UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Inquiry Concerning the	**)**	
Commission's Policy on	**)**	**Docket No. PL98-5-000**
Independent System Operators	**)**	

COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

I. INTRODUCTION

Pursuant to the Federal Energy Regulatory Commission ("Commission") March 13, 1998 Notice of Technical Conference, the California Independent System Operator Corporation ("Cal-ISO") submits the following comments.

II. DISCUSSION

A. SUMMARY OF ORAL COMMENTS

In his introductory statement on Panel 1 at the Commission's Technical Conference, Cal-ISO Chief Executive Officer Jeffrey D. Tranen focused on "what's working" and "what's not" from the perspective of Cal ISO. This summary expands that statement and also provides a response to a number of key issues presented in the Commission's notice.

1. What's working?

The Commission's 11 principles, as set forth in Order No. 888, are the guiding principles for the Cal-ISO and form the core of the Cal-ISO's incentive compensation program for all employees of the company. Those principles are now working in practice, not just theory.

Requiring independence and expertise for ISO Boards is working. The Cal-ISO Board, with 25 voting representatives of various stakeholder classes and five advisory representatives, is making decisions that enhance competitive markets and assure reliability. Moreover, the Cal-ISO has benefited from the strong "ultimate consumer" focus on our Board. Having that representation improves the decision making process over that of a disinterested Board (i.e., a board with no financial interest in the market).

Reliability has been maintained in California, notwithstanding the dramatic change in the structure of its retail and wholesale markets as of March 31, 1998. The Commission's requirement in its October 30 order that the five CEOs certify to the preservation of reliability as a condition to the ISO start-up helped bring the resources to bear to assure that we would start up reliably.

Markets have been closing on a timely basis, notwithstanding concerns raised when we could not meet these deadlines during testing. Tests do not always accurately predict actual operating conditions. We have found that market discipline (*i.e.*, when real money is at stake) is a tremendous motivating force for all market participants to meet deadlines.

The strength of this market force also reinforces the need to get the market rules "right" in terms of incentives. For example, our Ancillary Services Markets are thin, in part, we believe, because of cost-based rate caps applicable to Ancillary Services, but not sales of energy. The Cal-ISO recommends that the Commission remain open to reconsidering its ruling denying market-based rate authority for the sale of ancillary services.

Whether an ISO should also operate all energy markets (be a poolco) has been an issue. It is clear from experience to date that either model, California's or that of the tight pools, can work. Time will tell as to whether one way is better than another or not.

Finally, the Cal-ISO notes that questions have been raised as to whether an organization can operate efficiently and provide the lowest cost to consumers if it lacks the discipline and/or entrepreneurial spirit of a for-profit stock corporation. California's experience demonstrates that not-for-profit corporations are capable of attracting and motivating an effective and efficient work force. We have aligned the goals of the organization with those of every employee through a goal-based incentive compensation system.

The question of management incentives can be boiled down to one of how to keep "score." In for-profit entities, keeping score is simple – maximize return to shareholders. For a monopoly utility such as an ISO, however, customers cannot vote with their feet. The discipline of the market must be emulated by some sort of employee incentive system and regulatory oversight.

At the Cal-ISO we are working to devise a new way to measure success – through a more complex set of goals tied to the Commission's 11 principles and benchmarking of performance over time. Because we are independent from any motivation to put the needs of shareholders above those of the market and the ultimate consumer, we believe we can eliminate the need for costly regulatory oversight *and* accomplish efficiencies equal to any for-profit entity. We urge the Commission to afford parties the option of using not-for-profit entities as a form of organization for the long-term.

2. What's *not* working?

Results are preliminary, but at least from current experience, the Cal-ISO sees three areas of concern.

a. FERC needs to develop a layered decision making process that defers to the ISO Board on certain matters

The old paradigm of requiring FERC filing of any agreement that affects rates simply will not work in the new marketplace. FERC has long recognized the need for new approaches – by waiving many requirements for independent power producers, [1] and by waiving even more requirements for power marketers.[2]

At a minimum, we need a layered decisionmaking process: FERC at one level, the ISO Board at another, and ISO management at a third level. The Commission was extraordinarily deferential to the stakeholder process in California. Without that deference, the Cal-ISO likely would never have made its 1998 operation date. But more needs to be done in recognition of the fact that things will not go "back to normal" now – in fact, changes will continue to be necessary to many of the Cal-ISO Tariff provisions, in particular its Protocols.

While the Cal-ISO has noted its Tariff is perhaps unique in its level of detail,[3] in fact, ISOs, will, by their nature, be subject to stakeholders' desire to specify far greater detail than that typically appearing in utility tariffs or in jurisdictional contracts. This is particularly true for those ISOs using market mechanisms to perform certain functions. Moreover, things which in the past were transparent services of the transmission provider (like reliability must-run agreements, participating generator agreements, and meter service agreements) are now contracts between the ISO and market participants – each one FERC jurisdictional and capable, in the aggregate, of greatly

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[1] See, e.g., Citizens Power, 48 FERC ¶ 61,210, Doswell Limited Partnership, and 50 FERC, ¶ 61,251, Commonwealth Atlantic, 51 FERC ¶ 61,368.
[2] Enron 52 FERC ¶ 61,193
[3] March 23, 1998, Application of California ISO at 25.

expanding the Commission's trial docket if any party can succeed in litigating at FERC issues it was unsuccessful on before the stakeholder board.

Together we must figure out a better process or risk paralysis in making decisions. There will assuredly be a significant number of important changes to "the rules" as we continue to learn "what's working" and "what's not." At a minimum, the Commission should consider continuing to defer to the stakeholder board or an independent board of a not-for-profit ISO, so that parties understand that they need to be engaged at that level. Without continuing strong signals from FERC (principally by setting a high standard for ordering a hearing), the process of determining rules and resolving disputes *among stakeholders* will be undermined and gradually over time it will lose all effectiveness.

Apart from that deference, however, further movement is needed on the wide net FERC has cast over contracts currently deemed jurisdictional.[4] Under current Commission policy, virtually nothing would escape jurisdiction. The Commission should either reconsider *Central Maine* in light of changing circumstances or, alternatively, devise streamlined regulation that in certain cases defers to the ISO Board.

b. More work is needed to transition existing contracts into ISO structures

A fundamental difference between natural gas restructuring and electric restructuring is the Commission's decision not to abrogate supply contracts. Honoring existing contracts is a simple concept to state, but complex to implement, particularly when the parties to the contracts do not

[4] Prior Notice and Filing Requirements Under Part II of the Federal Power Act, Docket No. PL93-2-002, 64 FERC, ¶ 61,139 at 61,985.

agree on the interpretation of the contract and the ISO has no way to enforce one interpretation over the other.

