stakeholder Board be replaced with a non-stakeholder Board.²⁷ Subsequently, and under the direction of the State of California, the CAISO seated a new, non-stakeholder Board selected by the Governor of the State of California and comprising consumer advocates and other public representatives not associated with any Market Participant. The state statute establishing the new Board structure required that members of the

(11) establishes ADR procedure. See 81 FERC ¶ 61,122 at 61,446 – 61,463.

²⁶ See *San Diego Gas & Elec. Co. v. Sellers of Energy, etc.*, 93 FERC ¶ 61,294 (2000) ("December 15 Order")

²⁷ *Id.* at 31.

ISO Governing Board not be affiliated with any actual or potential participant in any market administered by the CAISO.²⁸ The CAISO bylaws revisions reflecting this change in the Board have been submitted for the Commission's approval in Docket No. ER01-1877-000.

The RTO, its employees, and any non-stakeholder directors must not have a financial interest in any market participant. As the Commission has noted, the CAISO is "a not-for-profit, public benefit corporation and therefore will have no financial interest in any market participant."²⁹ The Commission also required the CAISO to prohibit its employees from owning securities of Market Participants and this requirement is reflected in the CAISO's Employee's Code of Conduct.

With regard to the Board, procedures are in place to ensure that the CAISO Board of Governors are independent from Market Participant financial influences to the greatest possible extent. First, the California statute establishing the new, non-stakeholder Board provides that no member of this Board may "be affiliated with any actual or potential participant in any market administered by the Independent System Operator."³⁰ Second, both as a matter of state law and pursuant to the by-laws of the CAISO, each Governor has a fiduciary obligation to perform his duties in good faith in a manner that represents

²⁸ See CA Pub. Util. § 337(b) (as amended by A.B. No. 5, Jan. 18, 2001).

²⁹ October 1997 Order, 81 FERC at 61,454.

³⁰ CA Pub. Util. § 337 (b) (as amended by A.B. No.5, Jan. 18, 2001).

solely the interests of the CAISO.³¹ Third, the CAISO requires all Governors to disclose their financial investments in any entity engaged in the generation, transmission, marketing, or distribution of electricity. This information is available to the public upon request.³² Fourth, the Governing Board operates under an Open Meeting Policy and the CAISO makes all documents (subject to limited specific exemptions) available to the public. Finally, the Governors are monitored in order to ensure continued compliance with the code of conduct and other applicable provisions of federal and state law. Governors who fail to comply with these provisions are subject to reprimands, monetary fines, or termination.

In summary, the state-appointed Board of Governors is dedicated to meeting the needs of the consumers who rely on the ISO for reliable and affordable electricity.³³ The CAISO does not own any facilities for the production or transmission of electricity, and, although it procures Energy in its

³¹ See CA Corp. § 5231(a) (all directors of a non-profit, public benefit corporation to perform their duties in good faith, in a manner they believe to be in the best interests of the corporation). See also CAISO Bylaws, Article III, Section 14.1 (same), included as Attachment C. The revised CAISO Bylaws establishing the new state-appointed Board have been submitted to the Commission in Docket No. ER01-1877-000.

³² Governors Code of Conduct, Section (a)(12).

³³ The Commission has found that state participation in ISOs is appropriate (see e.g. *California Electricity Oversight Board*, 89 FERC ¶ 61,134 (1999), especially when the ISO's actions affect retail rates and other state-jurisdictional matters. See e.g. *California Electricity Oversight Board*, 88 FERC ¶ 61,172 (1999). Indeed, the Commission has recognized that "states have important roles to play in RTO matters." See Order No. 2000 at 31,213. Given that the CAISO operates only California's transmission system, the Commission has concluded that a significant degree of state involvement in CAISO is justified. 89 FERC at 61,383. The California Department of Water Resources ("DWR"), a state entity, has of necessity been an active purchaser in the energy market lately, it has done so in the public interest in order to make direct sales to retail consumers that would otherwise go unserved due to the weakened financial condition of California's investor-owned utilities.

