ORIGINAL

SWIDLER BERLIN SHEREFF FRIEDMAN, LLP
THE WASHINGTON HARBOUR
3000 K STREET, NW, SUITE 300
WASHINGTON, DC 20007-5116
TELEPHONE (202) 424-7500
FAX (202) 424-7647
WWW.SWIDLAW.COM

NEW YORK OFFICE
THE CHRYSLER BUILDING
405 LEXINGTON AVENUE
NEW YORK, NY 10174
(212) 973-0111 FAX (212) 891-9598

[redacted]

April 2, 2001

The Honorable David P. Boergers
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

EL00-95-023
EL00-98-022

FILED
OFFICE OF THE SECRETARY
01 APR -2 PM 1:29
FEDERAL ENERGY REGULATORY COMMISSION

**Re: California Independent System Operator Corporation**
**Docket No. ER01-____-000**
**Amendment No. 39 to the ISO Tariff**

Dear Secretary Boergers:

Pursuant to Section 205 of the Federal Power Act ("FPA"), 16 U.S.C. § 824d; Sections 35.11 and 35.13 of the Commission's regulations, 18 C.F.R. §§ 35.11, 35.13; and the Commission's December 15, 2000 Order Directing Remedies for California Wholesale Electric Markets,[1] the California Independent System Operator Corporation ("ISO")[2] respectfully submits for filing six copies of an amendment ("Amendment No. 39") to the ISO Tariff. Amendment No. 39 would adopt enhanced new facility interconnection procedures.

The ISO's proposed interconnection procedures are a necessary first step in ensuring that California can attract critical new generating capacity. Establishment of ISO Controlled Grid-wide interconnection procedures will ensure that there are clear and uniform procedures for interconnecting new capacity to the ISO Controlled Grid. In addition, adoption of the ISO's proposed interconnection procedures will guarantee that, consistent with the Commission's open-access principles, each new facility is treated in an open and non-discriminatory manner.

---

[1] *San Diego Gas & Electric Co. v. Sellers of Energy and Ancillary Services Into Markets Operated by the California Independent System Operator and the California Power Exchange, et al.*, 93 FERC ¶ 61,294 (2000) ("December 15 Order").

[2] Capitalized terms not otherwise defined herein are defined in the Master Definitions Supplement, ISO Tariff Appendix A, as filed August 15, 1997, and subsequently revised.

FERC DOCKETED
APR - 2 2001

01040404 60-1

Moreover, by clearly establishing the cost-responsibilities of new generators interconnecting to the grid, the ISO and Participating Transmission Owners, who are filing compatible changes to their Transmission Owner Tariffs, can reduce the uncertainty and risk of developers and thereby facilitate development of new capacity in California.

The ISO's proposed interconnection procedures are but one part of a larger initiative to reenergize the California electricity market. Obviously, while reducing barriers to entry for new generating capacity is an essential element of any plan to revive the competitive market in California, the ISO must also provide assurances that such new capacity can be reliably delivered to load. Therefore, as part of its ongoing process to enhance its grid planning and expansion process, the ISO and Market Participants in California are examining policies that will ensure that the ISO Controlled Grid is expanded in a manner to support competitive markets. The ISO is continuing to explore policies to expand the transmission system not only to satisfy reliability criteria, but also to ensure access to critical new supplies and markets and to, if necessary, mitigate the exercise of locational market power in certain constrained areas of the ISO Controlled Grid. The success of the ISO's new interconnection procedures is inextricably linked to these other initiatives. As discussed further below, the interplay between these policies raises certain issues. While the ISO would have preferred to file not only the interconnection procedures proposed herein but also complementary changes to its long-term grid planning and expansion process, other priorities have prevented the ISO from doing so. Therefore, the ISO requests that in considering this proposal, the Commission recognize that other initiatives are underway in which the ISO intends to address certain of the issues identified below.

## I. BACKGROUND

### A. The ISO's Initial Interconnection Filing

Over the past two years, the ISO has endeavored with Market Participants to develop comprehensive procedures governing the interconnection of new generating facilities to the ISO Controlled Grid. Early in this process, the ISO and the stakeholders coalesced around two approaches regarding the ISO's interconnection procedures. One approach, referred to as "No Grandfathering of Transmission Rights," proposed that any incremental Intra-Zonal Congestion created as a result of the interconnection of a New Generator should be mitigated in accordance with the existing procedures in the ISO Tariff.[3] The other approach

---

[3] Under the ISO's existing procedures, the cost of Intra-Zonal Congestion is spread among all

was referred to as Advance Congestion Cost Mitigation ("ACCM"). Under the ACCM, New Facilities would be responsible for mitigating incremental Intra-Zonal Congestion under certain circumstances.[4] It is important to note that certain principles were common to both methodologies: (1) each New Facility requesting interconnection would be responsible for the costs of all transmission expansions and reinforcements necessary to maintain the reliability of the ISO Controlled Grid; (2) each New Generator could voluntarily invest in grid upgrades and would be entitled to any system benefits that arise as a consequence of its investment; and (3) all *Inter*-Zonal Congestion impacts of the New Facility would be managed using the ISO's existing Inter-Zonal Congestion management protocols. The ISO Governing Board adopted the ACCM approach, and on June 23, 1999, the ISO filed Amendment No. 19 to the ISO Tariff. The Commission, however, rejected Amendment No.19, finding that it relied upon inaccurate price signals resulting from the ISO's flawed methodology for managing Intra-Zonal Congestion. *California Independent System Operating Corp.*, 88 FERC ¶ 61,221 (1999), *reh'g denied,* 90 FERC ¶ 61,086 (2000).

B. Subsequent Efforts To Develop New Generator Interconnection Procedures

On April 13, 2000, the ISO reconvened the stakeholder process on development of its interconnection procedures. At that time, the ISO focused on development of a streamlined proposal that did not rely upon the ISO's existing Congestion Management protocols, which were under concurrent reexamination in a different stakeholder process. Ultimately, the ISO decided to address its interconnection procedures as part of the Comprehensive Market Redesign or "CMR" process. As part of the July 28, 2000 CMR Recommendations package, the ISO proposed the following guiding principles be adopted in developing its interconnection procedures: (1) the ISO should take a proactive role in ensuring

---

Scheduling Coordinators ("SCs") scheduling within the Zone using the Grid Operation Charge ("GOC"). Thus, under the "No Grandfathering" approach, the incremental Intra-Zonal Congestion costs associated with a New Generator would have been spread, via the GOC, to all Load in the Zone experiencing the Intra-Zonal Congestion.

[4] If the Intra-Zonal Congestion could be handled using the ISO's Intra-Zonal Congestion protocols (*i.e.*, if there were sufficient competition in the Adjustment Bid and Supplemental Energy bid markets to resolve the Congestion), the New Generator would not be required to mitigate the increase in Intra-Zonal Congestion resulting from the interconnection. Second, if there were an insignificant increase local Congestion (*i.e.*, local Congestion below a certain level), mitigation would not be required of the New Generator. Beyond these circumstances, a New Generator would be responsible for increases in Intra-Zonal Congestion. In other words, under the ACCM approach, a New Generator would be required to mitigate increased Intra-Zonal Congestion that is significant and that is unable to be addressed using competitive bidding.

that each new or re-powered generator or resource is able to interconnect to the grid with minimal interconnection costs, thereby ensuring access to the market and reducing potential barriers to entry; and (2) the ISO should provide new entrants with reasonable *ex ante* price certainty regarding their costs of interconnecting to and utilizing the ISO Controlled Grid. The ISO advocated adoption of these principles in large part because of the Summer 2000 performance of the markets and the critical need for new generating capacity. The ISO's efforts to finalize and file its CMR recommendation were overtaken by the Commission's November 1, 2000 order regarding the functioning of the California electricity markets.[5] In the November 1 Order, the Commission found that standard procedures to facilitate the interconnection of new generators (or existing generators seeking to increase the rated capacity) were needed and directed the ISO to file generator interconnection procedures no later than sixty days after the new Governing Board was seated. November 1 Order, 93 FERC at 61,364-65. Accordingly, the ISO decided to move forward on the development of the ISO's interconnection procedures. On November 20, 2000, the ISO circulated revised draft tariff language on the new facilities interconnection policy ("NFIP") and requested Market Participants to submit comments by December 6, 2000.

C. The December 15 Order

On December 15, 2000, the Commission issued its Order Directing Remedies for California Wholesale Electric Markets. The Commission affirmed its requirement that the ISO and the IOUs to file generator interconnection procedures. December 15 Order, 93 FERC at 62,015. In addition, the Commission stated that it expected those filings to "comport with policy and precedent already established by the Commission." *Id.* The Commission advanced the date for the submission of the interconnection procedures to April 2, 2001. *Id.* at 62,016. The Commission also specified that the IOUs were to file interconnection procedures "that are compatible with those developed by the ISO." *Id.*

Based on the Commission's directive and the critical need to finalize the ISO's interconnection procedures, early this year ISO management once again began to focus on the ISO's interconnection procedures. On March 6, 2001, the ISO circulated to Market Participants a "White Paper" and draft tariff language on the NFIP.[6] The ISO developed the White Paper in order to update Market

---

[5] *San Diego Gas & Electric Co. v. Sellers of Energy and Ancillary Services Into Markets Operated by the California Independent System Operator and the California Power Exchange, et al.*, 93 FERC ¶ 61,121 (2000) ("November 1 Order").

[6] Copies of documents prepared by the ISO Staff and presented to the ISO Governing Board

Participants on the ISO's latest thinking regarding the NFIP. The White Paper also summarized and reviewed certain recent Commission decisions regarding interconnection procedures. Finally, the White Paper summarized the feedback the ISO received on the draft NFIP tariff provisions previously circulated to Market Participants and outlined the ISO's latest position on various issues related to the policy. The ISO also updated and circulated draft tariff language. The ISO asked for comments on the White Paper and the draft tariff proposal by March 14, 2001. On March 19, 2001, the ISO held a stakeholder meeting to discuss the NFIP and asked for final comments on the draft policy by March 21st. The ISO presented a revised NFIP tariff proposal to the ISO Governing Board on March 30, 2001. The Governing Board authorized ISO management to make this filing.

## II. DESCRIPTION OF THE COORDINATED GENERATION INTERCONECTION PROCEDURES

As illustrated by the Attachment B which contains the blacklined tariff pages, Amendment No. 39 represents a comprehensive revision to the interconnection provisions of the ISO Tariff. Previously, the details of the interconnection application process were contained only in the individual tariffs of the Participating Transmission Owners. In order to promote consistency throughout the ISO Controlled Grid, these requirements are now defined in the ISO Tariff. In developing these procedures, the ISO, while working with stakeholders, has also been mindful of the Commission's clear admonition to abide by its recent precedents. The specifics of the proposal are described in the sections below.

### A. Applicability

Amendment No. 39 revises Section 5.7 of the ISO Tariff to define which New Facilities will be covered by the ISO's interconnection procedures. These facilities include: (1) each Generating Unit that seeks to interconnect directly to the ISO Controlled Grid; (2) each existing Generating Unit directly connected to the ISO Controlled Grid that has been re-powered and increased the total capability of the power plant; and (3) each existing Generating Unit directly connected to the ISO Controlled Grid that has been re-powered without increasing the total capability of the power plant but has changed the electrical characteristics of the power plant such that its re-energization may violate Applicable Reliability Criteria.

These new procedures only apply to New Facility Operators that have not submitted a Completed Application, as defined under the applicable Interconnecting

---

including a revised version of the White Paper and a response to stakeholder comments on the proposal are provide in Attachment A.

Participating Transmission Owner's ("Interconnecting PTO") TO Tariff, to the Interconnecting PTO as of the effective date of Amendment No. 39. The ISO procedures do not apply to those facilities interconnecting at the wholesale distribution level (i.e., where service would be provided under the PTO's Wholesale Distribution Access Tariff) or to resources interconnecting to the distribution system pursuant to rules established by the California Public Utilities Commission.

B. Generator Interconnection Requests

In accordance with the proposed Section 5.7.3, The ISO will receive and process all applications for interconnections. Applications are to be accompanied by a Good Faith Deposit. Within one Business Day, the ISO will send a copy of the application to the Interconnecting PTO. Within 10 Business Days, the ISO and the Interconnecting PTO must determine whether the application is complete.

The ISO will post on its OASIS site an updated list of proposed new generation projects. Upon request by the applicant, the ISO will not disclose the applicant's identity. The ISO will, however, post the nearest substation, the capacity and the year of proposed operation. *See*, Section 5.7.3.3.

C. Study Procedures

In cooperation with the ISO and consistent with the timelines specified in the ISO Tariff, the Participating TOs will complete all necessary System Impact and Facility Studies.[7] Study procedures and timelines are consistent with the Commission's *pro forma* OATT and will be subject to the ISO's Alternative Dispute Resolution ("ADR") Procedures. Applicants or third parties are permitted to perform their own studies, subject to ISO and PTO review and approval.

1. System Impact Study

System Impact Study procedures are contained in Section 5.7.4.2.1. Within 10 Business Days after receiving a Completed Interconnection Application, the ISO and the Interconnecting PTO will determine, on a non-discriminatory basis, whether a System Impact Study is required. This determination is based on the ISO Grid Planning Criteria and the transmission assessment practices outlined in the ISO Planning Procedures posted on the

[7] Section 5.7.4.2. Consistent with the Commission's ruling in *Southwest Power Pool, Inc.*, 92 FERC ¶ 61,109 (2000), the ISO will develop procedures for expediting the interconnection requests of generating projects, including those needed for reliable grid operation. *See*, Section 5.7.3.1.

ISO Home Page. The ISO and Interconnecting PTO will utilize, to the extent possible, existing transmission studies.

The System Impact Study will identify whether any Direct Assignment Facilities and Reliability Upgrades are needed as well as, if requested by the New Facility Operator, whether any Delivery Upgrades are necessary to deliver a New Facility's full output over the ISO Controlled Grid. The System Impact Study will also identify any adverse impact on Encumbrances existing as of the Completed Application Date.

If the ISO and the Interconnecting PTO determine that a System Impact Study is necessary, the Interconnecting PTO shall within twenty Business Days of receipt of Completed Application, tender a System Impact Study Agreement for such study. The New Facility Operator shall execute the System Impact Study Agreement and return it to the Interconnecting PTO within ten Business Days, together with payment for the reasonable estimated cost, as provided by the Interconnecting PTO, of the System Impact Study. Alternatively, a New Facility Operator can request that the Interconnecting PTO proceed with the System Impact Study and abide by the terms, conditions, and cost assignment of the System Impact Study Agreement ultimately determined through the ISO ADR Procedures, provided that such request is accompanied by payment for the reasonable estimated cost, as provided by the Interconnecting PTO, of the System Impact Study. If a New Facility Operator elects neither to execute the System Impact Study Agreement nor to rely upon the ISO ADR Procedures, such New Facility Operator's Completed Interconnection Application will be deemed withdrawn.[8]

The Interconnecting PTO will use due diligence to complete the System Impact Study within sixty Calendar Days of receipt of payment and the executed System Impact Study Agreement or initiation of the ISO ADR Procedures. If the Interconnecting PTO cannot complete the System Impact Study within this period, the Interconnecting PTO will notify the New Facility Operator, in writing, of the reason why additional time is required to complete the required study and the estimated completion date.

2. Facility Study

If a System Impact Study indicates that additions or upgrades to the ISO

[8] If the New Facility Operator's application is deemed withdrawn, the New Facility Operator will compensate the Interconnecting PTO for all reasonable costs incurred to that date in processing the Completed Application.

Controlled Grid are needed to satisfy a New Facility Operator's request for interconnection, the Interconnecting PTO shall, within fifteen Business Days of the completion of the study, tender to a New Facility Operator a Facility Study Agreement that defines the scope, content, assumptions and terms of reference for such study, the estimated time to complete the required study. The New Facility Operator shall execute the Facility Study Agreement and return it to the Interconnecting PTO within ten Business Days, together with payment for the reasonable estimated cost, as provided by the Interconnecting PTO, of the Facility Study.[9]

The Interconnecting PTO will use due diligence to complete the Facility Study within sixty Calendar Days of receipt of payment and the Facility Study Agreement or initiation of the ISO ADR Procedures. If the Interconnecting PTO cannot complete the Facility Study within that period, the Interconnecting PTO will notify the New Facility Operator, in writing, of the reason why additional time is required to complete the required study and the estimated completion date.

As an alternative to executing and returning a Facility Study Agreement, a New Facility Operator may submit an amendment to its Completed Interconnection Application to reflect a revised configuration for its New Facility.[10]

3. New Facility Operator Election to Perform Studies

A New Facility Operator may perform its own System Impact Study and Facility Study, or contract with a third party to perform the System Impact Study and Facility Study. Section 5.7.4.2(d). Any such study or studies performed by a New Facility Operator or third party must be approved by both the ISO and

---

[9] Alternatively, a New Facility Operator may request that the Interconnecting PTO proceed with the Facility Study and abide by the terms, conditions, and cost assignment of the Facility Study Agreement ultimately determined through the ISO ADR Procedures, provided that such request is accompanied by payment for the reasonable estimated cost, as provided by the Interconnecting PTO, of the Facility Study. If a New Facility Operator elects either to not execute the Facility Study Agreement or to rely upon the ISO ADR Procedures, such New Facility Operator's Completed Interconnection Application will be deemed withdrawn.

[10] The amended Completed Interconnection Application shall be treated in accordance with Section 5.7.3.2.1 and the New Facility Operator's Completed Interconnection Application shall not be deemed withdrawn. The New Facility Operator shall maintain its existing queue position, if (a) the amended Completed Interconnection Application is submitted within ten Calendar Days of the Interconnecting PTO's tender of a Facility Study Agreement; and (b) the New Facility Operator has not submitted a previous amendment to the Completed Interconnection Application following the tender of a System Impact Study.

Interconnecting PTO and completed within the timelines identified in Sections 5.7.4.2.1 and 5.7.4.2.2.

To the extent that the ISO and Interconnecting PTO disagree on the adequacy of the New Facility Operator or third party-sponsored study, the ISO will determine the adequacy of the study, subject to the ISO's ADR Procedures. The ISO and Interconnecting PTO shall complete their review of the New Facility Operator's study within 30 Calendar Days.

D. Generator Interconnection Agreement

The proposed Section 5.7.6 specifies that neither the ISO nor the Interconnecting PTO shall be obligated to energize, nor shall the New Facility Operator be entitled to have its interconnection to the ISO Controlled Grid energized, unless an Interconnection Agreement has been executed, or filed at FERC. Section 5.7.4.3 describes the process for execution of Interconnection Agreements. If a New Facility Operator and the Interconnecting PTO are unable to agree on the rates, terms and conditions of the Interconnection Agreement, the New Facility Operator may request that the Interconnecting PTO file an unexecuted Interconnection Agreement with the Commission. *See,* Section 5.7.4.3. The ISO recognizes the benefit of having a *pro forma* Interconnection Agreement and will continue working with the Participating TOs to develop this document.