The Cal-ISO does not take issue with the policy to uphold existing contracts. We note, however, that it may be time to take a closer look at changes to existing contracts, at least in a limited context. Specifically, the Commission should consider whether *prospective* changes in existing contracts are in the public interest in the limited area of bringing existing contract scheduling and ancillary services provisions into line with regional practices – in particular when they effect the operating rules for an ISO with control area responsibility for those existing contracts.[5]

For example, the California model requires schedules to be submitted earlier than prior operating practices required, to enable the software to run congestion management and provide an opportunity (in the Day Ahead Markets) for market participants to change schedules to avoid congestion charges. Existing contracts, however, contain provisions allowing those parties to make changes much later. Ideally, both existing contract holders and other market participants would schedule concurrently, ensuring that all available transmission capacity is used in both the Day Ahead and Hour Ahead Markets. In California, however, the Cal-ISO must set aside capacity for *potential* scheduling by existing contract holders after the Cal-ISO markets close. This in effect creates two "pipes," one of which might go only partially used while market participants are curtailed and/or pay congestion charges on the other "pipe."

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[5] A related issue is whether existing contracts should be changed upon the transmission provider's motion to allow pass-through of ISO charges. Our comments do not extend to that related question.

The Cal-ISO is mindful that care should be taken not to upset the balance of commercial arrangements that have been hard-fought through negotiation or litigation, or both. The Cal-ISO suggests, however, that the Commission consider whether parties should be expected to abide by new regional practices when they can benefit from the efficiencies created by such new regional practices. This is not to say that Commission consideration of having existing contract holders abide by new regional practices would produce a different result than what is already in effect in California, since one avenue the Cal-ISO has to ameliorate the "two pipe" problem is to implement an interruptible transmission option. Rather, this example shows an issue worthy of consideration in approving ISOs and our desire that the Commission give any guidance it can on whether or when it might be willing to invoke the power to make changes to existing contracts, as indicated in Order No. 888.[6]

A second basis for prospective change to existing contracts, beyond the economic efficiency in having a single structure in which the entire control area participates, is the practical need for uniform rules. For example, even though only one of the three California investor-owned utilities has existing contracts that must be administered under different, Non-ISO, rules, the Cal-ISO has had to devote substantial resources to administer these various agreements both in setting up the operating rules and in ongoing administration. These costs are spread among all users of the transmission system. In certain instances, reliability can also be adversely affected. Ideally, the Commission would provide guidance on when the public interest might support a prospective change to avoid increased costs and/or adverse effects on reliability.

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[6] Order No. 888, See Regulations Preambles ¶ 31,036 at 31,664-66.

For example, for several months as the parties to existing contracts disputed with one another as to who was obligated to do what, the Cal-ISO was unable to get any party to agree to provide schedules to the Cal-ISO for load and generation into its control area (but not necessarily using transmission in the ISO-Controlled Grid). The Cal-ISO was indifferent as to who provided the data, but because it may not interpret existing contracts,[7] there was a protracted period in which it was unable to direct either party to provide the data. During testing, certain reliability indicators were hampered because this information was not available. The Commission ultimately recognized the Cal-ISO's expressed need for information[8] and the parties have in fact agreed to provide the data to the Cal-ISO. Thus, our concerns have been met. For other ISOs, which more so than single utilities will be heavily dependent on computer systems, having complete and properly formatted data will often be critical for reliability. The Commission should therefore make clear in any policy statement or initial order establishing an ISO that ISOs will be entitled to all information necessary to ensure reliability under the new operating paradigm.

c. ISOs need to be expanded -- covering large geographic areas and acting as the control area operator

The Cal-ISO recommends expansion of ISOs and a reduction in the number of control area boundaries. Every control area boundary represents a point of market inefficiency and a source of potential reliability problems. FERC can accomplish much by urging the consolidation of control areas and encouraging large ISOs. Moreover, this need not be a federal mandate. State

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[7] Pacific Gas and Electric Company, Docket Nos. EC96-19-001 et al., 81 FERC p 61,122 at 61,473 (1998).
[8] California Independent System Operator Corporation, 82 FERC ¶ 61,312 (1998).

compacts could be a vehicle for expansion that gives neighboring states comfort that their legitimate interests are being addressed.

B. BASIC STRUCTURE AND ROLE OF ISOS (PANEL 1)

1. What is the optimal size of an ISO?

The role of an ISO should be focused on reliability, efficiency, and equity. This is the focus of the Cal-ISO. Ideally, an ISO should:

- ensure the reliability of the transmission system;
- facilitate efficient electricity markets; and
- ensure the equitable treatment of market participants.

a. With ISOs, bigger is better

In order to maximize reliability, efficiency across all markets and to ensure equitable treatment of all participants, the Cal-ISO believes ISOs should be regional in scope and as large as possible. With ISOs, bigger *is* better.

A large regional ISO (*e.g.,* an ISO that encompasses all or a large portion of the Western Systems Coordinating Council ("WSCC")), would enhance reliability by minimizing the number of control area boundaries in a region. Fewer control area boundaries can: 1) reduce the potential for miscommunication or inadequate communication within the region; 2) improve coordination in emergency planning and improve the implementation of emergency procedures; and 3) enhance the coordination of market rules and operations.

A large regional ISO would promote the most efficient electricity market possible by:

- expanding the area over which there are no pancaked transmission rates;

- reducing market power by expanding the number of interconnected entities;
- minimizing the number of curtailments associated with inter-control area congestion and scheduling practices; and
- expanding the market for hour-ahead and real time transactions (control area boundaries, and their associated scheduling requirements across these boundaries, can limit these transactions).

A regional ISO is also the best vehicle to promote the equitable treatment of all market participants. For example, markets operating inside a large regional ISO would not have to contend with contract path wheeling and uncompensated loop flow because all flows would be internal to the region and the service would be network service. Also, the larger the ISO, the more difficult it would be for any one entity or group of entities previously exercising market power in an area to continue to exercise market power over the larger region.

b. Obstacles to expanding the size of ISOs exist, but are manageable.

There are two potential obstacles to expanding the geographic scope of ISOs, both of which are manageable. The first is technology – the inherent limit to the ability to process the tremendous amounts of data involved for an ISO that spans several states. The Cal-ISO relies, for example, on state-of-the art information systems that have yet to be demonstrated commercially on a scale substantially larger than California. Clearly, however, technology is available, or will be soon, to handle large regional ISOs.

The technology issues that must be solved to accommodate large regional ISOs can be summarized as follows:

- Improved Information Flow.

  Access to large quantities of system electric data for use in real time power flow models, transient stability analysis, and dynamic voltage assessment, is necessary to allow a large ISO to facilitate new market structures. The current ICCP protocol will accommodate this type of information flow but it is not yet widely implemented.

- Improved Congestion Models.