Ancillary Services and Imbalance Energy markets, it does so solely on behalf of others. These and the other factors mentioned above permit the CAISO to act as an independent market facilitator rather than a Market Participant.

Scope and Regional Configuration. The CAISO currently meets all of Order No. 2000's RTO requirements relating to Scope and Regional Configuration. As noted previously, the CAISO Controlled Grid constitutes one of the largest Control Areas in the world. The CAISO's existing configuration also satisfies the factors identified in Order No. 2000 for the evaluation of boundaries, in that it encompasses a highly interconnected portion of the Western Interconnection in a single contiguous area, and is large enough to address market power concerns, and to promote competition, efficiency, and reliability. The fact that the CAISO's extensive transmission grid and Control Area are located entirely within a single state does not render its scope and configuration inadequate.³⁴ [See also App. at A.2.]

Operational Authority. The CAISO Tariff and Agreements give the CAISO full operational authority over all facilities that form the CAISO Controlled Grid. The CAISO is also the WSCC security coordinator for California. The CAISO has exercised such full operational authority over its grid for over three years. The CAISO thus fully satisfies Order No. 2000's Operational Authority requirement. [See also App. at A.3.]

³⁴ See *GridFlorida LLC, et al.* 94 FERC ¶ 61,61,363 (2001) (provisionally granting GridFlorida RTO status to operate a single-state RTO that would encompass a system considerably smaller than the CAISO's by any measure).

Short-Term Reliability. The CAISO currently meets all of Order No. 2000's short-term reliability requirements. The CAISO retains exclusive authority for maintaining the short-term reliability of the grid that it operates, including the exclusive authority for receiving, confirming, and implementing all interchange schedules. The CAISO is authorized to order re-dispatch of any Generator connected to transmission facilities it operates if necessary for the reliable operation of these facilities, as well as to approve all requests for Maintenance Outages of transmission facilities to ensure that the outages can be accommodated within established reliability standards. Moreover, on May 11, 2001, as directed by the Commission in its April 26 Order, the CAISO filed a proposal that will enable the CAISO to coordinate and approve the planned maintenance outages of Generating Units owned or controlled by Participating Generators. The CAISO's outage coordination proposal will further ensure that the CAISO is able to maintain the short-term reliability of the grid. The CAISO operates under reliability standards at least as stringent as those established by the WSCC and NERC, and will report to the Commission if there is a change in these standards that hinder it from providing reliable, non-discriminatory and efficiently priced transmission service. [See also App. at A.4.]

B. Order No. 2000's RTO Functions

Tariff Administration and Design. The CAISO currently meets all Order No. 2000 tariff administration and design requirements. The CAISO is the sole provider of transmission services on the grid it operates. The CAISO, not

the Participating Transmission Owners, has sole authority for the evaluation and approval of all requests for transmission service. The CAISO also serves as the sole administrator of its own open access transmission tariff. Thus, the CAISO has independent authority to file tariff changes with the Commission; Participating Transmission Owners have authority to file only their own transmission revenue requirements and transmission revenue balancing account mechanisms. Additionally, the CAISO Tariff's Access Charge methodology permits the transmission of power throughout the CAISO grid on the basis of non-pancaked charges. [See also App. at B.1.]