E. Priorities and Grandfathered Requests

The ISO will maintain and oversee the queuing of Interconnection Applications. The ISO and Interconnecting PTO will process all Interconnection Applications based on the New Facility's Completed Application Date. *See*, Section 5.4.4.4. For any New Facility Operator that has submitted a request to interconnect to a Interconnecting PTO prior to the date that the Commission makes Amendment No. 39 effective, that New Facility Operator's position in the queue will be based on its Completed Application Date as that term was defined in the Interconnecting PTOs TO Tariff in effect at the time it submitted a request to interconnect to the Interconnecting PTO. *Id.*

The proposed Section 5.7.4.4.1 delineates certain milestones that must be met by the New Facility Operator to maintain its place in the queue. These milestones are in part tied to the California Energy Commission's requirements for generators requesting an Application For Certification and include obtaining Data Adequacy and obtaining a New Facility License.

F. Cost Responsibilities of New Facility Operators

The proposed Section 5.7.5 outlines the cost responsibilities for New Facility Operators. First, New Facility Operators are responsible for the costs of required studies in accordance with Section 5.7.4.2. A New Facility Operator's final cost responsibility will be based on actual costs.[11]

Second, each New Facility Operator shall pay the costs of planning, installing, operating and maintaining the following facilities: (i) Direct Assignment Facilities, and, if applicable, (ii) Reliability Upgrades. Direct Assignment Facilities include the costs of connecting the new facility to the ISO Controlled Grid. Reliability Upgrade Costs include the cost of facilities remote from the interconnection point, such as breakers, needed just to interconnect a new facility. However, the New Facility Operator shall be responsible for the costs of Reliability Upgrades only if the necessary facilities are not included in the ISO Controlled Grid Transmission Expansion Plan approved as of the New Facility Operator's Completed Application Date.[12]

The ISO's proposal does not, consistent with the ISO's interpretation of Commission precedent on this issue, provide for an allocation of cost-responsibility for Reliability Upgrades among different applicants. That is, the ISO's proposes that each New Facility be responsible for the Reliability Upgrades necessitated by its interconnection. Under the ISO's proposal if the first Generator in the interconnection queue is required to pay for Reliability Upgrades necessitated by its interconnection, the second Generator who proposes to interconnect at or near the same interconnection point may or may not be required to pay for Reliability Upgrades, depending on the amount of capacity made available by the first Generator's upgrades. However, nothing in the ISO's proposal would preclude these and other Generators from jointly sponsoring certain required Reliability-related or other upgrades. While the ISO recognizes that there are legitimate issues of equity in such a proposal, the ISO believes that the alternative would require a complex and burdensome tracking and reallocation of cost-responsibility going forward and that such a proposal would require the ISO and PTOs to develop crediting mechanisms and to specify a time horizon beyond which either the ISO

---

[11] The Interconnecting PTO will provide each New Facility Operator a detailed record of the actual costs assessed to it. A New Facility Operator may request the Interconnecting PTO to provide any additional information reasonably necessary to audit the actual costs the New Facility Operator is assessed.

[12] If the date for the installation of a facility is advanced by the interconnection of the New Facility, the New Facility Operator shall be responsible only for the incremental costs associated with the earlier installation of the facility.

would no longer reallocate such costs or would roll such costs into embedded cost rates. In the end, we believe that the ISO's proposal is consistent with Commission precedent and is administratively feasible.

Payment for Direct Assignment Facilities and Reliability Upgrades shall be made by the New Facility Operator to the Interconnecting PTO pursuant to the terms of payment set forth in the Interconnection Agreement between the parties. *See*, Section 5.7.5.2.

Third, each New Facility Operator shall implement all existing operating procedures necessary to safely and reliably connect the New Facility to the facilities of the Interconnecting PTO and to ensure the ISO Controlled Grid's conformance with the ISO Grid Planning Criteria, and shall bear all costs of implementing such operating procedures. *See*, Section 5.7.5(c).

The ISO does not propose, consistent with the ISO's interpretation of Commission precedent on this matter, to require that New Facility Operators pay for the costs of Delivery Upgrades. These costs include the costs of facilities necessary to deliver energy from the point of interconnection of the new facility to load and would include such costs as the cost of upgrading a line to eliminate congestion. The ISO believes that such upgrades are appropriately addressed pursuant to the procedures set forth in Section 3.2 of the ISO Tariff, Transmission Expansion. The ISO recognizes that a number of Market Participants have raised concerns and issue regarding the crediting for system benefits that arise as a result of a specific transmission expansion and what types of rights accrue to the sponsor of such transmission expansion projects. In addition, the ISO recognizes that others have raised concerns regarding the obligations of those who sponsor such expansions when those expansions impact the use of other interconnected facilities and/or existing transmission rights. The ISO believes that such issues are appropriately addressed as part of the process to revise the ISO's long-term grid planning process and the provisions of Section 3 of the ISO Tariff. The ISO believes that to address such issues now would only serve to unnecessarily delay approval of this proposal.

G. Critical Protective Systems

As proposed, Section 5.7.4.5 requires New Facility Operators to coordinate with the ISO, Participating TOs, and Utility Distribution Companies ("UDCs") to ensure that the New Facility Operator's Critical Protective Systems, including relay systems, are installed and maintained in order to function on a coordinated and complementary basis with ISO Controlled Grid Critical Protective Systems and the

protective systems of the Participating TOs and UDCs.

H. Encumbrances

Section 2.4.4.1.1 of the ISO Tariff requires the ISO and the Participating TO to honor the terms of Existing Contracts. In accordance with this requirement, the proposed Section 5.7.5.1 provides that no New Facility shall adversely affect the ability of the Interconnecting PTO to honor its Encumbrances existing as of the time a New Facility submits its Interconnection Application to the ISO. To the extent the Interconnecting PTO determines that the connection of the New Facility will have an adverse effect on Encumbrances, the New Facility Operator is to mitigate the adverse effect.

I. Definitional Sections

New definitions are added to the Master Definitions Supplement, Appendix A of the ISO Tariff to define and clarify the terms used in the new facilities connection procedures. The following new defined terms are proposed in Amendment No. 39: Completed Application Date, Data Adequacy Requirement, Delivery Upgrade Designated Contact Person, Direct Assignment Facility, Expedited Service Agreement, Facility Study Agreement, Facility Study, Good Faith Deposit, Interconnecting PTO, Interconnection Application, New Facility, New Facility License, New Facility Operator, Planning Procedures, Reliability Upgrade, Request for Expedited Interconnection Procedures, and System Impact Study.

## III. Requested Effective Date

The ISO respectfully that Amendment No. 39 be allowed to go into effect on June 1, 2001, sixty days from the April 2, 2001 filing date.

## IV. Service

The ISO has served this filing on Public Utilities Commission of the State of California, the California Energy Commission, the California Electricity Oversight Board, and all parties with effective Scheduling Coordinator Service Agreements under the ISO Tariff.

## V. Notices

Communications regarding this filing should be addressed to the following individuals, whose names should be placed on the official service list established by the Secretary with respect to this submittal:

Charles F. Robinson
General Counsel
Roger E. Smith
Senior Regulatory Counsel
The California Independent System Operator Corporation
151 Blue Ravine Road
Folsom, California 95630
Tele: (916) 608-7135
Fax: (916) 608-7296

Edward Berlin
Kenneth G. Jaffe
David B. Rubin
Bradley R. Milauskas
Swidler Berlin Shereff Friedman, LLP
3000 K Street, N.W. 20007
Washington, D.C.
Tel: (202) 424-7500
Fax: (202) 424-7643

## VI. Supporting Documents

The following documents, in addition to this letter, support this filing:

| | |
|---|---|
| Attachment A | Materials from the ISO Stakeholder process |
| Attachment B | Revised Tariff Sheets |
| Attachment C | Black-lined Tariff provisions |
| Attachment D | Notice of this filing, suitable for publication in the Federal Register (also provided in electronic format). |

Two additional copies of this filing are enclosed to be stamped with the date and time of filing and returned to our messenger. If there are any questions concerning this filing, please contact the undersigned.

Respectfully submitted,

Charles F. Robinson
General Counsel
Roger E. Smith
Senior Regulatory Counsel
The California Independent
System Operator Corporation
151 Blue Ravine Road
Folsom, CA 95630
Tel: (916) 608-7135

Edward Berlin
Kenneth G. Jaffe
David B. Rubin
Bradley R. Milauskas
Swidler Berlin Shereff Friedman, LLP
3000 K Street, N.W., Suite 300
Washington, DC 20007
Tel: (202) 424-7500

# Attachment A

# Memorandum

To: ISO Governing Board

From: Steve Greenleaf, Director of Regulatory Policy
Armie Perez, Director of Grid Planning

cc: ISO Officers

Date: March 22, 2001

***Re: The CAISO's New-Facility Interconnection Policy***

---

***This memo requires Board action on the ISO's New-Facility Interconnection Policy (NFIP).***

**EXECUTIVE SUMMARY**

Under the Federal Energy Regulatory Commission's (FERC or the Commission) rules, all transmission providers must establish rules that govern the interconnection of new or re-powered generators to their transmission systems. FERC regards interconnection service as but one facet of open and non-discriminatory transmission service. Over the past two years the ISO has worked with Market Participants, to develop a policy and procedures for interconnecting to the ISO Controlled Grid.

If California is to attract new generation to the state, it is essential that California develop a clear and consistent policy for interconnecting to the ISO Controlled Grid. Absent such a policy, critical new generating resources will find it difficult to determine the procedures and costs of interconnecting to the ISO Controlled Grid and may decide to locate outside of California. Therefore, development and approval of the New-Facility Interconnection Policy (NFIP) is a critical next-step in ensuring that California has the generating resources necessary to serve its native load.

This memorandum includes a brief summary of the salient features of the NFIP, an update on and brief response to the comments of Market Participants regarding the NFIP, and the proposed ISO Tariff language. Board action at the March 30 meeting is critical, as the ISO and the Participating Transmission Owners (PTOs) have been directed by FERC to file interconnection procedures by April 2, 2001.[1]

Management believes the proposed NFIP appropriately addresses the FERC directive and California's need to attract new investment in generation. Therefore, Management proposes the following motion:

> ***Moved,***
>
> ***That the ISO Governing Board authorize management to file at the Federal Energy Regulatory Commission CAISO Tariff language, substantially in the form presented in Attachment A to the memorandum dated March 22, 2001, that implements the CAISO's New Facility Interconnection Policy.***

---

[1] On December 15, 2000, FERC issued an order regarding the functioning of the California electricity markets. In that order, the Commission directed the ISO and the PTOs to file interconnection procedures no later than April 2, 2001. FERC's December 15 Order stated that the Commission expects the ISO's proposed interconnection procedures to "comport with the policy and precedent already established by the Commission for such filings."

## BACKGROUND - DEVELOPMENT OF THE NFIP

The proposed NFIP and modifications to the ISO Tariff are the product of a lengthy and intensive process conducted over the last two years. Early in this process, the ISO and the stakeholders coalesced around two approaches regarding the ISO's interconnection procedures. One approach, referred to as the "No Grandfathering of Transmission Rights" approach, dictated that any incremental Intra-Zonal Congestion created as a result of the interconnection of a New Generator should be mitigated in accordance with the existing procedures in the ISO Tariff.[2] The other approach was referred to as the Advance Congestion Cost Mitigation ("ACCM") approach. Under the ACCM, New Facilities would be responsible for mitigating incremental Intra-Zonal Congestion under certain circumstances.[3] It is important to note that certain principles were common to both approaches: (1) each New Facility requesting interconnection would be responsible for the costs of all transmission expansions and reinforcements necessary to maintain the reliability of the ISO Controlled Grid; (2) each New Generator could voluntarily invest in grid upgrades and would be entitled to any system benefits that arise as a consequence of its investment; and (3) all *Inter-*Zonal Congestion impacts of the New Facility would be managed using the ISO's existing Inter-Zonal Congestion Management protocols. By a large majority, the ISO Governing Board adopted the ACCM approach. On May 27, 1999, the ISO Board of Governors approved the Tariff language and directed management to file the proposal at FERC. On June 23, 1999, the ISO filed the then named "New Generator Interconnection Policy" at FERC as Amendment No. 19 to the ISO Tariff. FERC ultimately rejected Amendment No.19, finding that it relied upon inaccurate price signals resulting from the ISO's flawed methodology for managing Intra-Zonal Congestion. FERC directed the ISO to reexamine its proposal.

On April 13, 2000, the ISO reconvened the stakeholder process on development of its interconnection procedures. At that time, the ISO focused on development of a streamlined proposal that did not rely upon the ISO's existing Congestion Management protocols, which were under concurrent reexamination in a different stakeholder process. Ultimately, the ISO decided to address its interconnection procedures proposal as part of the Comprehensive Market Redesign or "CMR" process. As part of the July 28th CMR Recommendations package, the ISO proposed the following guiding principles be adopted in developing its interconnection procedures: 1) The ISO should take a proactive role in ensuring that each new or re-powered generator or resource is able to interconnect to the grid with minimal interconnection costs, thereby ensuring access to the market and reducing potential barriers to entry; and 2) the ISO should provide new entrants with reasonable ex ante price certainty regarding their costs of interconnecting to and utilizing the ISO Controlled Grid. The ISO advocated adoption of these principles in large part because of the Summer 2000 performance of the markets and the critical need for new generating capacity. As the Board is aware, the ISO's efforts to finalize and file its CMR recommendation at FERC was interrupted by FERC's November 1 and December 15 orders regarding the functioning of the California electricity

---

[2] Under the ISO's existing procedures, the cost of Intra-Zonal Congestion is spread among all Scheduling Coordinators ("SCs") scheduling within the Zone using the Grid Operation Charge ("GOC").[2] Thus, under the "No Grandfathering" approach, the incremental Intra-Zonal Congestion costs associated with a New Generator would be spread, via the GOC, to all Load in the Zone experiencing the Intra-Zonal Congestion.

[3] If the Intra-Zonal Congestion could be handled using the ISO's Intra-Zonal Congestion protocols (*i.e.*, if there were sufficient competition in the Adjustment Bid and Supplemental Energy bid markets to resolve the Congestion), the New Generator would not be required to mitigate the increase in Intra-Zonal Congestion resulting from the interconnection. Second, if there were an insignificant increase local Congestion (*i.e.*, local Congestion below a certain level), mitigation would not be required of the New Generator. Beyond these circumstances, a New Generator would be responsible for increases in Intra-Zonal Congestion. In other words, under the ACCM approach, a New Generator would be required to mitigate increased Intra-Zonal Congestion that is significant and that is unable to be addressed using competitive bidding.

markets. Recognizing the need for critical new generation, the ISO decided to move forward on the development of the ISO's interconnection procedures. On November 20, 2000, the ISO circulated revised draft tariff language on the NFIP and requested Market Participants to submit comments by December 6, 2000. As noted above, the December 15, 2000, FERC order, among other things, directed the ISO and the PTOs to file interconnection procedures no later than April 2, 2001.

Based on FERC's directive and the critical need to finalize the ISO's interconnection procedures, early this year Management once again began to focus on the ISO's interconnection procedures. On March 6, 2001, Management circulated to Market Participants a "White Paper" and draft tariff language on the NFIP (**Attachment D**). Management developed the White Paper in order to update Market Participants on the ISO's latest thinking regarding the NFIP. The White Paper also summarized and reviewed certain recent FERC decisions regarding interconnection procedures. Finally, the White Paper summarized the feedback the ISO received on the draft NFIP tariff language previously circulated to Market Participants and outlined the ISO's latest position on various issues related to the policy. The ISO asked for comments on the White Paper and the draft tariff language by March 14, 2001. On March 19, 2001, the ISO held a stakeholder meeting to discuss the NFIP and asked for final comments on the draft policy by March 21st.

## DISCUSSION

We have attempted below to summarize what we believe are the salient features of the NFIP. **Attachment A** contains the proposed ISO Tariff language. **Attachment B** contains an ISO Response to Comments on the NFIP, which provides additional insight into Management's updated position on the issues regarding the NFIP and responds to comments received from Market Participants. **Attachment C** contains a copy of the March 21st comments received from Market Participants.[4]

### *The New-Facility Interconnection Policy*

### 1) Applicability

- To new and re-powered generators interconnecting to the ISO Controlled Grid.
- Procedures will not apply to those facilities interconnecting at the wholesale distribution level (i.e., where service would be provided under the PTO's Wholesale Distribution Access Tariff (WDAT) or to resources interconnecting to the distribution system pursuant to rules established by the California Public Utilities Commission (CPUC).

### 2) Processing of Applications

- The ISO will receive and process all applications for interconnections.
- The ISO will post on its OASIS site an updated list of applicants. Upon request by the applicant, the ISO will not disclose the applicant's identity. The ISO will post the nearest substation, the capacity (MW) and the year of proposed operation.
- Per FERC's ruling in Southwest Power Pool, Inc., 92 FERC ¶ 61,109 (2000), the ISO will develop procedures for expediting the interconnection requests of generating projects, including those needed for reliable grid operation (e.g., Summer 2001 Peakers).

---

[4] Additional detailed material regarding the NFIP can be found on the ISO Home Page at http://www.caiso.com/stakeholders.

- Subject to ISO oversight, the PTOs will complete all necessary System Impact and Facility Studies. The timeline for completing the studies will be specified in the ISO Tariff. The TO Tariffs will be modified to be consistent with the ISO Tariff.
- Study procedures and timelines will be consistent with the *pro forma* OATT (60 days, longer with written explanation) and will be subject to the ISO's Alternative Dispute Resolution (ADR) Procedures. Applicants or third parties will be permitted to perform their own studies, subject to ISO and PTO review.

**3) Good Faith Deposit and Queuing**

- The ISO will require a Good Faith Deposit from all applicants in order to prevent spurious requests. Deposit will be refunded with interest when an interconnection is complete or an application is withdrawn.
- The ISO will maintain and oversee the queuing of Interconnection Applications.
- The ISO proposes queuing milestones in part tied to the California Energy Commission's requirements for generators requesting an Application For Certification (AFC). Those milestones include obtaining Data Adequacy and obtaining a New Facility License.
- An applicant may request that a PTO file an unexecuted Interconnection Agreement at FERC.
- ISO and PTOs will commit to develop a *pro forma* Interconnection Agreement by next year.

**4) Cost Responsibility for New Facilities**

- **The ISO proposes that New Facilities be responsible for:**
  1) Local Direct Assignment Costs – these costs include the costs of connecting the new facility to the ISO Controlled Grid;
  2) Reliability Upgrade Costs – these include the cost of facilities remote from the interconnection point, such as breakers, needed just to interconnect a new facility (the costs necessary to reliably connect a facility at zero output).

The ISO does not propose to charge New Facilities for Delivery Upgrade costs. These costs include the costs of facilities necessary to deliver energy from the point of interconnection of the new facility to load and would include such costs as the cost of upgrading a line to eliminate congestion. Delivery Upgrades are addressed in Section 3 of the ISO Tariff.

## CONCLUSION

The ISO must file its interconnection procedure at FERC on April 2, 2001. Management believes that it is imperative that the Board vote on the NFIP so that Management can make the required FERC filing and so that the ISO can establish a clear and consistent policy for interconnecting to the ISO Controlled Grid. Management recommends that the Board approve the proposed motion.

# CAISO Response to Stakeholder Comments
# New-Facility Interconnection Policy
# March 22, 2001

---

***Purpose: To update the ISO Governing Board and Market Participants on the ISO's current position on issues regarding the New-Facility Interconnection Policy (NFIP).***

## 1. Introduction & Background

On March 5, 2001, the ISO circulated a White Paper on the ISO's New-Facility Interconnection Policy (NFIP) that outlined certain recent FERC decisions regarding interconnection procedures and that updated Market Participants on the ISO's latest position on the NFIP. The ISO also circulated revised draft ISO Tariff language on the NFIP. At that time, the ISO requested that Market Participants submit comments on the NFIP by March 14, 2001. On March 14, 2001, the ISO received comments from five entities, which are generally summarized and addressed below. In addition, the ISO held a stakeholder meeting on the NFIP on March 19, 2001, and asked for additional comments from Market Participants by March 21, 2001. These additional comments from Market Participants are also summarized and addressed below.