  Congestion management over large regional areas will require high powered computers with the capability to run sophisticated models quickly for both day-ahead and hour-ahead transmission allocation. This technology is still in early implementation and continued refinements will be required as the size of an ISO increases.

- Transaction Processing and Volume.

  As ISO size increases and more customers opt for direct access, the ability to handle tremendous volumes of transactions will be increasingly important. For energy and ancillary service transactions, the ability to settle these transactions in short time intervals (i.e., 10 minutes) will increasingly stress the billing and settlement systems available today. Continued improvement in this area of technology will be required as the size of an ISO grows.

- Control Systems.

  As control area size increases beyond those currently operating, continued research will be required in the control algorithms necessary to operate these large control areas with a large number of units (i.e., 100+ units) on control. Additionally, as ISOs grow larger, the regional placement of control and operating reserve units will be become increasingly important to reflect the characteristics of a larger grid.

In summary, none of these obstacles is insurmountable. ISO development must proceed hand in hand with the development and implementation of these new technologies.

A second obstacle to expanding the geographic scope of ISOs is the inherent difficulty obtaining agreement among multiple parties in different jurisdictions. Again, although challenging, this problem is not insurmountable. A key aspect of obtaining agreement across a wide variety of

interests is the ability to persuade each interest that they will be better off and not harmed or required to relinquish existing rights.

A large regional ISO will enhance commerce and reliability. Like our system of interstate highways, a larger transmission network will allow commerce to take place across a wider network, ultimately leading to lower rates for consumers. Moreover, it is possible to achieve agreement on joining an ISO without federal preemption. For example, interstate compacts have often been used as a means for states to reach agreement on regional issues.

Historically, interstate compacts have represented a middle ground between a judicial resolution of regional issues and a congressional mandate. The Pacific Northwest Electric Power Planning and Conservation Act of 1982 and the Clean Air Act Amendments of 1990 are two fairly recent examples of legislation that use interstate compacts to address regional issues.

Indeed, the notion of a regional compact was included in California Assembly Bill 1890. Section 359 of AB 1890 states that it is the intent of the legislature that California enter into a compact with western region states to ensure adherence to enforceable standards to protect the reliability of the interconnected regional transmission and distribution systems. Such a compact could form the basis for a regional ISO including California, while ensuring each state legislature that reliability concerns would be met through reciprocal commitments by other states.

2. What are the appropriate ISO operational responsibilities?

a. A "full service" ISO operates the control area, maintains markets for ancillary services and real time energy, controls access to and pricing for usage of the transmission system. Such an ISO may also control transmission maintenance practices and/or conduct other energy auctions.

We believe an ISO should be as large as possible and be "full service" -- with control area responsibilities. In fact, we question whether it would be accurate to call an entity an "ISO" if it is not a "system operator." As discussed more fully below, we therefore question whether an entity could be an ISO without being a control area operator.

The NERC definition of a control area is as follows:

> An electric system or systems, bounded by interconnection metering and telemetry, capable of controlling generation to maintain its interchangeable schedule with other Control Areas and contributing to frequency regulation of the Interconnection.

Clearly, it is appropriate for an ISO to perform these functions.

To ensure non-discriminatory access, the ISO should also have a significant role in the long-term grid planning and expansion process. The transmission owners, the state regulatory bodies and the regional planning organizations also need to have an important role. This includes the use of eminent domain authority and the power to construct or cause to be constructed necessary facilities that otherwise would not be built. These comments are not, however, meant to suggest that if a region can only agree on some subpart of a full service ISO, that it would not be of some benefit to implement such an entity. Interim measures may be the best route to an ultimate full service ISO. Entities that provide transmission access to broad regions at non-pancaked transmission rates, but do not provide other control area services, are preferable to no ISO at all.

Various models are workable.

While bigger *is* better, no one operational model is the exclusive path to success. The Commission should, therefore, allow for regional variations. There are numerous examples of how the operational model can and should be allowed to vary. Time will tell whether one is more efficient or economic than another.

States and regions should be allowed flexibility. Abdication of state authority over areas of traditional state regulation is not a required or necessary consequence of creating a regional ISO. State oversight over important state issues can be maintained. For example, control over the siting of transmission facilities has been maintained in California. The decision to move to customer choice has been left to each state in the PJM and New England ISOs. The circumstances under which stranded costs will be recovered can also continue to reside with the states.

Certainly, a state's decision to delegate some or all of these decisions, or related ones, to a regional ISO is also workable. For example, California has delegated certain reliability functions to the Cal-ISO, including the adoption of transmission maintenance standards for the utility-owned transmission systems under the Cal-ISO's control.

Retail access is not a prerequisite to achieving a regional ISO, although ISOs can provide the mechanism to accomplish retail access, as the Cal-ISO has done. In the absence of retail access, a regional ISO would still facilitate and broaden existing wholesale power markets, as PJM is doing in participating states without retail direct access.

Likewise, there is not a universal model of or method for achieving regional ISOs. On the contrary, the Commission needs to allow for flexibility and innovation across regions. Even within an ISO there may be a need for differing treatment among participants on certain matters. For

example, in California each Utility Distribution System has its own load shedding scheme based on the particular characteristics of its distribution system.

The Cal-ISO covers a large geographic area, even though it is within a single state. If the Cal-ISO joins with other states, the region will be even more diverse. In those areas where the differences make sense, there needs to be enough flexibility such that the different practices can be retained. For example, both AB 1890 and the Cal-ISO recognize differences in terrain, rainfall, and vegetation may require different transmission maintenance practices. The Commission must allow for those differences so long as it is not undue discrimination.

Moreover, where there are differences between states with regard to reliability standards, there is no need to require one state to give up its standards in favor of another. Such differences are being accommodated today and they can be accommodated in the future. For example, California's plan for load shedding is different from other parts of the WSCC, and as noted above, the load shedding practices of the three investor-owned utilities within California are different.[9] The Commission's rules on ISOs should allow the participants to accommodate state differences unless those rules are unduly discriminatory.

Finally, whatever action the Commission takes to promote ISOs that span greater geographic areas, that action must be flexible enough to allow for the fact that different states are addressing restructuring matters at different times. If the Commission is too prescriptive, it could inhibit the development of regional ISOs.

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[9] See Utility Distribution Agreements between California Independent System Operator Corporation and Pacific Gas & Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company.

3. To ensure non-discriminatory transmission access, must an ISO be a control area operator?

Unless an ISO is the control area operator, it is not clear it *is* an ISO. However, even a non-ISO transmission alliance (*e.g.*, a loose pool that does not operate a control area) that offers a single or zonal rate for transmission service over a broad geographic region is a worthy goal.

Whether or not an entity is an ISO, it can serve the public interest if it is regional in scope and able to ensure nondiscriminatory access to transmission service at non-pancaked rates. Moreover, there is no reason why an existing ISO could not establish reciprocal agreements with adjacent ISOs or form a transmission alliance such as a loose pool, to offer non-pancaked rates and a mechanism for nondiscriminatory open access over an area larger than its existing boundary.