Congestion Management. The CAISO currently operates a Congestion Management market. CAISO's original Congestion Management System ("CMS"), which assigned scarce capacity to bidders based on locational zonal pricing, initially appeared capable of managing both inter-zonal and intra-zonal congestion effectively. However, in response to concerns expressed by the Commission, the CAISO began the process of overhauling the CMS through an open and active stakeholder process pursuant to the Commission's Order on Amendment No. 23 to the CAISO Tariff. The CAISO has engaged in extensive discussions on the elements of a new CMS, as well as related elements of redesigned markets. While the submission of a revised CMS design has been delayed by the CAISO's focus on meeting its immediate challenges, and by ongoing changes in market design resulting from efforts to stabilize the markets, the CAISO already fulfills the minimum RTO requirement. The CAISO believes that it will also be able to submit a long-term CMS re-design proposal that can be

implemented in late 2002 or early in 2003. Thus, substantially within the one-year deadline established by Order No. 2000, the CAISO expects to have a second-generation congestion management system in operation with enhancements that will improve its ability to ensure the most efficient possible use of scarce transmission capacity when congestion is present. [See also App. at B.2.]

Parallel Path Flows. The CAISO currently meets all of Order No. 2000's RTO requirements relating to parallel path flows. Because the CAISO transmission Access Charge does not depend on contract paths, parallel path flows within its extensive Control Area are internalized. Currently, loop flow issues outside the CAISO region are resolved by compliance with the Unscheduled Flow Mitigation Procedures for the California sub-region under policies applicable in the WSCC. The CAISO is also working to design and implement measures to address parallel path flows between its Control Area and other Control Areas, which measures will be in place well within the three-year window described in Order No. 2000. [See also App. at B.3.]

Ancillary Services. The CAISO serves as the provider of last resort for all Ancillary Services under its transmission tariff, through the use of competitive Ancillary Services markets. The CAISO determines the minimum required amount of each Ancillary Service and the locations at which each of them must be provided. Market Participants have the option of self-supplying or arranging with third parties for their Ancillary Services needs. The CAISO determines whether such arrangements are adequate. The CAISO also

operates an Imbalance Energy market to enable Market Participants to make real-time purchases to fine-tune their Energy supplies to match their Load responsibilities. Thus, the CAISO complies with Order No. 2000's Ancillary Service requirements. [See also App. A at B.4.]

OASIS, TTC and ATC. The CAISO is in the process of implementing its new OASIS, which will fully meet and exceed all of Order No. 2000's RTO requirements relating to OASIS, Total Transfer Capability (TTC), and Available Transfer Capacity (ATC). In addition to the CAISO's OASIS providing the market with all required information, the Secondary Market Registration System on Firm Transmission Rights is also available through the OASIS. The CAISO is the sole OASIS site administrator for the transmission facilities under its control. With daily input from the Participating Transmission Owners on Existing Rights, the CAISO calculates TTC and ATC values and develops procedures through which the validity of its ATC and TTC values are determined. The CAISO also coordinates its ATC estimates with adjacent Control Areas. [See also App. at B.5]

Market Monitoring. The CAISO has fully functioning market monitoring mechanisms in place, consisting of an internal Department of Market Analysis and an external, independent Market Surveillance Committee. In numerous orders, the Commission has recognized the work of the CAISO's market monitoring function and has directed its staff to work with the CAISO in its development of market monitoring and mitigation proposals. The CAISO's

Market Monitoring mechanism is in full compliance with Order No. 2000's requirements. [See also App. at B.6.]

Planning and Expansion. The current CAISO planning process satisfies Order No. 2000's planning and expansion requirements. In addition, further enhancements to the current CAISO planning process will be completed well within Order No. 2000's three-year window. The CAISO has already submitted revised generator interconnection policies to the Commission as Amendment No. 39 to its Tariff, filed April 2, 2001. It has also completed a state-mandated study identifying transmission obstacles and recommending resolutions under California statute AB 970. The CAISO believes that it will be able to submit the enhancements to its Planning and Expansion process requested by the Commission later this year. The CAISO's enhanced planning process will provide additional assurance that the ISO Controlled Grid is reliable and expanded in a manner necessary to support and facilitate the development of a coordinated regional transmission system. Moreover, the planning process will continue to encourage market-motivated operating and investment actions for preventing and relieving congestion, and will accommodate efforts by state regulatory commissions to create multi-state agreements to review and approve new transmission facilities, and to coordinate with programs of existing regional transmission groups where necessary. [See also App. at B.7.]