## 2. Stakeholder Feedback and Updated ISO Positions

The ISO's review of stakeholder comments has provided the ISO new and additional insight into how to structure the NFIP. The ISO has modified the draft NFIP tariff language both to address certain of the concerns raised by stakeholders. Outlined below is a summary of the ISO's updated position on various matters.

**2.1** ***Applicability*** – The ISO previously contemplated application of the NFIP to all large load projects that connect with the ISO Controlled Grid. Based on stakeholder feedback and further consideration of the issue the ISO agreed that load is different than generation and that, in general, the NFIP should not be applicable to load. The ISO modified its proposed tariff language to reflect this change.

In the previous NFIP White Paper, the ISO raised the issue as to whether the NFIP should be applicable to interconnections at both the Transmission and Distribution voltage levels. In an Order regarding Entergy Service Corporation's (Entergy) proposed interconnection procedures, FERC found that Entergy had improperly limited the scope of its filing to interconnections for the purpose of providing wholesale transmission service. FERC stated that an "eligible customer" as defined in the Order No. 888 OATT includes unbundled retail service. FERC directed Entergy to revise its filing to apply to interconnections for wholesale and unbundled retail transmission service. Based on further consideration, the ISO stated that it now believes that, with respect to the procedural aspects of the proposed tariff language, the proposed tariff provisions should apply to interconnections at both the transmission and distribution level. In addition, subsequent to the issuance of the ISO's White Paper, FERC issued an Order that, in part, addressed the ISO's treatment of Distributed Generation (DG). In that Order, FERC rejected the arguments that it does not have jurisdiction to address the distribution grid. FERC stated that sales for resale by a distributed generator and the transmission of electric energy in interstate commerce (including unbundled retail transmission) are subject to FERC's jurisdiction under Section 201 of the Federal Power Act even if the power enters the grid at distribution voltage.

In their March 14, 2001, comments, ***Southern California Edison Corporation (SCE), Pacific Gas & Electric Company (PG&E) and San Diego Gas & Electric Company (SDG&E), [collectively, the Participating Transmission Owners (PTOs)]*** stated that the NFIP should not apply to interconnections at the distribution level, whether those interconnections are for purposes of wholesale or retail service. The PTOs state that the NFIP should be limited to generation connected to the ISO Controlled Grid. Specifically, the PTOs argue that interconnections to the distribution grid should be under the Wholesale Distribution Tariff (WDAT) or under the California Public Utilities Commission (CPUC) jurisdictional tariffs pursuant to Rule 21.

***Duke Energy North America (Duke)*** states that the ISO should clarify the applicability of the NFIP to re-powered facilities. Duke states the NFIP should apply only to the "incremental increase" of a re-powered generator and/or electrical configuration changes.

Updated ISO Response

Upon further consideration, the ISO agrees to limit application of the NFIP to generation interconnecting to the ISO Controlled Grid. The currently effective method of addressing distribution-level interconnections under the PTOs WDATs and the CPUC's rules has been effective and the ISO believes that this is not the appropriate time to change the current process.

The ISO agrees with Duke that, for re-powered generating units, the ISO would only be concerned about the impact on the ISO Controlled Grid of the additional capacity. That is, for purposes of modeling the re-powered unit, the ISO would study the impact on the grid by first modeling the system with the old unit on line, and then study the system with the new unit on-line.

**2.2** ***Expedited Procedures for Processing Requests*** – The ISO proposed that the NFIP apply to all generation, regardless of size, but that certain streamlined interconnection procedures apply to requests for interconnection of generation units smaller than a certain threshold size (10 MW) and units needed for reliability.

In its March 14, 2001, comments, ***Grid Services, Inc. (Grid Services)*** stated that the ISO's proposed 10 MW threshold is arbitrary and the ISO's proposal should be consistent with the streamlined procedures already developed by the CPUC.

***SCE*** states that the expedited procedures should apply to all generators interconnecting to the ISO Controlled Grid and that such procedures should be developed in cooperation with the PTOs.

In its March 21st comments, ***PG&E*** requests additional clarification on the expedited interconnection procedures. PG&E assumes that, under the expedited procedures, a NFO would be obligated to pay the actual cost of Direct Assignment Facilities and Reliability Upgrades based on preliminary cost estimates (as opposed to waiting to begin construction until the Facility Study is finalized and approved). PG&E seeks clarification on that point and how long the PTO and the ISO would have to develop the cost estimates for the expedited service agreement.

Updated ISO Response

Upon further consideration, the ISO has decided to make the expedited procedures available to all generating units, regardless of size. The ISO has incorporated into the draft tariff language the expedited procedures currently available under the PTOs' TO Tariffs. The ISO has also attempted to clarify the proposed tariff language to address PG&E's concerns.

**2.3** ***Good Faith Deposit*** – In Section 5.7.2.1 of the draft tariff language, the ISO proposed to require applicants to submit a Good Faith Deposit. The ISO stated that a Good Faith Deposit is necessary to ensure that serious and viable requests for interconnection are received. The llanguage provided that the ISO would return such deposit if the applicant withdraws its application or is not responsible for any connection costs. The language also provided that, under the NFIP, an applicant could convert its deposit into a non-refundable deposit in order to retain its position in the queue.

***Duke*** states that the Good Faith Deposit is excessive and unprecedented. Duke states that although the ISO states that it will credit the deposit upon completion (or termination, based upon a withdrawal of the of the interconnection application). Duke argues that the utilities that do require a deposit only require a $10,000 deposit. ***Calpine Corporation (Calpine)*** states that the ISO should refund the Good Faith Deposit in the event that the interconnection application is "deemed withdrawn", as that term is used under FERC's *pro forma* open-access transmission tariff. Calpine also states that the Good Faith Deposit should be refunded directly to an applicant, as opposed to through the ISO's Grid Management Charge (GMC).

***Grid Services*** suggests that the ISO consider reducing the amount of the Good Faith Deposit by the amount the Interconnecting PTOs require to processinterconnection applications.

ISO Response

Based on the stakeholder comments and further consideration of the issue, the ISO has decided to revise the Good Faith Deposit amount from $1/kW of capacity to the fixed amount of $10,000. The ISO believes the fixed dollar amount is more consistent with FERC precedent. More importantly, in light of the fact that the ISO has narrowed the cost-responsibility of new facilities under the NFIP, a high dollar level deposit is no longer necessary. The ISO still believes that a Good Faith Deposit is necessary to ensure that the ISO does not receive and undertake to process interconnection requests that are not serious. The ISO has also made changes to the tariff language to address Calpine's concerns. Since the ISO views the purpose of the deposit as ensuring serious interconnection applications, and not as pre-payment for interconnection costs, the ISO does not believe changes are warranted to address Grid Services' recommendation.

**2.4** ***Performance of Studies*** – Previously, a number of stakeholders stated that the ISO should more clearly define the responsibilities of the PTOs and the ISO. In addition, a number of parties asserted that the ISO Tariff should specify all aspects of the interconnection process and that no detail should be left to the PTOs' tariffs. Based on those comments and further deliberation, the ISO agreed that the responsibilities of both the ISO and the PTOs need to be clearly expressed in the Tariff language. Moreover, the ISO agreed that the ISO Tariff should be detailed as to the performance and timeline for completion of all studies performed by the PTOs.

In its March 14, 2001 comments, ***Grid Services*** suggests that the PTOs should be required to provide the estimated cost of performing the study.

***SCE*** proposes that, among other things, NFOs should compensate the ISO and PTOs for the cost of reviewing third-party studies. In addition, ***the PTOs*** argue that disputes between the ISO and the PTO with regard to studies should be resolved under the ISO's ADR Procedures.

***PG&E*** states that: the Tariff should specify who determines which party conducts the required studies; the PTOs should be compensated for the cost of reviewing third-party studies and NFOs should pre-pay all study costs; an NFO should be held to the same timeline as the PTOs for the completion of all studies; and

certain information should be determined/provided as a result of the studies, including the identification of any adverse effect on Encumbrances.

Among other things, ***Calpine*** suggests that an NFO should be able to participate more fully in the study process and that the process should be flexible and accommodate changes to an NFO's plan. Calpine suggests that the provisions should comport with the timeline in FERC's *pro forma* tariff and that the study costs should be limited to actual costs. Calpine also requests that the ISO clarify which projects will be included in the studies.

***Duke*** recommends that the ISO have complete oversight and authority over the study process. Duke also requests that the ISO clarify, in the Tariff, the ability of an NFO or a third-party to perform the required studies. Duke also requests that the ISO clarify the types of analysis to be performed in the study process.

Updated ISO Response

The ISO has modified the study procedures to address many of the commenters' concerns. Specifically, the ISO has clarified the Tariff language to specify that the NFO should pay study costs in advance and that the costs will be limited to actual costs. In addition, the language now specifies that the PTO will provide an estimate of study costs. The ISO has also modified the Tariff language to specify what results should be provided under the studies, including the identification of needed Direct Assignment Facilities and Reliability Upgrades and whether an NFO may want to sponsor certain Delivery Upgrades. The ISO also believes that the Tariff is clear that it is the ISO that oversees the study process and that disputes regarding the study process will be handled under the ISO's ADR Procedures.

**2.5 *Queuing*** – A number of stakeholders previously raised various concerns with regard to the ISO's proposed queuing methodology. The ISO reasserted its position that the queuing procedures and milestones are and remain appropriate. The ISO stated that the queuing process is necessary to ensure that NFOs have the proper incentive to proceed with the interconnection process.

In its March 14th comments, ***Duke*** reiterated its recommendation that the melding of the pre-existing PTO interconnection queues and the ISO's queue be clarified. Duke recommended that if a System Impact Study has not been started as of the date these procedures become effective, the study procedures under the ISO Tariff should apply. Duke states that if any study has begun, the ISO should begin to coordinate with the PTO. Duke reiterated its concern that the six-month data adequacy requirement is not realistic and is too short. Duke also recommended that an NFO not be required to provide the information under 18 C.F.R. 2.20. Duke states that the information pertains to the provision of transmission service and does not indicate that a project is moving forward. Among other changes, Duke also recommends that an Interconnection Agreement (IA) should be executed with the ISO, not the PTO, and that the ISO should clarify the procedures with respect to execution of the IA.

***Calpine*** reiterated that applicants should have up to one year to satisfy the data adequacy requirements, since certain data is only available certain times of the year. Moreover, Calpine contends that the ISO's definition of Data Adequacy is ambiguous. Calpine states that the Tariff should explain the impact of an applicant losing and/or suspension of its queue position, e.g., will the PTO have to perform new studies?

***SCE*** raised concern that a NFO could remain in the queue for up to fifteen months without executing an IA. SCE proposes that an NFO be required to execute an IA within 30 days.

ISO Response

The ISO continues to believe that the queuing procedures in general are necessary elements to the NFIP. The ISO believes that it is necessary to ensure that applicants make every effort to proceed with the interconnection process and, therefore, that queuing procedures and milestones are necessary to ensure timely completion of certain tasks necessary to interconnect. Just as the ISO and PTOs have explicit obligations to complete certain tasks, such as agreements, on a timely basis, so do all applicants. The ISO also believes that tying the queuing milestones to the requirements of, currently, the California Energy Commission's (CEC's) requirements for obtaining a Application For Certification (AFC) is necessary and appropriate. The CEC's milestones are well known and established and the completion of such requirements or milestones are a good indicator that a project is viable and moving forward.

Upon further consideration, however, the ISO has decided to remove, as a queuing milestone, execution of an IA. Since the ISO has added language which permits NFOs to request that a PTO file an unexecuted IA at FERC, execution or the filing of an IA is no longer a good indication that an NFO has reached an important milestone. However, the ISO has included, as a second milestone, obtaining a New Facility License (e.g, obtaining a license or AFC from the California Energy Commission). Finally, the ISO has removed the tariff language regarding conversion of the Good Faith Deposit to a non-refundable deposit. In light of the ISO's decision to reduce the amount of the deposit, we believe these provisions are no longer necessary.

**2.6** ***Cost Responsibility*** – A number of stakeholders previously stated that the ISO Tariff should be more specific about the types of costs that an applicant would or could be responsible for paying. Based on that feedback, the ISO added more specificity as to the type of costs a NFO would be responsible for under the NFIP.

In its March 14, 2001 comments, ***SCE***, among other things, asserts that cost allocation should be based on cost causation, not the relative impact of each New Facility's interconnection on the ISO Controlled Grid. While SCE generally agrees with the ISO's proposed cost responsibility, SCE claims that the proposed Tariff language needs clarification.

On March 21, 2001, SCE stated that it could support either a first-come, first-served approach or a broader allocation of cost responsibility for specific Reliability Upgrades. SCE states that whatever approach is adopted, it should balance the need for fairness and administrative manageability. SCE also states it has difficulty constructing a scenario where a New Facility would require a PTO to reduce transfer capability in order to interconnect the New Facility. However, SCE states that it does not believe that customers that pay for transfer capability should be required to sacrifice that capability for the benefit of a New Facility and that generally, New Facilities should compete for the use of the transfer capability at an output greater than zero.

Similarly, ***SDG&E*** states that while it does not advocate a specific cost-allocation methodology at this time, any policy should be easy to understand and implement, should minimize the risk of potential litigation, and should, to the greatest extent possible, be based on market-based mechanisms. SDG&E also states that the ISO should clarify that a NFO is responsible for all study costs. Finally, SDG&E states that the tariff language should be clarified as to the rights and obligations of an NFO is they build a Delivery Upgrade.

In its March 14th and 21st comments, ***Calpine*** argues that the ISO's NFIP still improperly assesses transmission costs that could provide system-wide benefits on New Facility Operators, and therefore conflicts with FERC precedent. Calpine claims that imposing such costs on New Facility Operators will act

as a barrier to entry and discriminates between existing and new generators. Calpine suggests that all Reliability Upgrades should instead be included as plant in the PTO's rates. In addition, Calpine raised concerns with the assignment of costs based on an NFOs "incremental impact."

***Duke***, in its March 14th comments, takes the position that the ISO should provide credits for the system benefits associated with reliability upgrades, and that such credits should be provided on a dollar-for-dollar basis.

In its March 21, 2001, comments, ***FPL Energy*** generally supports the direction of the ISO's NFIP. FPL Energy also states, however, that it is somewhat concerned about the terms and conditions under which Delivery Upgrades would be made and what rights would be conferred to those who choose to invest in such upgrades. FPL Energy states that everyone wants a system that creates strong incentives for transmission upgrades. In addition, FPL Energy recommends that the definition of Delivery Upgrades be clarified.

***Jim Kritikson*** recommended that the ISO clarify how cost responsibility will be determined and how that relates to queue position.

In its March 14th and 21st comments, ***PG&E*** proposes that the ISO clarify the cost-responsibility sections of the proposed Tariff language to specify that NFOs will be responsible for Direct Assignment and Reliability Upgrades and that cost responsibility for Delivery Upgrades will be addressed under the ISO's Long-Term Grid Planning Policy. In its March 21st comments, PG&E suggests that any NFO that drops out of the interconnection queue should be responsible for its own study costs as well as the costs of performing additional studies for those NFOs later in the queue. In addition, PG&E suggests that an NFO that drops out of the queue should not be responsible for upgrade costs and that those costs should be borne by the next NFO in the queue. Finally, PG&E states that its own policy does not require the sharing of required costs but that parties should not be barred from sharing those costs upon mutual agreement. PG&E states that this policy is in line with FERC precedent, but that it would not be opposed to changing the policy as long as PG&E is not made responsible for these costs.

Lastly, ***Los Angeles Department of Water and Power (LADWP)***, states that the ISO and NFO should be obligated to coordinate to ensure that a NFO's Critical Protective Systems are complementary of entities outside the ISO Controlled Grid.

Updated ISO Position

The ISO believes that NFOs should be directly responsible for Direct Assignment and Reliability Upgrade facility costs. The ISO continues to believe that direct assignment of these costs is reasonable from a cost-causation standpoint, is consistent with FERC practice, and will not act as a barrier to entry for NFOs.

The ISO believes that NFOs may voluntarily agree to pay for Delivery Upgrade facilities pursuant to the procedures outlined in Section 3 of the ISO Tariff, but that such costs should not be directly assigned to NFOs. In addition, the ISO believes that if an NFO chooses to build such facilities, it should receive the benefits identified in Section 3.2.7.3 of the ISO Tariff. Finally, as a general matter, the ISO believes that NFOs should be able to compete for the use of Available Transfer Capacity on the ISO Controlled Grid and that if such capacity becomes constrained, the ISO should manage such congestion under its congestion management protocols.

The ISO also believes that NFOs should be responsible for Reliability Upgrade costs based on their position in the queue. That is, if NFO #1 pays for Reliability Upgrades, NFO #2 and #3 can utilize such upgrades as long as there is available capacity. Alternatively, if the existing system can accommodate NFO #1 without upgrades, NFO #1 would be able to utilize such facilities without paying directly for them.

While the ISO recognizes that such costs could be shared among NFOs, and would encourage NFOs to work cooperatively toward that result since it is in their collective best interests to share cost responsibility, the ISO is concerned that it will be administratively difficult to track and reassign cost responsibility for these facilities going forward. In addition, the ISO believes that assignment of these costs on a first come-first served basis is consistent with FERC precedent on this issue.

The ISO has also made changes to the ISO Tariff language to accommodate LADWP's concerns.

## Market Participant Comments
## New Facility Interconnection Policy

---

## PACIFIC GAS & ELECTRIC COMPANY

March 21, 2001

Steve Greenleaf
Director of Policy
California Independent System Operator
151 Blue Ravine Road
Folsom, California 95630

Dear Steve:

The purpose of this letter is to present Pacific Gas & Electric Company's (PG&E's) feedback on the Independent System Operator's (ISO's) New Facility Interconnection Policy (NFIP.)

PG&E appreciates the ISO's focus in developing its NFIP; it is an important milestone in allowing California to move forward in meeting its goal to develop new generation.

Additionally, FERC's December 15, 2000 Order Directing Remedies for California Wholesale Electric Markets requires the ISO to file interconnection procedures that comport with previously approved FERC interconnection procedures by April 2, 2001; in addition, the Order requires PG&E, Southern California Edison, and San Diego Gas & Electric Company to file interconnection procedures compatible with those due to be filed by the ISO under the same deadline. PG&E believes the ISO's overall approach to interconnection policies discussed to date is consistent with the FERC precedents referenced in the FERC's December 15 Order, and agrees with it.

Given the requirements of the FERC Order for the ISO and the Investor Owned Utilities (IOUs) to file by the same date, PG&E has strived to work cooperatively with the ISO and the other IOUs in order to produce the best filings for all parties. PG&E believes these efforts have been very successful and productive and appreciates the ISO's efforts.

**PG&E Feedback on the ISO's 3/20/01 NFIP Draft Tariff**
PG&E does not have significant issues with any part of the ISO's NFIP, and would like to commend the ISO on its excellent NFIP White Paper, which greatly enhanced PG&E's understanding of the ISO's reasoning and NFIP structure. In addition to specific comments within the ISO's draft tariff (see separate document), PG&E seeks additional clarity on expedited interconnection procedures (Sect. 5.7.2.1.1) and cost responsibility for Delivery Upgrades (Sect. 5.7.5.d.)