In one respect, however, the Commission's rules should be clear. An ISO cannot be a control area operator or operate ancillary services and real time energy markets without having access to sensitive market information. For this reason, the "I" in ISO necessarily means independent from interest as a market participant. The New York Stock Exchange takes no position in stocks traded on the Exchange. ISOs likewise should have no commercial interest beyond the need to buy or sell energy in real time to avoid or mitigate system emergencies.

4. Are ISOs "permanent" institutions or transitional mechanisms?

The ISOs are an appropriate mechanism to develop and expand regional power markets as the industry transitions over perhaps the next ten years. Whether an ISO ultimately survives as an organization will depend on whether it meets the endgame test of reliability, efficiency, and equity. ISOs have the potential to enhance reliability and increase market efficiency on a regional

basis, as well as provided equitable treatment to all market participants. Other organizational forms may also provide these benefits better and time will tell on that issue. In the meantime, most of the tough issues that need to be resolved are the same whether the organization form is an ISO, a for-profit transmission company, or something else.

a. ISOs will be necessary for certain functions, even if the industry is not vertically integrated

During the Commission's technical conference, several panelists indicated their belief in the desirability to transition as soon as possible to for-profit independent transmission companies ("transcos"). The panelists noted that once a corporation was no longer conflicted with the desire to use transmission to advantage affiliated generation, all of the functions currently contemplated to be performed by an ISO are capable of being performed by a transco. Certain panelists stated that there is a necessary link between ownership and operation in order to ensure that there are sufficient incentives to appropriately expand the grid and manage congestion.

The Cal-ISO disagrees. If a transco is organized to earn a return for shareholders, such an entity presents a dichotomy of interests between shareholders and ultimate consumers. In that case, the market will still need the independence of the ISO structure for at least certain functions.

For example, the Cal-ISO must assess and annually award contracts for "reliability must-run" ("RMR") contracts, or alternatives, to ensure local transmission reliability. These contracts represent an annual potential cost of over $1 billion. In contrast, to the total estimated ISO value of the ISO's ancillary services and real time energy markets of about $500 million, and the estimated cost of the grid management charge is $150 million. If the principal incentive for a transco is earning a return on equity for its shareholders, will market participants trust the transco's decision

to replace RMR contracts with a transmission project? Will that decision require closer scrutiny (*i.e.* enhanced regulation) by the Commission and state agencies, at a time when we are seeking mechanisms to transition away from command and control regulation? To quote several of the panelists, if the only tool you have is a hammer, every problem starts to look like a nail. The bias in favor of transmission solutions may not be present if the transco is a non-profit organization or if that decision resides in an independent body. Clearly, the Commission should carefully consider the incentives inherent in each of these organizations and should not mandate any one form of corporate organization.

A similar issue arises with respect to transmission maintenance practices where states, such as California, have delegated the responsibility to the ISO to oversee maintenance practices. States may be less willing to delegate that responsibility to a for-profit transco deciding its own fate.

Clearly, ISOs can transition into transcos – merely by serving as the builder of last resort. While this outcome should be permitted, the Commission should also allow for alternative organizational forms as well. In addition, the potential evolution of an ISO to a transco should not be affected by the question of whether a power exchange should be combined with the ISO, or the question of whether the board should be an independent board or a stakeholder board.

B. REGULATION, GOVERNANCE, AND INDEPENDENCE (PANEL 2)

1. Should the FERC encourage or define a particular form of ISO governance or establish additional standards?

The Commission's ISO Principle No.1 states that an ISO's governance should be structured in a fair and non-discriminatory manner. An ISO can satisfy this fundamental requirement in various ways. For example, the New England ISO has proposed a governing board

composed of independent members with no financial interest in the market (i.e., a disinterested board), who oversee the activities of the various NEPOOL management and operating committees. This is referred to as two-tiered governance structure and accommodated features of NEPOOL that were already in place.

In contrast, the Governing Board of the Cal-ISO is a single tier approach, comprising representatives that have an active stake in the market (*i.e.*, a stakeholder or interested board), with the voting rules providing that no one class, or interest, may dictate Board decisions. Under either the single-tier or two-tier approach, the independence of the governing body can be ensured.

The Commission is correct that expertise and independence are essential elements of an ISO Governing Board. There are trade-offs between the single-tier and two-tier governance structures. Under the New England ISO structure, the directors are independent but not generally as involved in industry issues as a constituent board. With a broadly diverse constituent board, California has been able to: 1) attract directors with extremely high expertise and, 2) ensure that there is no ability to have the biases of any minority dominate. Both the two-tiered approach and the single-tier constituent board can work. In both cases, market participants have a vehicle for regional stakeholder resolution of difficult issues. The Commission should allow for regional variations in the structure of governing boards.

2. Should the Transmission Owners be allowed to establish any ISO rules that cannot be changed by an ISO board as a condition of joining?

Transmission Owners should not be allowed to establish any "ISO rules." It is essential that an ISO's governing body, with Commission approval, establish the rules governing access to, and use of, the ISO-controlled transmission system. Absent this requirement, it is unlikely that the

ISO would be able to satisfy other market participants that transmission service will be provided on a non-discriminatory and fair basis.

Transmission Owners should, however, be allowed to negotiate the bilateral contracts with the ISO that establish, among other things, the rights and obligations of the Transmission Owners and the ISO with respect to system operation and maintenance, rights-of-access, expansion and liability. As the owner of the transmission facilities under the ISO's control, it is both appropriate and necessary for the Transmission Owner to participate in establishing the terms under which it will transfer operational control of its transmission facilities to the ISO.

3. Should the ISO have the ability to modify transmission tariffs and operating rules without seeking Transmission Owner approval?

The ISO should be able to modify the ISO Tariff to ensure non-discriminatory access to the grid, but should be required to honor the transmission tariff of the Transmission Owner to be paid by the ISO. Likewise, the ISO should be able to make unilateral changes in operating rules that do not impact the safety or maintenance practices of the Transmission Owner.

States, such as California, may choose to give the ISO further power in areas such as maintenance practices. The Commission should allow for such regional variances. Likewise, whatever practices are ultimately adopted, an ISO must remain flexible enough to accommodate supportable differences in such requirements that exist among the various ISO participants.

4. Should FERC require more specificity on the division of liability between the Transmission Owners and the ISO?

While the division of liability between the Transmission Owner and the ISO is important, this can be adequately addressed in the negotiated agreements between the Transmission Owner and ISO that transfer control of the transmission facilities. The Commission should allow variations

in these agreements, as it has allowed variations in bilateral agreements among regulated entities in the past.