Interregional Coordination. The CAISO meets the requirements of Order No. 2000 concerning interregional coordination and is continuing to enhance its activities in this area. The CAISO has already developed

mechanisms in several areas for coordinating its activities with other regions, and is continuing this process. To date the CAISO has coordination agreements governing the interconnection of a number of Control Areas in the West, including Arizona Public Service Company, Nevada Power Company and PacifiCorp, to name a few. Additionally, the CAISO has been a participant in the development of the WECC which will be (among other things) a coordination forum for regional entities in the Western Interconnection. The CAISO will meet the requirements of Order No. 2000 regarding Interregional Coordination well within the Commission's deadlines. [See also App. at B.8.]

C. Other Issues

Order No. 2000's Open Architecture Standard

The CAISO currently meets all of Order No. 2000's RTO requirements relating to Open Architecture. The current structure of the CAISO can quickly and effectively accommodate changes in facility ownership, geographical scope, market support structures, operational needs, and technology. The CAISO also intends to revise its software systems to enhance their flexibility, so that necessary changes can be adopted more quickly and easily [See also App. at C.]³⁵

Rate Issues

The CAISO currently satisfies most of Order No. 2000's requirements and goals relating to rate issues, and will satisfy the rest within the time frames prescribed by Order No. 2000. As discussed previously, the CAISO does not

³⁵ The ISO notes that state law requirements may apply to any disposition of utility assets from control by the CAISO to another entity.

permit pancaked rates, and is in the process of developing an improved pricing mechanism for congestion management that will be fully consistent with Order No. 2000's RTO requirements. As discussed below, the CAISO will work with various California parties and other proposed RTOs to develop a proposal that will waive, under appropriate circumstances, the CAISO's Wheeling Access Charge for other RTOs that afford reciprocal waivers of access charges.

Since its inception until January 1, 2001, the CAISO operated under license-plate rates that the Commission found acceptable.³⁶ The CAISO has filed a proposed Access Charge methodology revision that will result in one rate for high voltage facilities (200 kV and above) over the entire CAISO Controlled Grid. The Commission accepted the rate methodology and made it effective June 1, 2000. The Commission has also set the proceeding for settlement judge procedures.³⁷ [See also App. at D.1.]

Participation by Public Power and Cooperative Entities

The CAISO has from its inception sought the participation of California public power, municipal, and governmental entities. As of this date, one such entity has been approved for CAISO membership and has turned over operation control of its transmission facilities to CAISO; others participate in the CAISO on

³⁶ See *Pacific Gas and Electric Corp., et al.*, 81 FERC at 61,455-56.

³⁷ See *California Independent System Operator Corp.*, 91 FERC ¶ 61,205 (2000). This process is in accordance with California law, prior Commission orders, and the CAISO Tariff. See California Assembly Bill 1890, §12, (adding new §9600(a)(2) to the California Public Utilities Code); *Pacific Gas and Electric Co., et al.*, 81 FERC at 61,501.

other bases.³⁸ Still others have been the targets of extensive efforts by the CAISO to obtain participation as Participating Transmission Owners through the proposed Access Charge proceeding, which is intended to encourage these public entities to join by offering a transition mechanism to protect against cost shifting. Substantive changes to the CAISO's Grid Management Charge have also been made, primarily to accommodate the concerns of municipal entities. Thus, as required by Order No. 2000, the CAISO has made provisions for interconnection with non-CAISO facilities.³⁹ The Commission's April 26 Order, which requires certain governmental entities to make their generating facilities available to the CAISO grid, may further encourage these entities to participate in the CAISO markets, even if they do not turn over operational control of their transmission facilities. [See also App. at D.2.]