PG&E is supportive of expedited interconnection procedures, but is not able to ascertain exactly how such procedures would work based upon the present tariff language. PG&E has assumed in

its comments on the revised tariff that the expedited service agreement would result in the New Facility Operator (NFO) pledging to pay for the actual costs of Direct Assignment Facilities and Reliability Upgrades necessary to interconnect their facilities based on preliminary cost estimates. This would enable the Participating Transmission Owner (PTO) to begin design and construction of these facilities immediately following the completion of the Facility Study, in contrast to waiting for developer review and approval of Facility Study results before beginning design and construction. Also, it is not clear how long the PTO and the ISO would have to develop the cost estimates for the expedited service agreement. The present language can be read to be ten business days, which would not result in very accurate cost estimates. PG&E would appreciate clarification.

The ISO policy is clear that "interconnection" costs include Direct Assignment Facilities and Reliability Upgrades, not Delivery Upgrades, and PG&E supports that. However, Sect. 5.7.5.d. while attempting to clarify that Delivery Upgrades costs are not part of interconnection costs and therefore not "required," could actually lead parties to believe that some other party is responsible for these costs. This is not the case and will be decided in Long Term Grid Planning policy. Therefore, PG&E has suggested adding the following addition: "This Section 5.7 does not address the criteria for determining the need for a Delivery Upgrade or who must bear the cost responsibility for the construction of a Delivery Upgrade."

**ISO Requested Information from the 3/19/01 Stakeholder Meeting**

At the March 19 Stakeholder meeting the ISO requested feedback on cost responsibility when an NFO drops out of the queue, and how PG&E allocates "required" interconnection costs among multiple generators. On the topic of cost responsibility, when an NFO drops out of the queue, FERC precedent is clear that an NFO dropping out of the queue is responsible for the costs of any studies required for other NFOs in the queue due to the first NFO dropping out. PG&E's policy on upgrade costs due to an NFO dropping out of the queue, is they are the responsibility of the next applicable NFO; the dropping out NFO has no cost responsibility for upgrade costs.

PG&E's policy requires no sharing of "required" costs such as Reliability Upgrades, but does not bar parties interconnecting at the same interconnection point at the same time from reaching an agreement. However, PG&E has never had such a case. PG&E's policy is in line with FERC precedent and eliminates the accounting complications of forced sharing of "required" costs. PG&E would not be opposed to changing its policy on this issue as long as it is clear that PG&E is not responsible for these "required" costs.

If I can offer you further guidance on PG&E's feedback, please do not hesitate to call me.

Sincerely,

Jeannette Woo
Comprehensive Market Redesign Manager
Pacific Gas & Electric Company
(415)973-5097
245 Market, Room 1451D
San Francisco, California 94105

# SOUTHERN CALIFORNIA EDISON COMPANY

## Comments on Outstanding Issues from Steve Greenleaf's March 19, 2001 Presentation

### Outstanding Issue #1 – Allocation of Reliability Upgrade Costs

- For the allocation of Reliability Upgrade costs to New Facility Operators, SCE could support either the "first come, first pay" or the "window" approach, provided the approach abides by the following basic principles
    - Approach should be manageable – while some may argue that "fairness" dictates a window approach, the window approach may be difficult to implement (many "what if" scenarios) and result in legal challenges; the window would need to be a reasonable time period
    - Approach should not create unreasonable barriers to entry for new generators – if the first generator is required to pay for all Reliability Upgrades, that generator may choose to drop out of the interconnection process and leave the upgrade to the next generator in line – a game of upgrade hot potato is not a desirable outcome
    - Approach should not result in unnecessary duplication of studies – an approach that allows too much flexibility will result in uncertainty and lengthen the study process
    - Approach should be the same for all PTOs

### Outstanding Issue #2 – Impact on Transfer Capability

- To be honest, SCE has had a very difficult time trying to construct a scenario where the interconnection of a new generator would require a PTO to reduce transfer capability in order to interconnect the new generator
    - SCE does not believe that customers paying for transfer capability should be required to sacrifice that transfer capability for the benefit of a new generator
    - However, the new generator should be allowed to compete for the use of the transfer capability (i.e. New Firm Use) at an output greater than zero

## Comments on March 20, 2001 ISO Draft Tariff Language

- Overall, SCE believes the ISO's March 20 draft has addressed most of the concerns SCE raised in its March 14 comments – below are comments on the revised draft tariff language

### Section 5.7.5.2.1 System Impact Study Procedures

- Reference to the time period by which the Interconnecting PTO shall tender a System Impact Study Agreement should be "within 20 Business Days", not 20 Calendar Days
    - Consistent with current FERC-accepted TO Tariff
    - 20 Business Days is still less than 30 Calendar Days allowed under OATT
- Reference to the time period by which the New Facility Operator shall execute the System Impact Study Agreement should be "within 10 Business Days", not 10 Calendar Days

Section 5.7.4.2.2 Facility Study Procedures

- Reference to the time period by which the Interconnecting PTO shall tender a Facility Study Agreement should be "within 15 Business Days", not 15 Calendar Days
- Reference to the time period by which the New Facility Operator shall execute the Facility Study Agreement should be "within 10 Business Days", not 10 Calendar Days

Section 5.7.4.3 Queuing

- Suggest revising Section 5.7.4.3 (c) to make consistent with Section 5.7.1 (Applicability)
    - Section 5.7.1 states that the revised Section 5.7 is only applicable to New Facility Operators that have not submitted a ***Completed Application*** as of the effective date of the revised Section 5.7 – need to make Section 5.7.4.3 (c) consistent
- Suggested language: Section 5.7.4.3 (c) For any New Facility Operator that has submitted a request to interconnect to a Interconnecting PTO prior to the date that FERC makes ~~this section~~ Section 5.7 effective, such New Facility~~'s~~ Operator's position in the queue will be ~~established~~ based on its Completed Application Date as that term was defined in the Interconnecting PTOs TO Tariff in effect at the time the time the New Facility Operator submitted a request to interconnect to the Interconnecting PTO ~~date the New Facility Operator submitted its request to the Interconnecting PTO~~.

Section 5.7.5 Cost Responsibility of New Facility Operators

- Section 5.7.5 (c) [currently the first 5.7.5 (d), should be (c)] also needs to include ongoing operation and maintenance costs in additions to planning and installation costs.
    - Suggested language: "5.7.5 (c) Each New Facility Operator shall pay the costs of planning, ~~and~~ installing, operating and maintaining the following facilities: ....."
- Section 5.7.5 (d) [currently the second 5.7.5 (d), but should be the only (d) – the first (d) should be (c)] – suggest that this section be revised to be consistent with the existing language in Section 3 of the ISO Tariff since no changes to Section 3 are being contemplated
    - 5.7.5 (d) Each New Facility Operator may ~~also~~, at its own discretion, pursue ~~pay for~~, as described in ~~pursuant to~~ Section 3 of the ISO Tariff, ~~any Delivery Upgrades~~ a transmission system addition that is not identified as a Direct Assignment Facility or a Reliability Upgrade.

Definitions

- Delivery Upgrade – suggest deleting the definition, consistent with comments on Section 5.7.5 (d)

## LOS ANGELES DEPARTMENT OF WATER & POWER

Byron-

Here is a suggested addition to the draft tariff for Section 5.7.3.4 Coordination of Critical Protective Systems.

To be added to the end of the 010320 NFIP Tariff Language:

The ISO and the New Facility Operators shall also coordinate with transmission, distribution, and generation entities outside of the ISO controlled grid to ensure that the New Facility's Critical Protective Systems function on a coordinated and complementary basis with these entities outside the ISO Controlled Grid.

thanks-

JB

(An example where this would be needed is where new generation interconnects to jointly owned transmission facilities, where some of the owners do not belong to the ISO.)

## FPL ENERGY

We are in general support of the direction of the NFIP changes. And you can quote me on that.

That said, we are somewhat concerned about the terms and conditions under which the newly defined "Delivery Upgrades" would be made-and what rights would be conferred to those who choose to invest. I think we all want a system that creates strong incentives for transmission upgrades where they make sense. Don't think that we're there yet. A solution could be to defer all of those decision to the ISO. If so, that should be a conscious decision, not the default responsibility of the ISO due to the inaction of others.

And ask the transmission planners, but I think the definition of "Delivery Upgrades" would be more clear if you included remediation of single or double contingency overloads with the thermal limits already identified.

## SAN DIEGO GAS & ELECTRIC COMPANY

**March 22, 2001**

SDG&E's Further Comments on ISO NFCP
Draft Language Issued March 20, 2001

(1) We recommend and support the position that a uniform methodology for the allocation of reliability upgrades should be adopted. We do not have a proposed methodology at this time, but believe that the elements of a sound methodology would include the following: (a) easy to understand and implement; (b) should be structured to minimize the risk of litigation; and (c) should, to the greatest extent possible, rely on market based solutions that do not disincent

generators from seeking to cite and interconnect new generation or encourage gaming of the application and queuing processes.

(2) Under section 5.7.4.3.1(b), language should be added to clearly state that, if the ISO and the Interconnecting PTO determine that a new system impact study will be required based on the revised queue position of the New Facility Operator, the NFO will be required to pay for the new study. (Currently, this is implied, but ought to be directly stated).

(3) Under section 5.7.5, language should be added to make it clear that, if the New Facility Operator chooses not to pay for Delivery Upgrades, it may be unable to deliver its full generation output to load. Additionally, it should be made clear the NFO has the option of paying for the upgrades to be fully dispatchable and is so paying will obtain any rights associated with the upgrade, such as FTRs.

(4) In Appendix A, last page, Reliability Upgrade, the last sentence should be modified to include other transfer paths such as those identified in other WSCC or ISO documents or PTO path ratings approved by the ISO. Also, item (i) should not be removed from this section and placed back in the definition of Reliability Upgrade. The NFO should be responsible for system upgrades which cause overloads and cannot be mitigated by congestion management.

# CAISO White Paper
# New-Facility Interconnection Policy
# March 5, 2001

---

***Purpose: To update Market Participants on the status and development of ISO's New-Facility Interconnection Policy (NFIP).***

## 1. Introduction

Over the past two years the ISO has attempted, along with Market Participants, to develop a policy and procedures for interconnecting to the ISO Controlled Grid. Under the Federal Energy Regulatory Commission's (FERC or the Commission) rules, all transmission providers must establish rules that govern the interconnection of new or repowered generators to their transmission systems. FERC regards interconnection service as but one facet of open and non-discriminatory transmission service. The purpose of this paper is to update Market Participants on the ISO's latest thinking regarding this matter. First, Section 2 provides a brief review of events over the past few months and explains the ISO's rationale for finalizing its interconnection procedures. Section 3 summarizes and reviews certain of the recent FERC precedent regarding interconnection procedures; information that certainly will guide the ISO's deliberations on this issue over the next month. Section 4 summarizes the feedback the ISO received on its latest draft tariff language on interconnection procedures and outlines the ISO's latest position on various issues related to interconnection procedures.

## 2. Background

On November 29, 2000, the ISO circulated to Market Participants draft ISO Tariff language regarding the ISO's NFIP. On December 6, 2000, in response to the ISO's request for feedback on the draft tariff language, a number of Market Participants submitted comments on and recommended changes to the draft tariff language. On December 15, 2000, FERC issued an order regarding the functioning of the California electricity markets. In that order, the Commission directed the ISO and the Participating Transmission Owners (PTOs) to file interconnection procedures no later than April 2, 2001. Therefore, the ISO intends to finalize its NFIP over the next month. At this point in time, ISO Management intends to present its final recommendation regarding the NFIP to the ISO Governing Board the week of March 25, 2001.

FERC's December 15 Order stated that the Commission expects the ISO's proposed interconnection procedures to "comport with the policy and precedent already established by the Commission for such filings." As directed by FERC, the ISO must ensure that whatever interconnection procedures it ultimately adopts and files at FERC comport with Commission precedent. Therefore, the next section of this paper summarizes the body of precedent regarding interconnection procedures that the Commission has developed over the past year. The ISO provides this review in the hope that familiarity with the FERC precedent will facilitate the ISO's discussions with Market Participants over the next month.

## 3. Relevant FERC Precedent

FERC has developed a substantial body of precedent regarding interconnection procedures over the past year. In the December 15 Order, FERC cited to Commonwealth Edison Co., 91 FERC ¶ 61,083 (2000), order on compliance filing, 92 FERC ¶ 61,018 (2000); Entergy Services, Inc., 91 FERC ¶ 61,149 (2000); American Electric Power Service Corporation, 91 FERC ¶ 61,308 (2000); and Southwest Power Pool, Inc.,

92 FERC ¶ 61,109 (2000). The ISO believes that a brief of each of these cases may be instructive and will provide Market Participants some insight into what FERC believes are appropriate interconnection procedures.

***3.1 Tennessee Power Company (March 15, 2000)*** – Tennessee Power Company (Tennessee Power) filed a complaint against Central Illinois Public Service Company (Central Illinois) claiming that Central Illinois' good faith estimate for distribution service was not just and reasonable. Finding that the complaint was premature, FERC dismissed the complaint and in so doing provided guidance on a number of matters affecting interconnection service.

***3.1.1 The Nature of Interconnection Service*** – FERC stated that interconnection service is an element of transmission service and is required to be provided under the *pro forma* tariff. FERC stated that this is true whether the interconnection request is tendered concurrently with the request for transmission service or in advance of a request for transmission service. FERC stated that customers have the right to request the interconnection component of service separate from the delivery component and that when this occurs, the provisions of the *pro forma* continue to apply. These include provisions for arranging service, customer responsibilities, study procedures, compensation for new facilities, and service agreements. FERC stated that, once secured, the interconnection component of transmission service does not convey a right to the network capacity at the receipt point.

***3.2 Commonwealth Edison Co. (April 26, 2000)*** – On March 6, 2000, Commonwealth Edison Company (Commonwealth), filed amendments to its open-access transmission tariff to prescribe the procedures for the interconnection of generation. Commonwealth proposed to establish the information to be included in a request for interconnection; how priority in the queue for interconnection service will be determined; and timeframes for the completion of the necessary studies. FERC accepted for filing, subject to certain modifications, Commonwealth's proposed procedures.

***3.2.1 Queue Priority*** – FERC accepted Commonwealth's proposal to establish queue priority based on the date on which an interconnection service request is submitted, provided that a generator executes a letter of intent (LOI) within 15 days of receipt of the LOI. Moreover, FERC accepted Commonwealth's proposal to establish a priority queue for those applicants that requested interconnection prior to the effective date of the proposed procedures based on the date such applicants executed the LOI.

***3.2.2 Posting of Requests*** – Consistent with its finding in PJM Interconnection, L.L.C.,[1] and its finding that a request for interconnection is a component of transmission service, FERC found that the information that Commonwealth makes available on OASIS for an interconnection request "should be no more or less than the information for any other transmission service request."

***3.2.3 Standard Form of LOI and Interconnection Agreement*** – A number of intervenors stated the Commonwealth should have a standard form of LOI and Interconnection Agreement (IA). One party requested that the Commission initiate a rulemaking proceeding to address standardization issues. In the end, FERC did not require Commonwealth to file a standard form of LOI or IA.

***3.2.4 Study Costs and Study Support Documentation*** – FERC accepted Commonwealth's agreement to provide an "estimate" of study costs. Moreover, FERC directed Commonwealth to also provide a time estimate of study completion and to utilize existing studies to the extent practicable. FERC also accepted Commonwealth's agreement to provide supporting workpapers and stated that applicants can contest the results of the studies.

---

[1] 87 FERC ¶ 61, 299 (1999) (PJM), reh'g denied, 89 FERC ¶ 61,186 (1999).

***3.2.5 Right of Refusal*** – FERC accepted Commonwealth's proposal that if Commonwealth notifies an applicant of a competing request and that applicant fails to begin substantive negotiations on the IA with Commonwealth before the end of the "right of refusal" period, the applicant forfeits all queue priority rights. FERC found that such a provision serves as a safeguard for competing interconnection requests.

***3.2.6 Execution of IA*** – FERC directed Commonwealth, consistent with the *pro forma* tariff, to provide applicants with the option of requesting that Commonwealth file an unexecuted IA without losing its position in the queue. In that instance, the customer must also agree to pay whatever rate is ultimately found to be just and reasonable and must comply with al terms and conditions of the tariff.

FERC also directed Commonwealth to clarify that "system upgrades and modifications" for which the interconnection customer is financially responsible include only those required to interconnect the applicant's generation reliably and do not involve transmission system upgrades that "may be required to move power from the point of interconnection to load."

***3.2.7 Milestones*** – Certain parties stated that Commonwealth should be required to specify milestones in advance and adopt comparable milestones for all IAs. FERC agreed with Commonwealth that milestones are appropriate in an IA, but found that Commonwealth should adjust the milestones through negotiation. FERC stated that "open and timely communications" regarding the milestones would alleviate misunderstanding and disputes.

***3.2.8 Credit Worthiness*** – FERC found that Commonwealth's requirement to provide reasonable credit support to be consistent with its *pro forma* tariff.

***3.2.9 Cost Allocation*** -FERC accepted as sufficient Commonwealth's commitment to follow the Commission's precedent for the allocation of interconnection and facilities upgrade costs and did not direct Commonwealth to file more specific guidelines.

***3.3 Entergy Services, Inc. (May 18, 2000)*** – On March 1, 2000, Entergy Services, Inc. (Entergy), filed a *pro forma* Interconnection and Operating Agreement and procedures and requirements for interconnecting new generation to the transmission system. Entergy proposed that all new generators be required to sign an identical *pro forma* IA and that its IPs govern all requests to interconnect. The IA would define the interconnection services to be provided by Entergy as well as the cost responsibilities for the costs of interconnection facilities and necessary system upgrades. Entergy's proposal also provided that its proposed IA would not afford a generator any right to transmit across the transmission system. Entergy's proposed IPs would establish the process for and nature of the studies that Entergy must conduct to determine the applicable charges. The IPs would also establish the queue in which requests are processed and the relevant milestones for generators to remain in the queue.

***3.3.1 Pro Forma IA and IPs*** – FERC accepted Entergy's proposed *pro forma* IA and IPs as consistent with or superior to the *pro forma* OATT. FERC stated that a *pro forma* IA will streamline the processing of interconnection requests and will allow applicants to see that they are treated consistently and fairly. Finally, recognizing that Entergy's proposal was filed after the Commission's ruling in *Tennessee Power*, FERC directed Entergy to include its IA and IPs in its OATT to reflect the fact that interconnection is an element of transmission service.

***3.3.2 Queue*** – FERC accepted Entergy's proposal to establish queue priority based on the date Entergy receives the Study Letter Agreement (SLA).

***3.3.3 Study Costs*** – Entergy proposed that by signing the SLA, an applicant agrees to pay the actual cost of completing the study or a minimum of $10,000 for the study, even if the applicant elects not to proceed. FERC rejected this proposal and required Entergy to modify its IA and IPs to reflect that the reimbursement of study costs is restricted to actual costs.