The Cal-ISO respectfully submits that the more important issue is the standard of liability that will apply to the ISO with respect to its duties and responsibilities under the ISO Tariff. The Commission should consider whether a different standard of liability is appropriate given the competitive marketplace and the need to make operational decisions in real time.

Under the traditional paradigm, transmission system operators would take actions to ensure grid reliability and the limited number of players in the market would accept the consequences of these actions as a necessary feature of reliability, to the extent they were ever aware of the actions taken. Under the new market paradigm, system operators will be required to make decisions that will have economic consequences for a diverse and numerous field of new marketplace participants in an environment where most, if not all, decisions will be readily known or knowable by the market participants. Market participants may no longer be willing to accept the consequences of such actions and may resort to litigation to recapture "lost opportunities."

In the abstract, a negligence standard and the "reasonable person" test may seem to afford a measure of protection for an ISO (*e.g.*, the test would be what a reasonable system operator exercising the standard of care normal in the industry would have done under similar circumstances). In reality, the actions taken under the ISO Tariff and operating procedures require system operators to make numerous discretionary decisions on a moment-to-moment basis in a wholly new environment for which it is unclear whether a "standard of care normal in the industry" is known or knowable. Invariably, as in any situation requiring human input, mistakes will be made. As a result, the potential exists for the ISO to be inundated with litigation, far in excess of historical

practice. The cost of defending this litigation (and paying damages) will be borne by all market participants through increased insurance and operating costs. Typically, state law has insulated regulated utilities from liability for simple negligence if the utility complied with state-approved tariffs or rules.[10] For FERC-jurisdictional contracts, utilities have often sought and obtained limitation-of-liability provisions. It is not clear that the Commission should merely direct parties to "state law" when considering ISO tariffs.[11] The Cal-ISO respectfully suggests that, at least with respect to not-for-profit ISOs, a revisiting of the policy on limitation of liability is in order.

This second look should be combined with a consideration of the level of specificity of ISO tariffs. A tariff is, in effect, a contract by the ISO to do certain things and by those taking service under it to do other things. The more specific the ISO tariff, the greater the potential for liability for *unintentional* tariff violations. Even *intentional* violations will be more likely, such as in the early stages of development when having a market as the driver for reliability operations will create numerous unexpected or unintended consequences. ISOs should not be faced with the Hobson's choice of waiting 60 days for a tariff change or risking serious financial losses if it must violate the tariff to avoid serious adverse effects on operations or reliability. The sixty-day process for FERC actions is simply too long. There will even be times that the notice requirement for ISO Board meetings will be too long and ISO management may have to act to assure reliability. When this happens and there are financial consequences on market participants, there must be some rule of reason limiting ISO liability.

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[10] See, e.g., San Diego Gas & Elec. Co. v. Super. Ct. of Orange Cnty., 55 Cal. Rptr. 2d. 724 (Cal. 1996); and Wilson v. Pacific Gas & Elec. Co., 28 C.P.U.C 2d 528 (1988).

[11] Pacific Gas and Electric Company, Docket Nos. EC96-19-001 et al., 81 FERC ¶ 61,122 at 61,520..

The Cal-ISO believes its tariff may be unique in its level of complexity. Thus, this problem may be most acute for California. We intend to address this concern by undertaking a careful review of our protocols and operating procedures to determine if, under the Commission's "rule of reason", they properly belong in the ISO Tariff. Nonetheless, the Commission should not leave ISOs exposed to enormous lawsuits under a simple negligence standard when the ISOs have no choice but to act or are acting in ways which, under the old paradigm, would not have resulted in liability to parties taking service from the regulated utility.

5. Should FERC give more deference to ISO Board decisions?

As discussed above, the number of necessary changes to any ISO rules likely will be large, particularly in the early years. It is important that the Commission establish key principles and allow the ISO boards to make and change, without a FERC filing, the more detailed operating procedures in order to respond to market changes on a timely basis.

Specifically, tariffs that are approved by the Commission should only deal with important principles -- rates, terms, and conditions of transmission service and key elements to ensure that the 11 ISO principles are maintained. Protocols or operating procedures should contain the rules of lesser importance and should be within the ISO board's authority to change.

In the Cal-ISO's case, the crush of work resulted in important principles being put into the Protocols, simply because the Protocols were done last. The Cal-ISO will be working to separate its rules and procedures into the above-recommended categories. It provides this comment to encourage the Commission to provide general guidance on what matters it considers of such importance that they should always be subject to change solely by the Commission. The Cal-ISO

respectfully suggests that the category – at least with regard to ISOs – should be more narrow than what has in the past been deemed to be jurisdictional as *affecting* rates, terms and conditions.[12]

As a related matter, the Cal-ISO agrees with the proposal it understands that other ISOs have made – to consider how the FERC advisory staff might interface with ISOs in areas where deference is given, to monitor and remain informed of the ISO's activities. Such a structure is constrained, of course, under historic interpretations of the prohibition on *ex parte* communications. It may be appropriate, however, to consider modifications to those rules to accommodate greater deference to ISOs as a unique regulated entity. For example, if FERC advisory staff had one or more liaisons to each ISO – to keep abreast of developments and decisionmaking at the board level – those persons would be in a better position to understand the basis for ISO decisions and report on when deference remained appropriate or when FERC should interject itself. Such an approach worked well with respect to the Commission's interaction with Regional Transmission Groups. Commission representatives could also learn much by being involved in stakeholder discussions leading up to FERC filings.

The Cal-ISO has found that limiting communications to written pleadings in this complicated new regime leaves much to be desired. Certainly, there is a need to ensure all parties of an open and fair decisionmaking process. The question is whether for this new type of entity, a different approach is worth examining.

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[12] Prior Notice and Filing Requirements Under Part II of the Federal Power Act, Docket No. PL93-2-002, 64 FERC, ¶ 61,139 at 61,986.

6. Should ISOs and PXs be required to be separate or together?

The Commission should not choose between the two approaches. Both approaches can be implemented successfully. Only time will tell if one is preferable to the other for economic or other reasons. On the one hand, a combined ISO and PX may be simpler to operate and may be able to obtain operational efficiencies that are not possible with a separate ISO and PX. On the other hand, a combined ISO and PX may lessen the ability of market participants to purchase PX-related services elsewhere, thereby reducing choice and flexibility for market participants. In addition, as was the case in the California restructuring, there was a strong preference to separate these entities to ensure that the ISO was removed from significant aspects of the market.

C. THE ROLE OF STATES IN THE OVERSIGHT OF ISOS (PANEL 3)

1. What role should the states have with ISOs, especially as it relates to grid expansion and ownership, maintenance, and disputes over transmission/distribution interfaces?