Treatment of Existing Contracts

The uniform transmission Access Charge regime proposed by the CAISO would assist in resolving inefficiencies relating to Existing Contracts, such as "phantom congestion." This is because parties joining the CAISO under the proposed Access Charge settlement would convert their Existing Contracts into Firm Transmission Rights and agree to adhere to the CAISO scheduling timelines and protocols. The proposed Access Charge regime may thus go far in

³⁸ Public power entities have signed the necessary agreements to become Scheduling Coordinators that utilize the CAISO Controlled Grid and Utility Distribution Companies whose distribution activities are integrated with those of the Participating Transmission Owners as part of the CAISO Control Area.

³⁹ See Order No. 2000 at 267; Order No. 2000 Rehearing at 56.

resolving scheduling inefficiencies that result from existing contracts. [See also App. at D.3.]

V. THE CAISO INTENDS TO CONTINUE ITS EFFORTS TO ENHANCE REGIONAL COOPERATION ON TRANSMISSION ISSUES, INCLUDING THE ELIMINATION OF RATE PANKAKING, AND WILL CONTINUE DISCUSSIONS REGARDING A WESTERN INTERCONNECTION-WIDE RTO THAT DOES NOT INTERFERE WITH STATE INTERESTS IN MARKET AND RESOURCE ISSUES

The CAISO continues to believe that consumers in California and elsewhere in the West will benefit from improved region-wide transmission integration and cooperation, as long as such integration and cooperation accommodate public ownership of transmission facilities and an appropriate role for State authorities. Thus, the CAISO plans to continue its discussions with other Western RTOs and Control Area operators regarding measures to improve regional coordination.

However, it is not realistic to expect a Western Interconnection-wide RTO to form in the near future. Regional discussions cannot ignore the recent problems faced by California's electricity markets, and the difficult issues they have engendered. Those problems relate primarily to the insufficiency of generating capacity to meet increased demand, and design flaws that enhance the ability of suppliers to command excessive prices and to evade effective price mitigation measures. While the brunt of these problems have been borne by California electricity consumers and taxpayers, the fact is that demand for electricity has outstripped available supplies in much of the West. These problems are likely to be exacerbated in the near term by the reduced availability

of hydroelectric generation due to a below-normal water year. Unless and until additional supplies are available and market rules are reformed to provide effective protection against unjust and unreasonable prices, the formation of a Western Interconnection-wide RTO will not be possible consistent with the provision of reliable and reasonably priced electricity. The CAISO is nevertheless committed to taking steps to promote and facilitate increased regional transmission cooperation and integration, as long as this does not impair either state-mandated public ownership of transmission facilities or the ability of State agencies and other interested parties to address resource and market issues appropriately within their purview.

In recognition that formation of any acceptable region-wide RTO will unavoidably require years of hard work, and in order to begin at once the process of integration throughout the West, the CAISO proposes near-term measures to reduce the most substantial existing barriers to inter-regional trading: pancaked transmission rates, inadequate coordination of planning for transmission upgrades that can achieve regional benefits, and inconsistent sub-regional transmission tariffs.

Reciprocal Elimination of Pancaked Transmission Charges Among RTOs. Before the December 15, 2001 deadline for the initiation of RTO operations, the CAISO plans to develop a proposal (in conjunction with other California parties and other proposed RTOs) that will provide for the waiver of Wheeling Access Charges for the transmission of electricity from a resource on the ISO Controlled Grid to any other approved and operational RTO that provides

for the reciprocal waiver of transmission access charges for the transmission of electricity from a generator on its grid to a buyer on the ISO Controlled Grid.⁴⁰ This measure, if reciprocated by other RTOs, would remove pancaked transmission rates and accomplish a significant step toward the creation of an integrated regional transmission system. Thus, the CAISO hopes that this policy, which has also been suggested by at least two other proposed RTOs in the West (RTO West and Desert STAR), will both promote expanded regional trading and encourage the further integration of the transmission system.