***3.3.4 Required Studies and Study Timeline*** – Entergy proposed and FERC accepted a two-phased interconnection study. The first phase is the Feasibility Study (FS), which determines the local area constraints for various output levels, up to the requested level. The second phase is the Detailed Interconnection Study (DIS), which is a refinement of the FS and includes load flow analysis, a short circuit/breaker rating analysis, and a transient stability analysis. Entergy stated that it would provide the results of the FS in approximately 45 days. Upon receipt of the FS an applicant has 20 days to notify Entergy whether it wants it to proceed with the DIS. After 20 days, an applicant loses its place in the queue. If Entergy receives notification to proceed, Entergy would notify the applicant of the start date for the DIS and the last date for the applicant to provide all information to Entergy.

FERC rejected Entergy's proposal to complete the study in a reasonable timeframe (Entergy estimated that it would generally take 8-10 weeks to complete the DIS). FERC directed Entergy to revise its IPs to include: 1) specific timeframes in which it will attempt, with due diligence, to complete studies; and 2) a statement that applicants will be notified of any delay in the completion along with an explanation of the delay.

As revised by FERC, Entergy's proposal also provided that if an applicant fails to provide the necessary information, it will lose its place in the queue. Once a DIS is complete, Entergy's proposal provided that a Facilities Study, initiated by a Facilities Study Letter Agreement, would scope the project identified by the DIS and refine the cost estimates and construction schedule. A Letter of Intent is necessary to start the project and service is initiated with an IA and OA.

***3.3.5 Jurisdiction*** – Entergy requested that the Commission to acknowledge that the Commission has exclusive jurisdiction over the rate, terms and conditions of the IA and OA. A number of parties stated that Entergy's proposal did not delineate the type of interconnections that fall within the Commission's jurisdiction, as opposed to state jurisdiction. FERC reiterated its position, as stated in *Tennessee Power,* that interconnection service is a component of jurisdictional transmission services required under Order No.888 and that the Commission has exclusive jurisdiction over the filed agreements and procedures. More importantly, FERC found that Entergy had improperly limited the scope of its filing to interconnections for the purpose of providing wholesale transmission service. FERC stated that an "eligible customer" as defined in the Order No. 888 OATT includes unbundled retail service. FERC directed Entergy to revise its filing to apply to interconnections for wholesale and unbundled retail transmission service.

***3.3.6 Separation of Transmission and Interconnection Service*** – FERC reiterated its findings in *Tennessee Power,* and stated "that a generator may request the interconnection component of transmission service separately from the delivery component." FERC stated that the interconnection component "conveys a right to access the transmission provider's system at the receipt point" and "that there are no transmission delivery rights, beyond the receipt point, conveyed by an interconnection." (emphasis added). FERC opined that the benefit received from this "right" is that, if another generator subsequently seeks to interconnect in the same local area and the grid cannot accommodate "receipt" of power from the two generators without expansion, it is the new generator that must pay for the expansion. FERC directed Entergy to clarify which provisions of its IA and IPs apply to the interconnection component alone and what apply only at the time delivery service is taken.

***3.3.7 Execution of IA*** – FERC directed Entergy, consistent with the *pro forma* tariff, to provide applicants with the option of requesting that Entergy file an unexecuted IA. FERC directed Entergy to include an explicit statement as to the procedure for filing an unexecuted agreement at the request of the customer.

***3.3.8 Required and Optional System Upgrades and Customer Credits*** – Certain parties complained that Entergy's proposal was confusing regarding when system upgrades were required or optional. FERC accepted Entergy's clarification that: 1) "Required System Upgrades" were those necessary for safe and reliable interconnection of a new generator, regardless of whether there is output from the generator; and 2) "Optional System Upgrades" were those that resulted in increases to Entergy's transmission capability in order to allow the generator's power to flow on the system. Entergy also clarified that payment for optional upgrades entitles the generator to credits against future transmission charges but does not convey additional transmission rights to the generator. FERC directed Entergy to provide an explanation of the crediting procedures.

***3.3.9 Impact of New Generation*** – Certain parties raised concerns about the impact of new generation on Entergy's study results. Entergy stated that it would include new generation in its system studies when the new generator has executed an IA. In addition, Entergy stated that it would post certain basic information on its OASIS, such as the interconnection point, unit capacity and planned start date, but not the identity. FERC accepted Entergy's proposal as reasonable.

***3.3.10 Due Diligence*** – FERC found that the due diligence requirements of the OATT apply to the conduct of the IA. FERC stated that the OATT contains due diligence requirements for both feasibility and system studies and for construction of facilities fore interconnection.

***3.4 American Electric Power Service Corporation (June 28, 2000)*** – On May 4, 2000, American Electric Power Service Corporation (AEP), filed amendments to its OATT to prescribe procedures for the interconnection of generation. AEP stated that its proposed procedures set forth how a customer initiates a request for interconnection service; determination of a customer's position in the queue; and the timeframes for the completion of studies.

***3.4.1 Non-Refundable Deposit*** – AEP proposed that each applicant pay a non-refundable deposit of $10,000. AEP stated that this was necessary in order to limit requests to serious proposals. Consistent with its finding in *Entergy*, FERC rejected AEP's proposal and stated that customers are only responsible for the actual costs incurred and that any additional funds paid should be reimbursed. (AEP had noted that the Commission approved the use of a deposit in *PJM*. FERC found that that ruling was not dispositive in AEP, noting that its *PJM* ruling applied to an ISO that is engaged in regional planning and regional evaluation of merchant plant additions.)

***3.4.2 Queue*** – A number of entities complained that AEP's proposal was unclear as to how queue priority is established. As a result, FERC directed AEP to clarify that queue priority with respect to interconnection and the cost of upgrades is established by the date of the IR, provided that all subsequent deadlines are met. The Commission also accepted AEP's proposal to grandfather requests based on the date the IA was signed or the date an unexecuted IA was filed at the Commission.

***3.4.3 Study Procedures, Parameters and Timelines*** – AEP proposed that within seven days of a complete IR, AEP must tender to the customer a System Impact Study Agreement (SISA), describing the scope of the study and an estimate of its costs. AEP proposed that the customer then has 15 days to execute the SISA and to tender another deposit of $7,500. Upon receipt of an executed SISA, AEP will use

due diligence to start the SIS within 45 days and to complete the SIS 60 days later. FERC directed AEP to modify its proposal, consistent with the *pro forma* OATT, so that a customer is notified of a delay within 60 days, versus the 105 days proposed.

AEP stated that the SIS consists of two phases: 1) a power flow analysis; and 2) a short-circuit and transient stability analysis. AEP stated that the study criteria are the same as those documented in AEP's FERC Form 715. FERC directed AEP to include the criteria in its IPs. Upon completion of the SIS, AEP proposed that it tender to the customer a Facilities Study Agreement (FAS),which provides for the recovery of the actual costs of the study. As proposed by AEP, the customer must then execute the FSA and provide a deposit of $12,500 in order to retain its place in the queue. AEP committed to complete the study within 60 days.

No later than the completion of the FS, AEP proposed to tender a Facility Interconnection and Operating Agreement (IA) to the customer. Within 21 days the customer must execute the IA or request that AEP file the unexecuted IA with the Commission or risk losing its queue position. In response to concerns that 21 days was too short a time period for customers to execute the IA, AEP offered to provide customers a draft IA within seven days of receipt of a IR. FERC stated that while it thought AEP's offer would be helpful, it directed AEP to propose alternative deadlines, such as those accepted in *Commonwealth*, in which customers were given 90 days, with an option to extend the deadline another 30 days upon mutual agreement of the parties.

***3.4.4 Separation of Transmission and Interconnection Service*** – FERC reiterated its findings in *Tennessee Power*, and directed AEP to modify its IPs to reflect that it is merely evaluating whether system upgrades are needed to accept power into the grid at the interconnection receipt point.

***3.4.5 Cost Allocation Issues and Customer Credits*** – AEP defined Direct Assignment Facilities (DAF) as:

> The facilities necessary to physically and electrically interconnect the generating facilities to the Transmission System; and (b) the minimum necessary local and network upgrades that would not have been required but for an Interconnection Request, including: (i) system upgrades necessary to remove overloads; and (ii) system upgrades necessary to remedy short circuit or stability problems resulting from the connection of the generating facility to the network. Direct Assignment Facilities shall not include system upgrades that may be required to move power from the point of interconnection to load.

FERC found that AEP's proposed definition is not unreasonable for an interconnection customer who is not yet selling the output of its generator. In such cases, FERC found that it is appropriate for the customer to pay for the full cost of these upgrades which would not have been needed but for the customer's request for interconnection. FERC stated that, once transmission is secured, AEP is limited to charging the higher of the expansion cost of these upgrades or an embedded cost rate which has the expansion costs of these upgrades rolled-in. Since AEP proposes a credit equal to the full cost of the upgrades once transmission service is secured, FERC accepted AEP's proposal.

***3.4.6 Impact of New Generation*** – Certain parties raised concerns about the impact of new generation on AEP's interconnection studies. AEP stated that, consistent with prior practice, it would include new generation in its system studies when the new generator has executed an IA. FERC accepted AEP's proposal, stating that it was identical to that approved by the Commission in *Entergy*.

***3.5 Southwest Power Pool, Inc. (July 28, 2000)*** – On June 5, 2000, Southwest Power Pool, Inc. (SPP), filed amendments to its OATT prescribing coordinated procedures for customers seeking the interconnection of new or repowered generation.

***3.5.1 Request to Interconnect and Required Studies*** – SPP proposed that each applicant submit a Generation Interconnection Request (GIR) and an executed Feasibility Study Agreement under which the customer agrees to reimburse Southwest for the actual cost of the Feasibility Study. SPP proposed that all studies will be coordinated with the affected transmission owners. Subsequent to the Feasibility Study, SPP proposed to proceed with a System Impact Study (SIS) and a Facilities Study (FS). SPP stated that it would endeavor to complete a SIS within 90 days. SPP also proposed that third party studies may be used for any or all studies upon mutual agreement between the customer and SPP. SPP also provided that customers may request expedited study procedures. SPP required pre-payment for all studies based on SPP estimates, but is only responsible for the actual cost of the required studies (termination of a request does not relieve a customer of incurred costs or committed studies. Upon completion of the study process SPP proposed to provide customers with a Generation Interconnection Agreement (GIA).

FERC accepted SPP's proposal to complete the SIS within 90 days. However, FERC also accepted SPP's commitment to modify the procedures to provide that SPP will provide customers with written notification if SPP needs more than 60 days. FERC also accepted SPP's proposal to require execution of the GIA within 60 days of SPP's completion of the Facilities Study and the tender of the GIA to the customer. FERC also directed SPP to clarify the timeframes for tendering and executing the GIA.

***3.5.2 Exemption for Small Generation*** – SPP proposed to develop streamlined Interconnection Procedures for requests less than 10 MW. In addition, SPP proposed that it be permitted to waive, on a non-discriminatory basis, the procedures for any request less than 10 MW.

***3.5.3 Cost Allocation*** – A number of parties sought clarification of SPP's proposed allocation of costs. On reply, SPP clarified that there may be costs, such as the cost of breakers, associated with facilities needed beyond the point of interconnection. FERC agreed with SPP insofar as the customer has not yet requested transmission service. FERC stated that once the generator of a third-party contract for transmission service, SPP is limited to charging the higher of the expansion cost of the upgrades or an embedded cost rate that has the expansion costs rolled-in.

***3.5.4 Construction*** – Based on concerns raised by intervenors, SPP committed to begin construction of facilities prior to the execution of the GIA. SPP committed to that approach with the understanding that the customer agrees to bear all of the facilities-related costs prudently incurred prior to execution of the GIA. FERC accepted SPP's proposal.

***3.5.5 Grandfathering*** – FERC accepted SPP's proposal to grandfather all requests to interconnect received prior to the effective date of the new IPs based on the date of such requests were submitted to the applicable transmission owner.

***3.5.6 Industry-wide Guidance*** – FERC took the opportunity in the SPP to offer guidance on two matters regarding the filing if IAs. Based on its determination in *Tennessee Power* that interconnection is an element of transmission service, FERC stated that it will now require any IA to be filed as a service agreement under the applicable OATT. Second, FERC directed that any IA that is filed not include power sales rates.

## 4. Stakeholder Feedback and Updated ISO Positions

The ISO's review of stakeholder comments and the applicable FERC precedent has provided the ISO new and additional insight into how to structure the NFIP. As reflected in the attached revised tariff language (See **Attachment B**), the ISO has modified the draft NFIP tariff language both to better comport with FERC precedent and to accommodate certain of the concerns raised by stakeholders. Outlined below is a summary of the ISO's updated position on various matters.

**4.1** ***Applicability*** – The ISO previously contemplated application of the NFIP to all large load projects that connect with the ISO Controlled Grid. Southern California Edison Company (***Edison***), Pacific Gas & Electric Company (***PG&E***) and San Diego Gas & Electric Company (***SDG&E***) (collectively, ***the IOUs***) oppose application of the NFIP to load. The IOUs state that requirements for the connection of load is within the California Public Utility Commission's (CPUC) jurisdiction. Moreover, the IOUs argue that load is materially different than generation in both the nature of the facility and the manner in which it is treated for cost allocation purposes. For example, the IOUs argue that, under the ISO, load pays for the embedded cost of the transmission system, whereas generation does not. In addition, and as a result of the load cost responsibility, the IOUs argue that, as Participating Transmission Owners (PTOs), they have an obligation to plan the transmission system to reliably serve load.

Edison also states that the provisions should not apply to distributed generation (which is covered under the Wholesale Distribution Access Tariff (WDAT)), and that if the ISO decides to make the provisions applicable to load, it should apply just to wholesale load.

Similarly, Cogeneration Association of California and Energy Producers and Users Coalition (***CAC/EPUC***) recommend that the draft tariff language to be modified to state that "This section does not apply to the connection of facilities for which the California Public Utilities Commission has jurisdiction over connection." In addition, CAC/EPUC recommend other revisions to the draft tariff language to clarify: 1) that the connection of generation only impacts the grid if energy flows over the ISO's grid; 2) that the term "Load" only applies to a wholesale customer's load; and 3) that only if a repowered generator's size exceed the size of the interconnection should it have to submit an application. Finally, with respect to the applicability of the ISO's NFIP, CAC/EPUC state that any entity that has already signed an IA with a PTO should not be subject to these provisions.

Calpine Corporation (***Calpine***) also stated that the applicability provisions of the draft tariff language need to be clarified. First, Calpine, along with Edison and ***Thermo Ecotek***, states that the tariff provisions should recognize and accept the existing queue positions of entities that have already requested interconnection but have not yet signed an IA with the applicable PTO. Moreover, Calpine asserts that the queuing milestones set forth in the PTOs tariff should apply, not those in the ISO Tariff. Lastly, to the extent that an applicant had applied for connection as of April 1, 1998, but has not yet signed an IA, Calpine states that the cost allocation and system benefits provisions of the ISO Tariff should apply.

Coral Corporation (***Coral***) states that the tariff provisions should be clarified to provide that the NFIP does not apply to facilities behind a retail customer's meter.

Enron Corporation (***Enron***) contends that the applicability provisions are misleading and that Section 5.7 "very appropriately" applies to connections at all voltage levels. Enron recommends that the language be clarified to provide that the provisions apply to interconnections to both the PTOs transmission and distribution facilities.

Sacramento Municipal Utility District (***SMUD***) argues that all generation and load that is connected to the distribution system and that is not synchronized with the grid should be exempted. SMUD, along with

Williams Energy Marketing & Trading Company (***Williams***), also states that the applicability of the provisions to "repowered" generation needs to be clarified. SMUD states that the provisions should not apply to generation that "powers down for 30 days."

ISO Response

The ISO agrees that load is different than generation and that, in general, the NFIP should not be applicable to load. Therefore, the ISO agrees to modify its proposed tariff language to reflect this change. However, the ISO may revisit this policy in the future. The ISO believes that there are circumstances where it may be appropriate for the ISO to closely scrutinize the impact of the interconnection of a load-based project on the ISO Controlled Grid. For example, the ISO may want to closely scrutinize the impact of the interconnection of load-based projects that are Participating Loads, as defined under the ISO Tariff. In addition, as more large energy-intensive loads seek interconnection to the ISO Controlled Grid, the ISO may want to ensure that such customers do not impose high costs on other customers/loads.

Interestingly, in *Entergy*, FERC found that Entergy had improperly limited the scope of its filing to interconnections for the purpose of providing wholesale transmission service. FERC stated that an "eligible customer" as defined in the Order No. 888 OATT includes unbundled retail service. FERC directed Entergy to revise its filing to apply to interconnections for wholesale and unbundled retail transmission service. The ISO believes that, with respect to the procedural aspects of the proposed tariff language, the proposed tariff provisions should apply to interconnections at both the transmission and distribution level.

**4.2 *Exemption for Small Generation*** – The ISO's proposed tariff language applied to all generation, regardless of size. In *SPP,* SPP proposed to develop streamlined Interconnection Procedures for requests less than 10 MW. In addition, SPP proposed that it be permitted to waive, on a non-discriminatory basis, the procedures for any request less than 10 MW. In FERC's December 15 Order FERC directed the ISO to develop streamlined interconnection procedures regarding requests for interconnection of generation units smaller than a certain threshold size.

ISO Response

In light of FERC's directive, the ISO now proposes streamlined procedures for generation projects less than 10 MW. This is consistent with the SPP proposal, as accepted by FERC, and is consistent with the ISO's recent ISO Tariff changes regarding generation less than 10 MW.

**4.3 *Good Faith Deposit*** – In Section 5.7.2.1 of the draft tariff language the ISO proposed to require applicants to submit a Good Faith Deposit. The ISO provided that the ISO would return such deposit if the applicant withdraws its application or is not responsible for any connection costs. The ISO also provided that an applicant could, at the end of the process, apply the deposit toward the cost of upgrades. Moreover, the ISO also provided that an applicant could convert its deposit into a non-refundable deposit in order to retain its position in the queue.

***PG&E*** states that the crediting provisions unnecessarily complicates matters and that the ISO should just return the deposit to the applicant at the end of the interconnection process. At that time, the applicant can decide whether to apply that money towards the cost of any necessary upgrades.

***Calpine*** recommends that the ISO modify the draft tariff language to provide that an applicant can satisfy its deposit obligation through "any commercially reasonable financial instrument." Calpine also recommends that the tariff language be modified to clarify when the deposit (including the non-refundable portion) will be returned.

***Williams*** argues that the deposit is unjustified and that the deposit is unnecessary. ***Edison*** also argues that the deposit may no longer be necessary, especially in light of the fact that the ISO is not requiring the mitigation of Intra-Zonal Congestion, as it proposed under Amendment No. 19.

ISO Response

The ISO does not object to PG&E's recommendation. The ISO has also modified the draft language to address Calpine's concerns. The ISO disagrees with Williams and Edison. The ISO believes that by requiring a Good Faith Deposit the ISO will deter the submission of spurious applications. More importantly, the ISO believes that such a deposit will provide incentives for applicants to meet the stated milestones.

**4.4 *Posting of Requests*** – Section 5.7.2.2 (Non-disclosure) of the ISO's proposed draft tariff language provided that the ISO and the applicable PTO will not disclose the identity of an applicant until the end of the calendar month in which the connection application is determined to be complete.