States should continue to play an important role relating to grid expansion and ownership, maintenance, and disputes over transmission/distribution interfaces. For example, many states have authority over transmission line siting. In some states, such as California, a public body must make a finding that the project is in the public interest before eminent domain can be exercised. While there is anecdotal evidence of states failing to approve transmission facilities viewed as having an *interstate,* as opposed to in-state, public benefit, that problem, if it exists, is likely to diminish as utilities join multi-state ISOs. Moreover, as noted by the panelists at the technical conference, transmission-pricing policies may ameliorate this problem.

States also have a legitimate interest in the physical security of the infrastructure. When the lights go out, citizens tend to look to the state government for answers. It is unlikely, given political realities, that states would willingly transfer all control over physical security to others, with no opportunity for state oversight.

Likewise, states will have a continuing interest in anticompetitive practices in the marketplace, notwithstanding that ISO and PX markets may be solely FERC-jurisdictional. The same is true of state interest in other modes of interstate commerce. As noted by certain state representatives, however, as long as ISOs are truly independent and are seen as an ally in protecting the public interest, states may be willing to assume a less active role.

2. Should ISOs have an advisory committee that includes state commission members?

The states need to have vehicles through which they can provide input to the ISO. States also should have appropriate oversight responsibilities for those areas in which the state either has a direct interest as noted above or an indirect interest such as costs to be born by the residents of the state. An advisory board, as in the case of the New England ISO, or an oversight board, as in the case of the Cal-ISO, each can serve that role.

3. Should there be joint State/FERC Boards?

Depending on the issue and the applicable jurisdiction, either the FERC or the state is the ultimate decisionmaker. We are not convinced that joint boards are necessary, although we do not rule them out where jurisdictions desire them. In all cases, each of FERC and the states should have a vehicle to participate in the process of the others.

4. How should a state's role differ with respect to single and multi-state ISOs?

A state's role should not vary with respect to single and multi-state ISOs. Each state should be able to retain for itself those areas of jurisdiction that it has now. In addition, the representation on the ISO board should be sufficiently diverse to provide some comfort to each state that its concerns are being adequately addressed without requiring the state to seek Commission assistance. Properly constituted, a diverse ISO board should lead to more problems being resolved at the regional level, with state interests adequately addressed, and less need to seek FERC resolution.

D. ISOs AND RELIABILITY (PANEL 4)

The subject of ISO formation and its relationship to reliability is a significant question with many facets. In the integrated utility environment of the past, there were four necessary elements for ensuring overall grid reliability:

Rules: Historically these rules came from NERC and the regional councils and consisted of technical guidelines required to actually maintain system integrity. There were also rules governing the mechanics of system scheduling, control area interface, information exchange, and the timing and content of information exchange.

Information: The acquisition of pertinent control area information is an essential element of reliability. Historically, this has been achieved through EMS and SCADA systems, load forecasting programs (including weather data), telephone, and computer links. In addition, outage schedules for transmission and generation equipment have been scheduled through control area

operators. Information regarding power flow, voltage, equipment loading, transmission scheduling, and maintenance outages are essential to keep a grid stable.

Tools: Proper analysis of information received consisted of stability and load flow studies (both off-line and in real-time) to ensure that grid configuration and proposed transmission uses dictated by generation and load patterns were compatible. Seasonal operating studies and seasonal outage planning were necessary particularly in peak load periods to ensure grid reliability. System operators and engineers used these tools to spot potential problems and correct real-time system anomalies.

Authority: In the environment of the past, system operators had sufficient authority to direct all aspects of the power systems in their control area. This included generation loading and reactive power levels, equipment in and out of service, scheduled work, and peripheral system stability equipment such as line reactors, shunt capacitors and other controllable devices.

All four of the above-listed elements work together to maintain a reliable grid. In the new world of the ISO, these same four elements will be even more essential to maintain system security as the level of transmission system utilization increases, scheduling becomes more complex, the number of participants increases, and markets are used to provide essential tools previously available by command and control.

ISO formation will have a significant impact on grid reliability and this impact can be positive, enhancing overall grid stability, transmission utilization, and economic output of the grid. The questions the Commission has raised are some of the important ones regarding ISO formation and reliability implications. On a recurring basis in the future, it will be essential to reexamine these and other policy questions raised by this profound change in grid management structure.

1. **Are there opportunities for regional ISOs to address reliability concerns and thereby maintain or even enhance grid reliability?**

Yes. Reducing the number of control area boundaries presents a significant opportunity to enhance both reliability and efficient grid utilization. Elimination of boundaries internalizes power flow problems, loop flow considerations, and scheduling issues within a single control area, making these simpler to solve when administered by a single operator and a single set of rules. The WSCC has begun a region-wide information sharing program of system security-related data specifically designed to facilitate reliability. Although initially intended for the purpose of supporting NERC security coordinators, this type of region-wide sharing of critical information is essential to ISO success in the expanded competitive markets of the future. The availability of this information serves to provide each ISO control area with a more complete picture and timely understanding of regional operations and constraints. Under the umbrella of a regional ISO, and provided that the ISO has the authority to direct appropriate action as noted above, the use of this information can be expanded to not only enhance system reliability but also to increase the efficient use of generation and transmission resources under a market-oriented environment.

2. **What tools or procedures will be necessary to enhance reliability in new markets?**

The ISO must be responsible, and responsive to market needs, in its development of tools and procedures to improve reliability. When the market is the provider of the reliability tools, unique challenges are created particularly with respect to timing and market choices regarding implementation of reliability needs. If the market can choose whether or not to provide a service previously bid to the ISO, as opposed to this provision being mandatory, this presents challenges

from both a timing and an implementation perspective. Visible and appropriate incentives and possible sanctions need to accompany the move to market provision of reliability tools.

Reliability can be measured in technical terms, such as in responding to disturbances and in maintaining adequate reserves. Additional analysis tools, including real-time evaluation of transient stability and reactive margin are essential next steps in allowing further market development. From a customer standpoint, reliability is oftentimes measured simply in terms of the frequency and duration of interruptions. These, however, are the traditional measures. For the ISO to enhance reliability, new tools and procedures are required.

These new tools and procedures are differentiated from traditional tools and procedures in that they must provide market participants with the proper set of incentives to participate and comply with the new market structure. Short of having the incentives right, the ISO must naturally gravitate to a position of command and control. This outcome is best avoided by getting the incentives right and properly communicating them to market participants. The incentive issue is particularly important when considering availability and use of highly responsive generation, such as hydro units, which play a significant role in effective control of the power system in real time.

These new tools and procedures necessarily rely on timely and complete acquisition of all necessary reliability and market information which must be analyzed, acted on, and disseminated in a timely manner to market participants. As noted above, information becomes increasingly important as the sources of reliability tools and implementation processes become more disaggregated. Increasingly sophisticated communications tools and procedures for communicating economic and technical information are required to enhance reliability in new markets.