Enhanced Coordination of Planning Efforts. The CAISO believes that current efforts to coordinate the planning of transmission upgrades in the Western Interconnection are inadequate. Not only do disputes arise over the impact of transmission projects in one part of the West on the rights of utilities in other parts of the region,⁴¹ but opportunities to construct upgrades to relieve bottlenecks in other parts of the region are not identified. The CAISO intends to facilitate a more effective process for the coordination of transmission planning among the CAISO, other RTOs, and utilities that have not yet joined a functioning RTO. To that end, the CAISO will explore using the existing WSCC Transmission Planning forum to advance discussions on this issue.

⁴⁰ For “wheeling through” transactions, i.e., transmission from one inter-RTO tie to another, the CAISO would waive Wheeling Access Charges under its tariff where both the sending and receiving RTOs waive similar charges for wheeling through transactions to and from the ISO Controlled Grid. The CAISO notes that, under the revised Access Charge methodology, it has separate High Voltage Wheeling Access Charges and Low Voltage Wheeling Access Charges. The appropriate charges would be waived in each instance.

⁴¹ See *Sierra Pacific Power Company*, 94 FERC ¶ 63,019 (2001).

Review of Transmission Tariff Provisions. The CAISO recognizes that its tariff utilizes an approach to transmission access that differs from the approach employed in the Commission's *pro forma* tariff. Unlike the *pro forma* model, the CAISO's tariff relies on the submission of schedules and the availability of Firm Transmission Rights, rather than on reservations of network and point-to-point service. RTO West, in contrast, appears to contemplate a regional transmission tariff that is based on the *pro forma* approach. The provision of region-wide transmission access will benefit greatly from convergence or reconciliation of these varying approaches to transmission access. The CAISO accordingly intends to begin discussions with the other western RTOs and the Commission staff in order to determine how a common approach to transmission access might be adopted to facilitate a more efficient and better integrated regional wholesale electricity market. The ISO will provide the Commission with semi-annual progress reports on this issue.

The CAISO notes, however, that its ability to implement these steps toward regional integration depends significantly upon the establishment and maintenance of effective authority for the CAISO and other RTOs to mitigate unreasonable wholesale electricity prices. For example, reciprocal waivers of Wheeling Access Charges in the absence of effective and consistent mitigation authority could facilitate the practice of "megawatt laundering," because it would reduce the cost of transferring energy across RTO boundaries to escape price mitigation or other rules in one or more of the participating RTOs. The CAISO accordingly will continue to review the plans described above to ascertain their

continued appropriateness in light of market conditions and the price mitigation authority authorized by the Commission.

VI. CONCLUSION

As explained above, this filing is submitted under protest due to its having being made a condition of price mitigation. As further explained above the CAISO satisfies the RTO requirements of Order No. 2000. It also plans to undertake near term measures to enhance inter-regional cooperation on transmission matters and, in the longer term, to continue discussions with other

RTOs regarding the possibility of forming an appropriately structured Western RTO that does not require the merger of power markets in the region or a reduction in State authority over market and resource planning issues.

Respectfully submitted,

Charles F. Robinson
General Counsel
Roger Smith
Senior Regulatory Counsel
The California Independent System
Operator Corporation
151 Blue Ravine Road
Folsom, CA
(916) 608-7135 (main)
(916) 608-7296 (fax)

Edward Berlin
Kenneth G. Jaffe
Jamil Nasir
Theodore J. Paradise
Swidler Berlin Shereff Friedman
3000 K Street, N.W.
Suite 300
Washington, DC 20007
(202) 424-7500 (main)
(202) 424-7643 (fax)

Ann P. Cohn
Michael D. Mackness
Attorneys for Southern California Edison
Michael D. Mackness
Mike.mackness@sce.com
(626) 302-2863

Don Garber
Attorney for San Diego Gas &
Electric Company
dgarber@sempra.com
(619) 696-4539

Dated: June 1, 2001