***Williams*** states that the ISO should not disclose the applicant and location. Williams states that, at most, the ISO should disclose the nearest substation, capacity and in-service year, such as is done in PJM. ***Edison*** states that while it does not necessarily oppose disclosure of the identity of an applicant, under the current TO Tariff the identity remains confidential. ***PG&E*** states that the PTO may be required to disclose the identity of an applicant for regulatory or legal reasons. ***Enron*** argues that PTOs should not have any role in the process but that if they do, they should be required to abide by a strict code of conduct and should act as an agent of the ISO and should be subject to penalties for release of confidential information. ***Calpine*** states that, consistent with the *pro forma* tariff, the ISO should keep confidential the location of the facility and the location of the load ultimately served.

ISO Response

The FERC orders are clear that, since interconnection service is required to be provided under the Commission's OATT and are an element of transmission service, the ISO should post all such requests on its OASIS site.

Therefore, the ISO proposes to modify Section 5.7.2.2 to provide that the ISO will post all interconnection requests, including unit capacity, interconnection point, and planned start date, on its OASIS site, but will not reveal the identity of any applicant until the end of the month in which its application is deemed complete.

**4.5 *PTO Responsibilities*** – A number of stakeholders state that the ISO should more clearly define the responsibilities of the PTOs and the ISO. Moreover, a number of parties assert that the ISO Tariff should specify all aspects of the interconnection process and that no detail should be left to the PTO's tariffs. ***Williams*** argues that the ISO should establish a set of guidelines applicable to all PTOs. ***Thermo Ecotek*** argues that Section 5.7.3 should be modified to further clarify that third parties can conduct studies. ***PG&E*** states that Section 5.7.3 should be modified to state that the ISO will manage the queue. In addition, PG&E states that the tariff should be clarified to state that all parties must comply with the ISO Tariff, TO Tariff and the Transmission Control Agreement (TCA). ***MWD*** states that the section should be modified to clarify which tariff, the ISO or the TO's, governs when there are disputes. ***MWD*** and ***Calpine*** states that the ISO Tariff should define "Facilities Study", and that the study rules and procedures should be uniform across PTOs. Moreover, ***Calpine*** states that the ISO Tariff should delineate specific timelines for the performance and completion of required studies, consistent with the *pro forma* tariff. Calpine also recommends that the tariff provide that during the period after an application an applicant should have the right to modify facility configuration, size or interconnection point and not lose its queue position. Finally,

Calpine recommends that the ISO vigorously monitor a PTOs compliance with its obligations to perform studies within a given timeframe and that PTOs should be obligated to maintain sufficient resources to perform the necessary studies and should perform such work at reasonable rates. Calpine recommends that ISO Management report to the ISO Governing Board each month on the status of each interconnection request. ***Coral*** and ***Enron*** state that the ISO should perform all necessary studies as long as the IOU's affiliates are participating in new facilities. ***Edison*** states that the tariff language should add a reference to the WDAT if the ISO is going to include DG and load connections in its tariff language.

ISO Response

The ISO believes that the responsibilities of both the ISO and the PTOs need to be clearly expressed in the tariff language. Moreover, the ISO believes that the ISO Tariff should be detailed as to the performance and timeline for completion of all studies performed by the PTOs. As a result, the ISO recommends that the TO Tariffs should be modified to cross-reference the ISO Tariff. Moreover, as a result of FERC's recent determinations regarding the performance of system impact and facilities studies, the ISO believes that the study completion requirements and timelines should closely conform to the *pro forma* tariff.

**4.6 *Planning Procedures*** – In reference to Section 5.7.4.1 of the proposed language, ***Edison*** and ***MWD*** state that the term Planning Procedures needs to be defined. Edison also states that the ISO should clarify the term "connection" standards and that the tariff should refer to the TCA regarding technical standards. ***MWD*** states that if Planning Procedures include system impact and facilities studies or system benefits assessments, such procedures should be filed at FERC. In addition, MWD states that the tariff should state that al such procedures are consistent with the policies and principles established in the Tariff. ***PG&E*** states that the determination and modification of the ISO's procedures should be the result of a public process and that such a requirement should be added to the tariff. ***Enron*** states that the ISO's procedures should be detailed enough so that there need not be any PTO procedures.

ISO Response

The ISO agrees to define Planning Procedures and to clarify the use of the term "connection" standard. The ISO believes that, consistent with the TCA, the PTOs should post their technical interconnection standards on their internet sites. The ISO objects to filing its Planning Procedures but agrees to outline a process for creating and amending its procedures.

**4.7 *Studies*** - In reference to Section 5.7.4.2 of the proposed language, ***CAC/EPUC*** state there should be limits on the type and costs of studies for which an applicant must pay. As noted above, ***Calpine*** states that the ISO Tariff should specify the timelines for the completion of studies and such timelines should be consistent with the *pro forma* tariff. Calpine also states that an applicant or a third-party should be able to conduct a study and that if the ISO approves a study plan the ISO should not be able to challenge the credibility of the study. Lastly, Calpine states that the ISO and PTOs should be given a specific period of time (30 days) to determine the adequacy of a study proposed by an applicant.

***Coral*** requests guidance on how the ISO and PTOs will handle simultaneous requests for the same ATC. Also, Coral requests that the ISO address the cost assignment of circuit breakers. Coral also states that the ISO and or PTO should be required to provide data to a third party so that it can perform a study.

As noted above, ***Enron*** believes that the PTOs should not be involved in performing studies unless they have separated their wires business from other functions and met the code of conduct standards. Similar to Calpine, Enron states that the ISO tariff should specify all of the procedures, standards and timelines associated with interconnection. Finally, Enron states that the tariff should provide that the ISO is the ultimate provider of the FERC-jurisdictional service of generation interconnection.

***PG&E*** and ***Edison*** assert that an absolute deadline for the completion of studies is not reasonable. PG&E states that the TO Tariff prescribes best efforts to complete a SIS in 60 days. PG&E states that I does not object to third parties performing studies as long as they use PTO-prepared and ISO-approved base cases and planning assumptions. PG&E states that the costs of all studies should be paid by an applicant and that such costs should be paid before the PTO is obligated to initiate a study. PG&E also states that the ISO should clarify the source of funds for a study. ***Edison*** states that the ISO should not "batch" studies by calendar month. ***Edison*** states that the ISO and PTO should be compensated for the costs of reviewing all third-party studies. ***Edison*** states that the ISO's determination of the adequacy of third-party studies should be subject to dispute resolution. ***Thermo Ecotek*** states that the PTOs should provide for open discussion, input and review during the study process. ***Williams*** requests that the ISO clarify what is the resolution in the event an applicant does not agree with study results and cost responsibility.

ISO Response

The ISO agrees that the tariff should specify the procedures and timelines for completing studies. Moreover, the ISO agrees to modify the study requirements and timelines to more closely match those specified in the *pro forma* tariff. The ISO also agrees that it should require only those studies that are reasonably necessary and that, consistent with the *pro forma* tariff, only actual study costs will be charged. The ISO believes that the ADR provisions of the ISO Tariff do apply to the study procedures and that, if an applicant disagrees with a study/cost allocation result or determination, the applicant can request that the PTO file an unexecuted IA so that the issue can be resolved by FERC.

**4.8 *Queuing*** – A number of stakeholders raised various concerns with regard to the ISO's proposed queuing methodology, as outlined in Section 5.7.4.3. ***CAC/EPUC*** questioned whether six months is adequate time to obtain "Data Adequacy". CAC/EPUC also states that an applicant's ability to negotiate changes to the IA should not be impaired by a requirement to "hastily" execute the IA. CAC/EPUC contend that an applicant should be able to "suspend the clock" while it appeals or litigates the terms and conditions of the IA. Finally, CAC/EPUC also seeks clarification and deletion of certain specific provisions.

***Calpine*** states that applicants should have up to one year to satisfy the data adequacy requirements, since certain data is only available certain times of the year. Moreover, Calpine contends that the ISO's definition of Data Adequacy is ambiguous. Calpine states that the tariff should explain the impact of an applicant losing its queue position, e.g., will the PTO have to perform new studies? Calpine also argues that the PTOs should develop and file with FERC a *pro forma* IA in order to expedite execution of the IA. In addition, consistent with FERC precedent, Calpine states that the tariff should allow an applicant to request that the PTO file an unexecuted IA at FERC and still retain its queue position. Calpine states that any refund of the Good Faith Deposit include interest. Finally, Calpine requests that certain ambiguous provisions be deleted and requests certain other limited changes.

***Coral*** requests that the ISO clarify the significance of the queuing provisions with respect to priority of access to ATC and cost responsibility. Coral questions whether all applicants in a given month have equal status. Finally, Coral states that the ISO should clarify the impact on entity later in the queue if an earlier applicant "extends".

***Enron*** contends that the PTOs should not be at all involved in processing applications to connect. Enron also states that the ISO should develop its own data adequacy requirements and that the ISO should not judge whether an applicant has satisfied state requirements. Finally. Enron believes that the ISO should develop a *pro forma* IA.

***PG&E*** supports ISO maintenance and oversight of the interconnection queue. PG&E recommends that the ISO clarify that in references to one-twelfth of the Good Faith Deposit, the one-twelfth refers of the original deposit. PG&E also states that no portion of a "non-refundable" deposit should be refunded under any circumstances. Moreover, PG&E contends that once the original deposit has been depleted, an applicant must either execute an IA or withdraw its application. PG&E also raised concerns with provision that permits applicants o suspend the milestone procedures if the applicant enters into ADR. PG&E asserts that this may lead to gaming and questionable ADR procedures. PG&E contends that as part of the milestone procedures, applicants should be required to make timely payment to the PTOs for study and construction work and that withdrawal of an application could materially affect the results of studies for others lower in the queue. ***SMUD*** contends that the Good Faith Deposit is more of a fee than a deposit and should be so characterized.

As noted above, ***Edison*** believes that applications should not be aggregated or "batched" on a monthly basis but that requests should be queued by date. Edison states that it is unclear what is meant by a "queue position comparable to other New Facility Operators that have satisfied comparable milestones during the same calendar month." Edison suggests that an applicant would have a queue position equal to its original position plus the number of days between the date it was originally supposed to satisfy its Data Adequacy Requirements and the date it actually satisfied its Data Adequacy Requirements. Edison states that the TO Tariff currently provides that an applicant can request that a PTO file an unexecuted IA and that the ISO Tariff should not preclude such an option. ***Thermo Ecotek*** states that the milestone provisions be deleted since each PTO specifies interconnection requirements in its IA. ***Williams*** requests that the tariff specify when an applicant will be required to execute an IA.

ISO Response

The ISO continues to believes that the Good Faith Deposit and the queuing procedures in general are necessary elements to the NFIP. The ISO believes that the Good Faith Deposit will ensure that only serious requests for interconnection are submitted. Moreover, the ISO believes that since the deposit will be refunded in almost all circumstances, the Good Faith Deposit is not onerous and should not be considered a "fee." The ISO also believes that it is necessary to ensure that applicants make every effort to proceed with the interconnection process and, therefore, that queuing procedures and milestones are necessary to ensure timely completion of certain tasks necessary to interconnect. Just as the ISO and PTOs have explicit obligations to complete certain tasks, such as agreements, on a timely basis, so do all applicants. The ISO also believes that tying the queuing milestones to the requirements of, currently, the California Energy Commission's (CEC's) requirements for obtaining a Application For Certification (AFC) is necessary and appropriate. The CEC's milestones are well known and established and the completion of such requirements or milestones are a good indicator that a project is viable and moving forward.

The ISO agrees with Edison hat it may no longer be essential to group interconnection requests by month. In light of the shift in cost responsibilities since Amendment No. 19 (see below), the importance of submitting requests a day apart has been reduced. The ISO also agrees with Edison that applicants should be able to request that PTOs file unexecuted IAs at FERC. The ISO agrees with Enron and others that the ISO should facilitate a process to develop a *pro forma* IA. The ISO intends to commit, in its April 2 filing, to develop a *pro forma* IA over the next year. The ISO believes that it is not possible to develop such an agreement prior to the April 2 filing date for the NFIP. Finally, the ISO agrees to make certain changes to clarify the queuing and deposit requirements.

**4.9** ***Cost Allocation (including System Benefits)*** – A number of stakeholders stated that the ISO Tariff should be more specific about the types of costs that an applicant would or could be responsible

for. In general, the PTOs thought that there should be no crediting for "system benefits" but that if applicants were entitled to a credit for system benefits, the ISO should address such matters in the ISO Tariff provisions regarding the ISO's Long-term Grid Planning process and system expansion.

***Williams*** states that a standard mechanism should be used to determine cost responsibility and that "system benefits" should include, but not be limited to, FTRs, transmission revenues, transmission losses, voltage support, Reliability Must-Run reduction, and reactive margin. Williams also recommends that methodology for determining system benefits be outlined in the TO Tariffs.

***Thermo Ecotek*** states that the tariff language does not address which entity is responsible for system upgrades and the circumstances where the PTO should be responsible. Thermo Ecotek also recommends that the ISO make explicit its policy that it can direct the PTO to upgrade and roll-in the costs of the upgrade. Thermo Ecotek states that new facility owners should only be responsible for direct connection costs and the costs of reliability upgrades that are not included in the PTOs expansion plans. Thermo Ecotek states that since the PTOs generally do not conduct short-circuit analysis as part of developing their expansion plans, such costs will typically be assigned to new entrants and that this is inappropriate. Thermo Ecotek requests that the ISO provide the criteria by which it will determine cost responsibility. Thermo Ecotek questions whether the PTO should be permitted to pass on the costs of upgrading equipment which is already operating at or near its maximum capability or reached its life-cycle (either by rating or age). Thermo Ecotek requests that the ISO clarify the criteria or new facility owners will be burdened with costs that otherwise should have been included in a PTO's expansion plan.

***Edison*** states that rather than both the PTO and the ISO providing cost estimates to the new facility operator, only the PTO should provide such estimates. Edison states that the IA between the PTO and the applicant will govern the payment of costs associated with the interconnection. Edison states that, in light of the current financial crisis, it will not be able to finance the costs of interconnections. Edison states that if the ISO desires it to finance projects, it should be prepared to support such filings before FERC, the CPUC, and other entities. Edison further states that until the financial issues are resolved, the tariff language should require upfront payments by a new facility owners unless otherwise determined by the PTO. Edison also recommends other targeted revisions to the proposed tariff language.

***SMUD*** inquires as to whether the ISO intends new facility owners to pay for the full costs of necessary expansions or whether the ISO intends that new facility owners only pay for the facilities necessary to satisfy the minimal requirements to assure future expansion. SMUD also raises issue with the application of the System Benefits provisions and states that if an applicant is to be credited with System Benefits, an applicant should also be responsible for all costs imposed on a PTO as a result of its interconnection. SMUD also raises certain issues with respect to the settlement of interconnection costs.

In reference to Section 5.7.5 (a), ***PG&E*** proposes that an applicant and the PTO be allowed to mutually agree on a cost responsibility methodology other than actual costs, subject to regulatory approval. PG&E also proposes that applicants be responsible for paying the costs a PTO incurs in providing information to the applicant for auditing costs. In addition, PG&E proposes a new subsection to clarify the implications of multiple parties sharing the same queue position. Finally, PG&E states that it is concerned about the inclusion of FTR revenues as a System Benefit. PG&E states that until a new congestion management methodology is filed, it is premature to address such matters. ***MWD*** offers some suggested tariff modifications to clarify certain issues regarding the honoring of encumbrances.

***Enron*** states that the ISO should remove all references to the PTOs in Section 5.7.5 of the proposed language and that the ISO alone should be responsible for determining cost responsibility. Enron also states that the PTO and an applicant should agree on cost-responsibilities up front and that such

determinations should not be based on "actual" costs, as that term is used in the proposed language. Enron contends that requiring applicants to pay actual costs provides no incentive for the PTO to exercise cost control and in fact invites PTOs to increase interconnection costs. More importantly, Enron states that the ISO's proposal for determining cost responsibility is a complete reversal of its previous position and what the ISO filed as Amendment No. 19. Enron states that the ISO's proposal provides virtually no locational price signal or incentives for new generators to locate in areas where they would not cause incremental congestion. If the ISO is unwilling to go back to its previous proposal, Enron states that the ISO should at a minimum offer "long-term market access rights" similar to FTRs. Enron states that such mechanisms are necessary to ensure that generators can mitigate against the transportation cost uncertainties created by the ISO's new interconnection policy. Finally, Enron states that the ISO's definition of System Benefits is entirely too limited. Enron states that an applicant should be able to demonstrate that facilities that it is required to build defer projects in a subsequent PTO expansion plan, an to receive credit for such facilities Enron also states that applicants should receive credit for any other demonstrable cost reductions to the PTO and should receive an appropriate share of Wheeling Revenues.

***Coral*** states that the ISO should establish uniformity between the ISO and TO tariffs with regard to defining cost responsibility. In addition, Coral states that System Benefits should not be limited to defined set of costs, but that such benefits could include the cost savings from reducing or eliminating RMR contracts. Coral also states that a new facility owner that must pay for certain facilities should be granted title to those facilities.

***Cal PX*** states that all entities that give rise to the need for a system expansion should pay for it. Cal PX opposes requiring new facility owners to expand the system to address inter-zonal congestion.

***Calpine*** states that "actual" costs should not include an allocation of overhead, general or administrative expenses but should be limited to costs to construct. Calpine recommends that the ISO delete the phrase "incremental impact" from the proposed language in Section 5.7.5, stating that it is ambiguous. Calpine asserts that the cost of system upgrades should not be assigned to a new facility because such upgrades benefit the entire system. Calpine states that the ISO Tariff should clearly define cost responsibilities, not the TO Tariff. Finally, Calpine states that a new-facility operator should be able to challenge the results of any study and any cost responsibility determinations and not lose its queue position.

***CAC/EPUC*** contends that actual costs should be limited to a defined dollar or percentage amount of the estimate. CAC/EPUC states that provision must be made for future reimbursement to an applicant if another entity uses the facilities paid for by an applicant.

ISO Response

The ISO believes that interconnection costs can be broken down into three categories:

1) Local Direct Assignment Costs – these costs include the costs of connecting the new facility to the ISO Controlled Grid;

2) Reliability Upgrade Costs – these include the cost of facilities remote from the interconnection point, such as breakers, needed just to interconnect a new facility (the costs necessary to reliably connect a facility at "0" output); and

3) Delivery Upgrade Costs – these costs include the costs of facilities necessary to deliver energy from the point of interconnection of the new facility to load and would include such costs as the cost of upgrading a line to eliminate congestion.

The ISO believes that no party contests that a new facility should be charged Direct Assignment Costs. Moreover, the ISO believes that most if not all parties believe that it is appropriate for new facility owners to pay the cost of Reliability Upgrades that would otherwise not have been needed but for the interconnection of the new facility. The applicable FERC precedent is clear that it is appropriate to allocate Local Direct Assignment Costs to a new facility. The FERC precedent is also clear that it is appropriate, in instances of an "interconnection" request, to allocate the costs of a Reliability Upgrade that is needed beyond the first point of interconnection. FERC also stated that once an applicant requests "transmission" service, a transmission provider is limited tp charging the higher of the cost of required upgrades or the embedded costs of the system (including the upgrade costs). This is known as FERC's "higher of" principle. In California, where only Load pays for the embedded cost of transmission service (i.e., a Generator does not pay for transmission service, except for Congestion costs), the question of whether all upgrades, or only Delivery Upgrades, are subject to the higher of principal is moot; it is appropriate that developers of new facilities pay appropriate "interconnection" costs (e.g., the costs of direct assignment facilities and the cost of upgrades necessary for reliability, including those beyond the first point of interconnection). With respect to Delivery Upgrade Costs (i.e., the cost of facilities necessary to deliver Energy from the first point of interconnection of a facility to Load), the FERC precedent is clear that such costs are subject to the "higher of" test and in most instances should will be rolled-in. However, to the extent a new facility wishes to pay for an upgrade so that it can ensure the delivery of energy and obtain the benefits associated with such facilities (e.g., FTRs), a new facility owner can do so under the system expansion provisions of the ISO Tariff. Thus, the ISO believes that a new facility owner should be directly responsible for:

1) Local Direct Assignment Costs; and

2) Reliability Upgrade Costs, i.e., the cost of facilities necessary to ensure reliability, even if those facilities are beyond the first point of interconnection of the new facility.