3. How will the ISO handle short term reliability assessment (*i.e.*, the next day to one week time period)?

The next day's reliability assessment is only as good as the information available to the ISO. As such, the ISO relies on multiple forms and levels of information to make such assessments; pre-scheduled generation and transmission outages, proposed schedules of market participant loads and resources, and its own independent load forecast designed to assess and mitigate market scheduling deficiencies. Additionally, the ISO publishes scheduled equipment outages and total control area load forecasts several days ahead of each trading day. This look-forward supports the short-term planning processes of market participants and, additionally, allows the flexibility of scheduling several days in advance; serving purposes of both planning and scheduling.

As reliability needs can be translated into market products, such as dispatchable load which is sensitive to system parameters, such as voltage or frequency, in addition to the traditional price sensitivity, a market will play an increasingly important role in providing the tools necessary to maintain reliability. Depending on the markets and products developed, a month-ahead, or several months-ahead, assessments might be appropriate. The need for such extended-term assessments should be driven by and respond to market signals around price sensitivity, or service terms and conditions.

4. Should an ISO have a special relationship with regional reliability authorities or should it establish its own mandatory reliability rules?

Only one entity can establish the mandatory minimum reliability criteria for a region. This should be the regional reliability authority. The ISO(s) in a region should have special interest and play a significant role in the development of these criteria. This is particularly true as markets

become increasingly active in this process. All market participants MUST play by the same rules and be required to comply with the criteria necessary to maintain system reliability. Rules should allow as much market flexibility as possible, but compliance with the ground rules for maintaining system reliability is an obligation that all market participants share.

5. What is necessary to ensure that regional ISOs will have access to all information required for them to determine power flows in their region?

The information required to reliably operate a regional power system must come from all entities that operate systems within the region or that buy and sell power within the region. This means that all power produced and consumed inside of the ISO control area must be visible to the ISO in the timeframe and in the format required by the ISO for security assessment, analysis, and appropriate action. If some, but not all, of the entities provide information to the regional ISO, system reliability cannot be assured. Since the operation of a reliable grid is paramount in order to allow markets maximum flexibility, all market participants must provide timely and accurate information to the ISO in order for the markets to function correctly without adversely impacting the grid.

Some existing contract timelines conflict with ISO scheduling and operational deadlines. This situation can cause unique challenges in both allocating transmission and maintaining reliability. Because of these non-coincident timelines, some transmission may be left unused, while usage charges are assessed on parallel transmission. In some instances, existing contract terms do not require the sharing of information nor do they require that operating reserves be tested, proven, or available to the ISO. In these circumstances, the ISO, as control area operator, only knows in real-time if it has the appropriate amount of reserves to cover total control area

responsibilities. In real-time, it may be too late to take appropriate action to recover the deficiency, requiring the ISO to call on out-of-market resources to prevent or avoid a system emergency. In these circumstances it may not be practical or possible to honor all the terms and conditions of the existing contracts, facilitate an efficient market, and maintain reliability at the same time.

As a policy matter, it is necessary for the FERC to exercise its authority to require all operating entities within a region to provide the necessary information to the regional ISO on an established timeline, in a standard format, and by means of a standard interface to facilitate the ISO's evaluation and maintenance of system security and reliability. In a related area, it may also be in the public interest for the FERC to require participation by all entities in regional ISOs in order to accomplish the policy goals of non-discriminatory open access while maintaining system reliability. Control areas with significant "swiss cheese" holes create both market inefficiencies and reliability concerns, which hinder both open access and competitive markets.

6. Should the ISO calculate and post regional ATC values?

Yes. The ISO's responsibility for maintaining transmission system reliability and scheduling the use of the transmission system must be accompanied with the authority to determine the availability of transmission capacity. The responsibility to post such information in a timely manner is also appropriately placed with the ISO acting on a regional basis.

7. Should the ISO be allowed to implement voluntary redispatching of resources to unload transmission lines before pro-rata curtailment?

Yes. A robust market will develop tools and processes to allow for economic redispatch consistent with market participant objectives while maintaining appropriate transmission line

loadings. The one critical element is time, and in the final sense, if there is insufficient time, the ISO must have authority to take necessary action to maintain line loading and grid security.

8. **Would a regional ISO be able to manage congested interfaces and loop flow issues in a more efficient and nondiscriminatory manner than an individual transmission owner?**

Clearly, yes. A regional ISO encompassing the geography of many control areas will be able to internalize constraints, coordinate relief actions, and apply universal non-discriminatory standards in the allocation of transmission utilization during periods of curtailment. When this is performed by individual transmission owners, actions are often fragmented, inconsistent with one another, and potentially discriminatory.

9. **NERC has encouraged the development of security coordinators. Would it be preferable for the ISO to be the security coordinator in its region, and what rules should apply so that an ISO's responsibilities complement a utility's obligation to maintain reliability at the retail level?**

Yes. The security role of the ISO and the role of the security coordinator are the same. To have separate entities would cause duplication and confusion. The ISO, in its role as transmission administrator and security coordinator, can maintain grid reliability and administer non-discriminatory transmission access including during times of curtailment. The ISO must interface with distribution companies so that division of responsibilities are clear, and rules are compatible. Transmission system security takes precedence over distribution system security because of the level of impact involved. Close coordination, however, between the ISO and distribution companies should ensure reliability at both the transmission and distribution levels.

10. Would other entities through entrepreneurial efforts provide better reliability?

As noted in the beginning of this section D, reliability requires four elements. These same four elements will be essential going forward.

(1) **Rules:** Mandatory reliability rules and compliance will be essential as the number of players increase and as markets provide many or all of the reliability tools.

(2) **Information:** Access to all system information and schedules is essential for system reliability. All new market players and other entities within the ISO control area must be required to provide necessary information in a standard format and timeline in order maintain a reliable framework within which the markets can operate.

(3) **Tools:** Enhanced communications and analysis tools will be required as markets expand. Entrepreneurial efforts to provide these enhanced tools as well as market solutions to system reliability needs are necessary and desirable.

(4) **Authority:** Some single entity must be vested with the appropriate authority to gather information, make analyses, and require compliance with reliability rules in order to ensure that the system remains stable and fully functional, and that the ultimate consumer sees no negative impact as markets are allowed to grow and replace the old integrated structures. The ISO is uniquely positioned to be that entity.

E. ISOs AND TRANSMISSION PRICING (PANEL 5)

1. Should the FERC require a uniform method for transmission pricing in regional ISOs?

There is no single "correct" way to price transmission to enable non-discriminatory access and to encourage efficiency. Different regions could come to varying conclusions on how to price congestion and losses and how to recover the fixed costs of the transmission system. One of the most difficult aspects in creating an ISO is to gain the consensus to do so and to agree on a set of rules. The Cal-ISO generally believes that the Commission should permit a greater degree of pricing flexibility with respect to large regional ISOs, as opposed to sub-regional ISOs, recognizing the involved and complicated process of reaching a consensus. Alternatively, the Commission could establish minimum pricing requirements for single-system ISOs. The FERC should not impose a single national approach, but instead assure itself that the approach chosen by the region will support reliability, efficiency, and equity.