The ISO now believes that if a new facility owner wishes to build additional, "optional" facilities (i.e., Delivery Upgrade Costs), it can do so under Section 3 of the ISO Tariff. Therefore, based on the fact that the cost responsibility for facilities required under the NFIP is appropriately narrow, the ISO believes that it is no longer appropriate or necessary to retain the System Benefits section of the proposed tariff language. The assessment and potential crediting of System Benefits should be determined in Section 3 of the ISO Tariff. The ISO also believes that the cost responsibilities of new facility owners should be made more clear in the proposed tariff language.

**4.10** ***Existing Contacts*** – With respect to Section 5.7.5.1, ***Calpine*** states that "Encumbrances" should be treated as any other physical or legal constraint and therefore questions the need for this provision. ***Coral*** contends that the provision is vague and that it requires additional specificity as to how the PTO will determine if a new facility will adversely impact an encumbrance. ***Enron*** states that this section is contrary to the intent of the new NFIP and creates a right to use the grid without bearing the risk of congestion and denies that same right to new generators. ***MWD*** supports the provision. PG&E requests clarification that its existing Northern California Hydro Facilities would retain their existing access to transmission capacity via the Coordinated Operations Agreement on the California Oregon Transmission Project. ***SMUD*** is concerned that the provision only requires a new facility owner to mitigate, versus remedy, any adverse impact.

ISO Response

The ISO believes that this section is necessary and provides proper assurances that the ISO can continue to honor *existing* contracts and *existing* encumbrances. Contrary to Enron's assertion, the provision does not grant any new privilege on existing entities. The provision should necessarily be included in this

section, since the impact of the interconnection of new facilities is addressed in Section 5.7. The ISO believes that no other changes are necessary as a result of stakeholder comments.

**4.11** ***Critical Protective Systems and Energization – Edison*** states that Section 5.7.3.4.4 should be modified to clarify that a new facility operator must install and maintain critical protective systems that are consistent with ISO, PTO and UDC protection requirements. With respect to Section 5.7.6 Edison states that a new owner must comply with all provisions of Section 5.7 prior to energization of the project. ***MWD*** requests that the ISO define Critical Protective Systems. ***Calpine*** states that the ISO should provide to the new facility owner any information on the ISO Controlled Grid Protective Systems and that such standards should be applied uniformly and in a non-discriminatory manner. CAC/EPUC contends that the requirements of the section are ambiguous and should deleted.

ISO Response

The ISO agrees with Edison's proposed changes and MWD's suggestion. The ISO also agrees to provide new facility owners with all information necessary to comply with the critical protection system requirements of the ISO Tariff.

Conclusion

The ISO wishes to thank all of the stakeholders who provided feedback on the draft NFIP ISO Tariff language. To the extent that we have missed or mischaracterized your position on an issue, please accept our apology.

This White Paper and the attached revised draft tariff language outline the ISO's current thinking on the NFIP. Although we have updated our position on many issues, as reflected in this paper and the revised tariff language, the ISO may make further revisions. These revisions may result both from additional ISO review of the proposed tariff language and the comments of stakeholders. As we noted previously, the ISO and the PTOs must file interconnection procedures by April 2, 2001. Therefore, the ISO must move quickly to finalize the NFIP. We look forward to your comments.

# Attachment B

(ii) if the ISO is required to call for the involuntary curtailment of firm Load to maintain Applicable Reliability Criteria during the System Emergency, an additional charge equal to $1,000 for each MWh of the Dispatch instruction with which the Participating Generator does not comply.

**5.6.3.2** A Participating Generator shall not be subject to penalties pursuant to Section 5.6.3.1 if the Participating Generator can demonstrate to the ISO that it failed to comply with such a Dispatch instruction either because: (a) the Generating Unit, System Unit or System Resource that was the subject of the Dispatch instruction was physically incapable of responding in accordance with the instruction, provided that if such Participating Generator has not notified the ISO in advance that the Generating Unit, System Unit or System Resource was unavailable or de-rated, such Generating Unit, System Unit or System Resource will be presumed to be available; or (b) compliance with such Dispatch instruction would have resulted in a violation of an applicable requirement of state or Federal law, which requirement cannot be waived. A Participating Generator must notify ISO operations staff of its reason for failing to comply with the Dispatch instruction within the operating hour that the instruction is issued and must provide information to the ISO that verifies the reason the Participating Generator failed to comply with the Dispatch instruction within 72 hours of the operating hour in which the instruction is issued. Disputes concerning the cause of a Participating Generator's failure to comply with an ISO Dispatch instruction shall be subject to the Dispute Resolution provisions set forth in Section 13 of this ISO Tariff.

## 5.7 Interconnection of New Facilities to the ISO Controlled Grid.

### 5.7.1 Applicability.

For purposes of this Section 5.7, a New Facility shall be:

(a) each Generating Unit that seeks to interconnect to the ISO Controlled Grid;

(b) each existing Generating Unit connected to the ISO Controlled Grid that will be re-powered and increase the total capability of the power plant; and

(c) each existing Generating Unit connected to the ISO Controlled Grid that will be re-powered without increasing the total capability of the power plant but has changed the electrical characteristics of the power plant such that its re-energization may violate Applicable Reliability Criteria and trigger the application of Section 5.7.5(c).

The owner of a planned New Facility, or its designee, is referred to for purposes of this Section 5.7 as a New Facility Operator. Only New Facility Operators that have not submitted a Completed Interconnection Application, as defined under the applicable Interconnecting PTO's TO Tariff, to the Interconnecting PTO as of the effective date of this Section 5.7 are subject to its provisions.

**5.7.2 Requests to Interconnect to the Distribution System.**

Any request by a New Facility Operator to connect at distribution level voltage will be processed, as applicable, pursuant to the Wholesale Distribution Access Tariff of the Interconnecting PTO or CPUC Rule 21; provided, however, that the New Facility Operator shall be required to mitigate any adverse impact on reliability on the ISO Controlled Grid in accordance with Section 5.7.5. In addition, each Interconnecting PTO will provide to the ISO a copy of the System Impact Study used to determine the impact of a New Facility on the Distribution System and the ISO Controlled Grid pursuant to a request to interconnect under the applicable Wholesale Distribution Access Tariff.

**5.7.3 Interconnection Application.**

All New Facility Operators shall submit two copies of a Completed Interconnection Application to the ISO in the form specified by the ISO. The ISO will date stamp all copies of the

Interconnection Application, retain one executed copy, and, within 1 Business Day, send the other copy to the Designated Contact Person of the Interconnecting PTO. Within 10 Business Days after the Interconnecting PTO receives an Interconnection Application, the ISO and the Interconnecting PTO shall determine whether the application is complete and the ISO will notify the New Facility Operator that its Interconnection Application is complete; or, in the event that the ISO, in consultation with the Interconnecting PTO, determines that the Interconnection Application is incomplete, the ISO will notify the New Facility Operator of the deficiencies or omissions in its application.

**5.7.3.1 Expedited Procedures For New Facilities.**

A New Facility Operator may submit a Request for Expedited Interconnection Procedures in accordance with Section 5.7.3.1.1. The ISO will develop and post on the ISO Home Page the Planning Procedures applicable to such expedited processing of Interconnection Applications.

**5.7.3.1.1 Request for Expedited Interconnection Procedures.**

(a) If it elects to expedite processing of its Completed Interconnection Application, a New Facility Operator shall submit a Request for Expedited Interconnection Procedures within 10 Business Days after receiving a copy of the System Impact Study for the proposed interconnection. The request should be submitted in writing to the ISO and the Interconnecting PTO.

(b) Within 10 Business Days after receiving a Request for Expedited Interconnection Procedures, the ISO and Interconnecting PTO shall provide to applicant the results of any studies required in addition to the System Impact Study, and shall tender an Expedited Interconnection Agreement that requires the applicant to compensate the Interconnecting PTO for all costs reasonably incurred pursuant to the terms of the ISO Tariff and the Interconnecting PTO's applicable TO Tariff for processing the Completed Interconnection Application and providing the requested interconnection.

(c) Concurrent with the provision, by the ISO and the Interconnecting PTO, of the studies referenced in subsection b, above, the Interconnecting PTO and the ISO shall provide to applicant their best estimate of the cost of any needed Direct Assignment Facilities and Reliability Upgrades, Delivery Upgrades, if requested by the New Facility Operator, and other costs that may be incurred in processing the Interconnection Application and providing the requested interconnection, however, unless otherwise agreed by the ISO, and the Interconnecting PTO, and the applicant, such cost estimate shall not be binding and the New Facility Operator shall compensate the ISO and the Interconnecting PTO for all actual interconnection costs reasonably incurred pursuant to the provisions of this Section 5.7 and the Interconnecting PTO's TO Tariff.

(d) The New Facility Operator shall execute and return to the Interconnecting PTO, with a copy to the ISO, such Expedited Interconnection Agreement within 10 Business Days of its receipt or the New Facility Operator's Interconnection Application will be deemed withdrawn. In that event, the New Facility Operator shall reimburse the ISO and the Interconnecting PTO for all costs reasonably incurred in the processing of the Interconnection Application, including the Request for Expedited Interconnection.

**5.7.3.2 Good Faith Deposit.**

(a) Each New Facility Operator that submits an Interconnection Application will on the date of submission also provide a Good Faith Deposit to the ISO. The ISO shall hold the Good Faith Deposit in trust for each applicant in a separate, interest-bearing account.

(b) The ISO shall refund the Good Faith Deposit, with accrued Interest, in the event that:

(i) The ISO determines that the New Facility is not responsible for any interconnection costs, other than study costs; or

(ii) The applicant withdraws its Interconnection Application or its Interconnection Application is deemed withdrawn.

**5.7.3.3 Posting of Interconnection Applications and Non-disclosure.**

The ISO will maintain on its OASIS site an updated list of all pending Interconnection Applications. As soon as practicable after the ISO receives a Completed Interconnection Application, the ISO will post the nearest substation, the capacity (MW) of the New Facility and the year the New Facility is proposed to begin operations. At the time it submits its Interconnection Application, a New Facility Operator may request in writing that the ISO and Interconnecting PTO not publicly disclose the identity of such New Facility Operator. Upon such request, the ISO and Interconnecting PTO will not disclose the identity of the applicant while its Interconnection Application is pending, unless disclosure is permitted under Section 20.3.1 or in the event that an applicant's identity becomes otherwise publicly known.

**5.7.4 Interconnection.**

**5.7.4.1 Detailed Planning Procedures.**

The provisions set forth in this Section 5.7 shall govern the interconnection of New Facilities to the ISO Controlled Grid, including the costs of such interconnection. The ISO shall also maintain on the ISO Home Page detailed Planning Procedures and interconnection standards for all such interconnections. The ISO will develop, and post on the ISO Home Page, detailed procedures for updating the Planning Procedures.

**5.7.4.2 Studies.**

(a) Except as provided in Section 5.7.4.2(d), for each Completed Interconnection Application, the ISO will direct the Interconnecting PTO to perform the required System Impact Study and Facility Study, and any additional studies the ISO determines to be reasonably necessary.

(b) The Interconnecting PTO will complete or cause to be completed all studies directed by the ISO within the timelines provided in this section. Any studies performed by the ISO

or by a third party at the direction of the ISO shall also be completed within the timelines provided in this section.

(c) Each New Facility Operator shall pay the reasonable costs of all System Impact and Facility Studies performed by or at the direction of the ISO or the Interconnecting PTO, and any additional studies the ISO determines to be reasonably necessary in response to the Interconnection Application, including any iterative study costs required for other New Facility Operator's that have established a new queue position due to the New Facility Operator either withdrawing its Interconnection Application or because its queue position has been modified pursuant to the procedures in Section 5.7.4.4. A New Facility Operator shall also pay the reasonable cost of Interconnecting PTO review of any System Impact Study or Facility Study that is performed by a New Facility Operator or its designee pursuant to subsection (d).

(d) A New Facility Operator may perform its own System Impact Study and Facility Study, or contract with a third party to perform the System Impact Study and Facility Study, and shall so notify the ISO and the Interconnecting PTO of this election at the time it submits its Interconnection Application. Any such study or studies performed by a New Facility Operator or third party must be completed within the timelines identified in Sections 5.7.4.2.1 and 5.7.4.2.2. To the extent that the ISO and Interconnecting PTO disagree on the adequacy of the New Facility Operator or third party-sponsored study, the ISO will determine the adequacy of the study, subject to the ISO's ADR Procedures. The ISO and Interconnecting PTO shall complete their review of the New Facility Operator's study within 30 calendar days of receipt of the completed study. The results of any study or studies performed by a New Facility Operator or third party must be approved by both the ISO and the Interconnecting PTO.

**5.7.4.2.1 System Impact Study Procedures.**

Within 10 Business Days after receiving a Completed Interconnection Application by the Interconnecting PTO, the ISO and the Interconnecting PTO will determine, on a non-discriminatory basis, whether a System Impact Study is required. The ISO and the Interconnecting PTO will make such determination based on the ISO Grid Planning Criteria and the transmission assessment practices outlined in the ISO Planning Procedures posted on the ISO Home Page. The ISO and Interconnecting PTO will utilize, to the extent possible, existing transmission studies. The System Impact Study will identify whether any Direct Assignment Facilities and Reliability Upgrades are needed, as well as, if requested by the New Facility Operator, any Delivery Upgrades necessary to deliver a New Facility's full output over the ISO Controlled Grid. The System Impact Study will also identify any adverse impact on Encumbrances existing as of the Completed Application Date.

If the ISO and the Interconnecting PTO determine that a System Impact Study is necessary, the Interconnecting PTO shall within 20 Business Days of receipt of Completed Interconnection Application, tender a System Impact Study Agreement that defines the scope, content, assumptions and terms of reference for such study, the estimated time required to complete it, and pursuant to which the applicant shall agree to reimburse the Interconnecting PTO for the reasonable actual costs of performing the required study. The New Facility Operator shall execute the System Impact Study Agreement and return it to the Interconnecting PTO within 10 Business Days, together with payment for the reasonable estimated cost, as provided by the Interconnecting PTO, of the System Impact Study. Alternatively, a New Facility Operator can request that the Interconnecting PTO proceed with the System Impact Study and abide by the terms, conditions, and cost assignment of the System Impact Study Agreement as determined through the ISO ADR Procedures, provided that such request is accompanied by payment for the reasonable estimated cost, as provided by the Interconnecting PTO, of the System Impact

Study. If a New Facility Operator elects neither to execute the System Impact Study Agreement nor to rely upon the ISO ADR Procedures, such New Facility Operator's Completed Application will be deemed withdrawn. If the New Facility Operator's application is deemed withdrawn, the New Facility Operator will compensate the Interconnecting PTO for all reasonable costs incurred to that date in processing the Completed Interconnection Application.

The Interconnecting PTO will use due diligence to complete the System Impact Study within 60 Calendar Days of receipt of payment and the System Impact Study Agreement or initiation of the ISO ADR Procedures. If the Interconnecting PTO cannot complete the System Impact Study within 60 Calendar Days, the Interconnecting PTO will notify the New Facility Operator, in writing, of the reason why additional time is required to complete the required study and the estimated completion date.

**5.7.4.2.2 Facility Study Procedures.**

If a System Impact Study indicates that additions or upgrades to the ISO Controlled Grid are needed to satisfy a New Facility Operator's request for interconnection, the Interconnecting PTO shall, within 15 Business Days of the completion of the System Impact Study, tender to a New Facility Operator a Facility Study Agreement that defines the scope, content, assumptions and terms of reference for such study, the estimated time to complete the required study, and pursuant to which the applicant agrees to reimburse the Interconnecting PTO for the actual costs of performing the required Facility Study. The New Facility Operator shall execute the Facility Study Agreement and return it to the Interconnecting PTO within 10 Business Days, together with payment for the reasonable estimated cost, as provided by the Interconnecting PTO, of the Facility Study. Alternatively, a New Facility Operator may request that the Interconnecting PTO proceed with the Facility Study and abide by the terms, conditions, and cost assignment of the Facility Study Agreement ultimately determined through the ISO ADR

Procedures, provided that such request is accompanied by payment for the reasonable estimated cost, as provided by the Interconnecting PTO, of the Facility Study. If a New Facility Operator elects either to not execute the Facility Study Agreement or to rely upon the ISO ADR Procedures, such New Facility Operator's Completed Application will be deemed withdrawn. If the New Facility Operator's application is deemed withdrawn, the New Facility Operator will compensate the Interconnecting PTO for all reasonable costs incurred to that date in processing the Completed Application.

The Interconnecting PTO will use due diligence to complete the Facility Study within 60 Calendar Days of receipt of payment and the Facility Study Agreement or initiation of the ISO ADR Procedures. If the Interconnecting PTO cannot complete the Facility Study within 60 Calendar Days, the Interconnecting PTO will notify the New Facility Operator, in writing, of the reason why additional time is required to complete the required study and the estimated completion date.

A New Facility Operator shall be entitled to amend its Completed Interconnection Application once without losing its queue position. Such amendment shall occur on or before 10 Business Days following the Date the Interconnecting POT tenders a Facility Study Agreement. Specifically, as an alternative to executing and returning a Facility Study Agreement, a New Facility Operator may submit an amendment to its Completed Interconnection Application to reflect a revised configuration for its New Facility. The amended Completed Interconnection Application shall be treated in accordance with Section 5.7.4.2.1 and the New Facility operator's Completed Interconnection Application shall not be deemed withdrawn, and it shall maintain its exiting queue position, if (a) the amended Completed Interconnection Application is received by the Interconnecting PTO within 10 Business Days of the Interconnecting PTO's tender of a Facility Study Agreement; and (b) the New Facility Operator has not submitted a previous

amendment to the Completed Interconnection Application. In the event a New Facility Operator amends its Completed Interconnection Application, it will be responsible for any additional study costs that result from that amendment, including costs associated with revisions to studies for other applicants holding later queue positions.

**5.7.4.3 Execution of Interconnection Agreement.**

Within 10 Business Days of receipt of a completed Facility Study, a New Facility Operator shall request the Interconnecting PTO to provide to such applicant an Interconnection Agreement. The Interconnecting PTO shall provide an Interconnection Agreement to an applicant within 30 Business Days of receipt of the request for an Interconnection Agreement. If the ISO and Interconnecting PTO determine, pursuant to Sections 5.7.4.2.1, that either:

(a) a New Facility Operator's Interconnection Application can be accommodated and that such New Facility Operator will not incur costs for Reliability Upgrades, the New Facility Operator shall execute the Interconnection Agreement within 10 Business Days of receipt of the Interconnection Agreement; or

(b) a New Facility Operator's Interconnection Application will necessitate Reliability Upgrades, the New Facility Operator shall execute the Interconnection Agreement within 30 Business Days of receipt of the Interconnection Agreement or, if a New Facility Operator and the Interconnecting PTO are unable to agree on the rates, terms and conditions of the Interconnection Agreement, the New Facility Operator may request that the Interconnecting PTO file an unexecuted Interconnection Agreement at FERC. If a New Facility Operator does request that the Interconnecting PTO file an unexecuted Interconnection Agreement at FERC, the New Facility Operator shall agree to abide by the rates, terms and conditions of such Interconnection Agreement ultimately determined by FERC to be just and reasonable.