2. Should an ISO have an incentive rate of return?

No, the ISO should be a non-profit entity without bias toward particular approaches to satisfy its goals. If an ISO owns and operates transmission facilities (*i.e.*, becomes a transco), the ISO will have a natural bias towards transmission alternatives to relieving congestion or enhancing grid reliability. The proper role of an ISO is to weigh objectively all alternatives to relieving congestion and ensuring system reliability, including transmission upgrades, the use of location-sensitive generation or demand-based programs. Contrary to the opinion that there is a necessary link between ownership and efficient operation of a transmission system, the implementation of an

incentive-based compensation system can achieve the same goals as an incentive return for a profit-oriented company.

F. ISOs AND MARKET MONITORING (PANEL 6)

1. Should the Commission require every ISO to have a market-monitoring plan?

Yes. Market monitoring is one of the most important ways that an ISO can obtain feedback about the operation of the markets under its direct control or markets that affect the ones it operates. Without feedback, the ISO has no way to determine if its rules and protocols are facilitating an efficient market operation. Some common elements should be required in all monitoring plans: a systematic process for assembling and evaluating market performance indicators (prices, ancillary service bid sufficiency, congestion and market concentration) and the responsibility for changing market rules to promote reliable and efficient outcomes. Even if no market participant would seem to have market power, the ISO still must review price behavior and bid sufficiency if it is to retain the ability to adapt to changing market conditions and continue to operate effectively. It may be that market rules are creating disincentives to participants associated with providing services necessary to operate the grid. Rules may also negatively affect bid prices by increasing uncertainty or limiting participation. An ISO's review of actual market results can identify when this is happening and facilitate changes and improvements.

We believe that its is important for the FERC to move cautiously on this subject and establish general rules that apply to all ISOs yet allow each ISO to tailor its monitoring programs to the specific circumstances of the markets it operates.

2. Should there be enforcement mechanisms?

An ISO requires mechanisms to enforce its own rules, but it is not the appropriate agency to enforce potential market power abuse. There must be some consequences to breaking market rules or the rules have no meaning. To the extent that an entity obligates itself to provide certain services, there has to be a financial consequence if it does not perform that service. For instance the Cal-ISO Tariff provides that to the extent a generator bidding in the Ancillary Service Market fails to deliver when instructed, the generator will forfeit all payments received since the last successful delivery. The Commission should allow ISOs the flexibility to develop rules and enforcement mechanisms that best suit their market operation. They should have the discretion to determine enforcement actions (subject to pre-approved FERC guidelines) for violations of the ISO's own rules, protocols and contracts on a case by case basis, with ultimate FERC oversight.

ISOs should monitor their markets and be able to identify instances where market power compromises the efficiency and fairness of the market. They should report their findings to appropriate regulatory agencies. These agencies, and not the ISOs, are responsible for taking corrective or enforcement action.

3. Is it necessary and feasible for ISOs to monitor bilateral markets?

The ISO is responsible for the fair and efficient operation of ISO-administered markets and the transmission grid. To accomplish this, the ISO must be aware of price and volume information related to the power that is being transmitted across the grid. Power can come from a central exchange operated by the ISO, an independent central exchange like the California Power Exchange, or from bilateral power sales contracts. Where participation in a central power pool is not mandatory, bilateral transactions may account for a significant portion of the total power moved

over the grid. The exercise of generation market power in the bilateral market may affect the efficient functioning of the entire marketplace and may produce results not in the best interests of electric consumers, other market participants and the ISO ancillary service and congestion management markets. Identifying market power abuses requires access to, and examination of, data that affects the electricity market. The ISO should play a role of identifying market power concerns but should not be thrust into the role of a regulator. If a significant amount of activity takes place in the bilateral market, the ISO will not have adequate information required to detect market power abuses. FERC needs to consider what information is necessary to enable the ISO to perform this screening function.

4. Should there be different market monitoring requirements for ISOs that do not operate centralized energy markets?

No. ISOs that do not operate a central energy market still have a need to monitor market activity if they are to fulfill their responsibilities. Activities in central power markets, as well as in bilateral markets, can impact ISO operation and ISO ancillary service markets. The ISO must perform a monitoring function so that it may change its rules when necessary and identify participant behavior that impedes the fairness and efficiency of the ISO operation.

G. ISOs AND FERC REGULATION (PANEL 7)

1. Should FERC mandate ISOs?

It is premature for the Commission to mandate ISOs, but FERC should continue to encourage their formation. Whether viewed as a permanent body or a transitional entity, ISOs provide market participants an opportunity to obtain non-discriminatory transmission access over an entire region at non-pancaked rates. To date, ISOs have been instrumental in expanding

market access over entire regions. The development of additional ISOs in combination with the appropriate expansion of those already in place will inevitably lead to a larger market and a commensurate increase in efficiency and reliability. However, mandating the creation of ISOs is impractical in light of the complex regional and jurisdictional issues involved in forming an ISO. The formation of an ISO can only be successful when all participants agree on a limited number of core principles. Such core principles must address issues such as economic fairness and reliability. Absent consensus on these issues, there is no foundation upon which to build an ISO, whether mandated or not.

The notion that the Commission can mandate the creation of properly structured and constituted ISOs may be at odds with the practical reality that there is no one correct form for an ISO. The concept of an ISO as a regional entity requires that the Commission be flexible in evaluating ISOs that reflect unique regional characteristics or preferences. Just as the Commission gave deference to and was tolerant of the stakeholder process that gave rise to the Cal-ISO, the Commission should allow for regional variations in ISOs.

III. CONCLUSION

The Commission is to be commended for its foresight and early recognition that ISOs provide a means through which the Commission can achieve its goals of providing for open and nondiscriminatory transmission access and promoting competitive generation markets. The eleven ISO principles set forth in Order No. 888 have been instrumental in the development of ISOs throughout the country.

Beyond the establishment of the principles themselves, the Commission also deserves praise for the way in which it has chosen to apply those principles to the various ISO proposals that

have been filed with the Commission. The flexibility the Commission has shown in how the principles can be accomplished has undoubtedly encouraged the formation of ISOs in different regions of the country. In the case of California, the Cal-ISO is cognizant and appreciative of the extraordinary effort put forth by the Commission to allow the Cal-ISO to form in an expedited time frame and with many changes.

The Cal-ISO believes the Commission's efforts will be rewarded due to the ability of ISOs to: 1) eliminate pancaked transmission rates; 2) facilitate transmission pricing reforms; 3) reduce market power concerns; and 4) enhance the reliability of the transmission grid. Each of these issues is critical to expanding the scope of robust competitive markets.

Respectfully submitted,

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