**5.7.4.4 Queuing.**

(a) The ISO and Interconnecting PTO will process all Interconnection Applications based on the New Facility's Completed Application Date.

(b) The queue position for each New Facility that has submitted an Interconnection Application will be established according to the Completed Application Date and the New Facility's compliance with the milestones set forth in Section 5.7.4.4.1.

(c) For any New Facility Operator that has submitted a request to interconnect to a Interconnecting PTO prior to the date that FERC makes Section 5.7 effective, such New Facility Operator's position in the queue will be based on its Completed Application Date as that term was defined in the Interconnecting PTOs TO Tariff in effect at the time the New Facility Operator submitted a request to interconnect to the Interconnecting PTO.

**5.7.4.4.1 Queuing Milestones.**

(a) To maintain its queue position, each New Facility Operator must timely comply with the requirements of the ISO Tariff and the TO tariff of the Interconnecting PTO and must, within 6 months of its Completed Application Date, satisfy all applicable Data Adequacy Requirements of state and local siting and other regulatory authorities. Any New Facility Operator not subject to state siting requirements must satisfy the information requirements set forth in 18 C.F.R. §2.20. The ISO will permit a New Facility Operator to retain its queue position if such New Facility Operator requests an extension of the six-month period at least 5 Business Days prior to the expiration of such period. Such extension will be limited to one period of 30 Business Days and additional extensions shall not be granted. A New Facility Operator that does not maintain its queue position, but later satisfies the Data Adequacy Requirements, or the requirements of 18 C.F.R. § 2.20 if applicable, will be placed in a queue position comparable to that of other New Facility Operators that have satisfied the Data Adequacy Requirements, or the

requirements of 18 C.F.R. § 2.20, as of the same date. At that time, the ISO and the Interconnecting PTO will determine whether a new System Impact Study must be performed based on the revised queue position of such New Facility Operator.

(b) Upon satisfaction of the Data Adequacy Requirements, or the requirements of 18 C.F.R. § 2.20 if applicable, each New Facility Operator, in order to maintain its queue position, must obtain a New Facility License within 15 months after satisfying the Data Adequacy Requirements. A New Facility Operator that does not obtain a New Facility License within the allowed time and does not maintain its queue position, but later obtains a New Facility License, will be placed in a queue position comparable to other New Facility Operators that have satisfied comparable milestones as of that date.

(c) Any New Facility whose New Facility License or building permit expires or is rescinded will not maintain its queue position.

(d) A New Facility Operator that has submitted a dispute under Article 13 of the ISO Tariff regarding any part of this Section 5.7 may request that the presiding judge, arbitrator, or mediator of the dispute suspend its obligation to meet milestones in order to maintain its queue position. In the event such a suspension is granted, the New Facility Operator must satisfy the missed milestones specified in this Section 5.7.4.4.1 within 30 calendar days of the date the decision on the dispute becomes final.

**5.7.4.5 Coordination of Critical Protective Systems.**

New Facility Operators shall coordinate with the ISO, Participating TOs and UDCs to ensure that a New Facility Operator's Critical Protective Systems, including relay systems, are installed and maintained in order to function on a coordinated and complementary basis with ISO Controlled Grid Critical Protective Systems and the protective systems of the Participating TOs and UDCs. The ISO and Participating TOs will make available all information necessary for a New Facility Operator to determine whether its Critical Protective Systems are compatible with

those of the ISO, Participating TOs and UDCs. The ISO and New Facility Operators shall also coordinate with entities that own, operate or control facilities outside of the ISO Controlled Grid to ensure that a New Facility's Critical Protective Systems function on a coordinated and complementary basis with such entities Critical Protective Systems.

**5.7.5 Cost Responsibility of New Facility Operators.**

(a) Each New Facility Operator shall pay the costs of required studies in accordance with Section 5.7.4.2 and the costs identified in this Section 5.7.5. The ISO and Interconnecting PTO will provide each New Facility Operator an estimate of its total cost responsibility under this Section. A New Facility Operator shall be responsible for the actual costs of all Direct Assignment Facilities and Reliability Upgrades necessitated by its Completed Interconnection Application. The Interconnecting PTO will provide each New Facility Operator a detailed record of the actual costs assessed to it under this Section. A New Facility Operator may request the Interconnecting PTO to provide any additional information reasonably necessary to audit the actual costs the New Facility Operator is assessed.

(b) The ISO and Interconnecting PTO will process all Interconnection Applications, and determine the cost responsibility of each New Facility Operator based on the New Facility Operator's Completed Application Date or, if applicable, based on the queue position determined by the procedure described in Section 5.7.4.4.1(b). The ISO and Interconnecting PTO will process simultaneously all interconnection requests with the same Completed Application Date.

(c) Each New Facility Operator shall pay the costs of planning, installing, operating and maintaining the following facilities: (i) Direct Assignment Facilities, and, if applicable, (ii) Reliability Upgrades. In addition, each New Facility Operator shall implement all

existing operating procedures necessary to safely and reliably connect the New Facility to the facilities of the Interconnecting PTO and to ensure the ISO Controlled Grid's conformance with the ISO Grid Planning Criteria, and shall bear all costs of implementing such operating procedures. The New Facility Operator shall be responsible for the costs of Reliability Upgrades only if the necessary facilities are not included in the ISO Controlled Grid Transmission Expansion Plan approved as of the New Facility Operator's Completed Application Date, or the date for the installation of a facility is advanced by the interconnection of the New Facility, in which case the New Facility Operator shall be responsible only for the incremental costs associated with the earlier installation of the facility.

(d) Each New Facility Operator may, at its own discretion, sponsor, pursuant to Section 3.2 of the ISO Tariff, any Delivery Upgrades.

**5.7.5.1 Maintenance of Encumbrances.**

No New Facility shall adversely affect the ability of the Interconnecting PTO to honor its Encumbrances existing as of the time a New Facility submits its Interconnection Application to the ISO. The Interconnecting PTO, in consultation with the ISO, shall identify any such adverse effect on its Encumbrances in the System Impact Study performed under Section 5.7.4.2.1. To the extent the Interconnecting PTO determines that the connection of the New Facility will have an adverse effect on Encumbrances, the New Facility Operator shall mitigate such adverse effect.

**5.7.5.2 Settlement of Interconnection Costs.**

Payment for Direct Assignment Facilities and Reliability Upgrades shall be made by the New Facility Operator to the Interconnecting PTO pursuant to the terms of payment set forth in the Interconnection Agreement between the parties.

**5.7.6 Energization.**

Neither the ISO nor the Interconnecting PTO shall be obligated to energize, nor shall the New Facility Operator be entitled to have its interconnection to the ISO Controlled Grid energized, unless and until an Interconnection Agreement has been executed, or filed at FERC pursuant to Section 5.7.4.3, and becomes effective and such New Facility Operator has demonstrated to the ISO's reasonable satisfaction that it has complied with all of the requirements of this Section 5.2.

**5.8 Recordkeeping; Information Sharing.**

**5.8.1 Requirements for Maintaining Records.**

Participating Generators shall provide to the ISO such information and maintain such records as are reasonably required by the ISO to plan the efficient use and maintain the reliability of the ISO Controlled Grid.

**5.8.2 Providing Information to Generators.**

The ISO shall provide to any Participating Generator, upon its request, copies of any operational assessments, studies or reports prepared by or for the ISO (unless such assessments studies or reports are subject to confidentiality rights or any rule of law that prohibits disclosure) concerning the operations of such Participating Generator's

| | |
|---|---|
| **BEEP Interval Ex Post Prices** | The prices charged to or paid by Scheduling Coordinators for Imbalance Energy in each Zone in each BEEP Interval. |
| **BEEP Software** | The balancing energy and ex post pricing software which is used by the ISO to determine which Ancillary Service and Supplemental Energy resources to Dispatch and to calculate the Ex Post Prices. |
| **Black Start** | The procedure by which a Generating Unit self-starts without an external source of electricity thereby restoring power to the ISO Controlled Grid following system or local area blackouts. |
| **Black Start Generator** | A Participating Generator in its capacity as party to an Interim Black Start Agreement with the ISO for the provision of Black Start services, but shall exclude Participating Generators in their capacity as providers of Black Start services under their Reliability Must-Run Contracts |
| **Bulk Supply Point** | A UDC metering point. |
| **Business Day** | A day on which banks are open to conduct general banking business in California. |
| **C.F.R.** | Code of Federal Regulations. |
| **Completed Application Date** | For purposes of Section 5.7, the date on which a New Facility Operator submits an Interconnection Application to the ISO that satisfies the requirements of the ISO Tariff and TO Tariff of the Interconnecting PTO. |
| **Completed Interconnection Application** | An Interconnection Application that meets the information requirements as specified by the ISO and posted on the ISO Home Page. |
| **Conditional Energy Bids** | A Bid for Energy to serve Demand at or below a specified price. |
| **Congestion** | A condition that occurs when there is insufficient Available |

Transfer Capacity to implement all Preferred Schedules simultaneously or, in real time, to serve all Generation and Demand. "Congested" shall be construed accordingly.

**Congestion Management** The alleviation of Congestion in accordance with Applicable ISO Protocols and Good Utility Practice.

| | |
|---|---|
| **Critical Protective System** | Facilities and sites with protective relay systems and Remedial Action Schemes that the ISO determines may have a direct impact on the ability of the ISO to maintain system security and over which the ISO exercises Operational Control. |
| **CTC (Competition Transition Charge)** | A non-bypassable charge that is the mechanism that the California Legislature and the CPUC mandated to permit recovery of costs stranded as a result of the shift to the new market structure. |
| **Curtailable Demand** | Demand from a Participating Load that can be curtailed at the direction of the ISO in the real time dispatch of the ISO Controlled Grid. Scheduling Coordinators with Curtailable Demand may offer it to the ISO to meet Non-spinning or Replacement Reserve requirements. |
| **Data Adequacy Requirement** | Any applicable minimum data requirements of the state agency responsible for generation siting or of any Local Regulatory Authority. |
| **Day-Ahead** | Relating to a Day-Ahead Market or Day-Ahead Schedule. |
| **Day-Ahead Market** | The forward market for Energy and Ancillary Services to be supplied during the Settlement Periods of a particular Trading Day that is conducted by the ISO, the PX and other Scheduling Coordinators and which closes with the ISO's acceptance of the Final Day-Ahead Schedule. |
| **Day-Ahead Schedule** | A Schedule prepared by a Scheduling Coordinator or the ISO before the beginning of a Trading Day indicating the levels of Generation and Demand scheduled for each Settlement Period of that Trading Day. |
| **Default GMM** | Pre calculated GMM based on historical Load and interchange levels. |

| | |
|---|---|
| **Delivery Point** | The point where a transaction between Scheduling Coordinators is deemed to take place. It can be either the Generation input point, a Demand Take-Out Point, or a transmission bus at some intermediate location. |
| **Delivery Upgrade** | The transmission facilities, other than Direct Assignment Facilities and Reliability Upgrades, necessary to relieve constraints on the ISO Controlled Grid and to ensure the delivery of energy from a New Facility to Load. |
| **Demand** | The rate at which Energy is delivered to Loads and Scheduling Points by Generation, transmission or distribution facilities. It is the product of voltage and the in-phase component of alternating current measured in units of watts or standard multiples thereof, e.g., 1,000W=1kW, 1,000kW=1MW, etc. |
| **Demand Bid** | A bid into the PX indicating a quantity of Energy that an Eligible Customer wishes to purchase and, if relevant, the maximum price that the customer is prepared to pay for that Energy. This bid will only be accepted in the PX auction process if the Market Clearing Price is at or below the price of the Demand Bid. A Buyer may state, for each hour, a different price preference for each demand quantity in each location, i.e., the maximum price in each hour at which it is prepared to take a specified amount of Energy in the Day-Ahead Schedule. If a bid is submitted without a price, it is assumed that the bidder is prepared to pay the Market-Clearing Price. |
| **Demand Forecast** | An estimate of Demand over a designated period of time. |
| **Demand Market Participant** | Any Eligible Customer on behalf of whom Demand and Ancillary Services are scheduled pursuant to the ISO Tariff. |

| | |
|---|---|
| **Designated Contact Person** | The person designated by each Participating TO to coordinate with the ISO on the processing and completion of all Interconnection Applications. |
| **Direct Access Demand** | The Demand of Direct Access End-Users. |
| **Direct Access End-User** | An Eligible Customer located within the Service Area of a UDC who purchases Energy and Ancillary Services through a Scheduling Coordinator. |

| | |
|---|---|
| **Direct Access Generation** | An Eligible Customer who is selling Energy or Ancillary Services through a Scheduling Coordinator. |
| **Direct Assignment Facility** | The transmission facilities necessary to physically and electrically interconnect a New Facility Operator to the ISO Controlled Grid at the point of interconnection. |
| **Dispatch** | The operating control of an integrated electric system to: i) assign specific Generating Units and other sources of supply to effect the supply to meet the relevant area Demand taken as Load rises or falls; ii) control operations and maintenance of high voltage lines, substations, and equipment, including administration of safety procedures; iii) operate interconnections; iv) manage Energy transactions with other interconnected Control Areas; and v) curtail Demand. |
| **Dispatchable Loads** | Load which is the subject of an Adjustment Bid. |
| **Distribution System** | The distribution assets of a TO or UDC. |
| **EEP (Electrical Emergency Plan)** | A plan to be developed by the ISO in consultation with UDCs to address situations when Energy reserve margins are forecast to be below established levels.. |
| **Effective Price** | The price, applied to undelivered Instructed Imbalance Energy, calculated by dividing the absolute value of the total payment or charge for Instructed Imbalance Energy by the absolute value of the total Instructed Imbalance Energy, for the Settlement Period; provided that, if both the total payment or charge and quantity of Instructed Imbalance Energy for the Settlement Period are negative, the Effective Price shall be multiplied by -1.0 (minus one). |
| **Electric Capacity** | The continuous demand-carrying ability for which a Generating Unit, or other electrical apparatus is rated, either by the user or by the manufacturer. |

| | |
|---|---|
| **Existing Contracts** | The contracts which grant transmission service rights in existence on the ISO Operations Date (including any contracts entered into pursuant to such contracts) as may be amended in accordance with their terms or by agreement between the parties thereto from time to time. |
| **Existing Rights** | Those transmission service rights defined in Section 2.4.4.1.1 of the ISO Tariff. |
| **Expedited Interconnection Agreement** | A contract between a party which has submitted a Request for Expedited Interconnection Procedures and an Interconnection PTO under which the ISO and an Interconnecting PTO agree to process, on an expedited basis, the Interconnection Application of a New Facility Operator and which sets forth the terms, conditions, and cost responsibilities for such Interconnection. |
| **Facility Owner** | An entity owning transmission, Generation, or distribution facilities connected to the ISO Controlled Grid. |
| **Facility Study** | An engineering study conducted by a Participating TO to determine required modifications to the Participating TO's transmission system, including the cost and scheduled completion date for such modifications that will be required to provide needed services. |
| **Facility Study Agreement** | An agreement between a Participating TO and either a Market Participant, Project Sponsor, or identified principal beneficiaries pursuant to which the Market Participants, Project Sponsor, and identified principal beneficiaries agree to reimburse the Participating TO for the cost of a Facility Study. |
| **Facility Thermal Ratings** | For all electric current carrying facilities, all applicable capacity or electric limits to be observed during normal, short-term emergencies, and long-term emergency operating conditions. |

| | |
|---|---|
| **FERC** | The Federal Energy Regulatory Commission or its successor. |
| **FERC Annual Charges** | Those charges assessed against a public utility by the FERC pursuant to 18 C.F.R. § 382.201 and any related statutes or regulations, as they may be amended from time to time. |
| **FERC Annual Charge Recovery Rate** | The rate to be paid by Scheduling Coordinators for recovery of FERC Annual Charges assessed against the ISO for transactions on the ISO Controlled Grid. |
| **FERC Annual Charge Trust Account** | An account to be established by the ISO for the purpose of maintaining funds collected from Scheduling Coordinators for FERC Annual Charges and disbursing such funds to the FERC. |
| **Final Day-Ahead Schedule** | The Day-Ahead Schedule which has been approved as feasible and consistent with all other Schedules by the ISO based upon the ISO's Day-Ahead Congestion Management procedures. |

| | |
|---|---|
| **Generation Dispatch Constraints** | Details of any mandatory Generating Unit commitment requirements (e.g., Must-Run Generation) or dispatch limits (minimum output or maximum output) that must be observed due to system operating constraints (e.g., thermal, voltage, or stability limits). These limits are in addition to limits that may be specified by Generators in their Energy or Ancillary Service bids to the ISO or PX. |
| **Generation Scheduling** | The ISO's planned hourly pattern of Generation. |
| **Generator** | The seller of Energy or Ancillary Services produced by a Generating Unit. |
| **GMM (Generation Meter Multiplier)** | A number which when multiplied by a Generating Unit's Metered Quantity will give the total Demand to be served from that Generating Unit. |
| **Good Faith Deposit** | The deposit paid to the ISO by a New Facility Operator with submission of its Interconnection Application in accordance with Section 5.7.3.2, in an amount equal to $10,000, including any interest that accrues on the original amount, less any bank fees or other charges assessed on the escrow account. A New Facility Operator may satisfy its deposit obligation through any commercially available financial instrument determined to be satisfactory by the ISO. |
| **Good Utility Practice** | Any of the practices, methods, and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods, and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the |

desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practice is not intended to be any one of a number of the optimum practices, methods, or acts to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

| | |
|---|---|
| **Interconnecting PTO** | For purposes of Section 5.7, the Participating TO that will supply the connection to the New Facility. |
| **Interconnection Agreement** | A contract between a party requesting interconnection and the Participating TO that owns the transmission facility with which the requesting party wishes to interconnect. |
| **Interconnection Application** | An application that requests interconnection of a New Facility to the ISO Controlled Grid and that meets the information requirements as specified by the ISO and posted on the ISO Home Page. |
| **Interest** | Interest shall be calculated in accordance with the methodology specified for interest on refunds in the regulations of FERC at 18 C.F.R. §35.19(a)(2)(iii) (1996). Interest on delinquent amounts shall be calculated from the due date of the bill to the date of payment. When payments are made by mail, bills shall be considered as having been paid on the date of receipt. |
| **Interruptible Imports** | Energy sold by a Generator or resource located outside the ISO Controlled Grid which by contract can be interrupted or reduced at the discretion of the seller. |
| **Intra-Zonal Congestion** | Congestion within a Zone. |
| **IOU** | An investor owned electric utility. |
| **ISO (Independent System Operator)** | The California Independent System Operator Corporation, a state chartered, nonprofit corporation that controls the transmission facilities of all Participating TOs and dispatches certain Generating Units and Loads. |
| **ISO Account** | The ISO Clearing Account, the ISO Reserve Account or such other trust accounts as the ISO deems necessary or convenient for the purpose of efficiently implementing the funds transfer system under the ISO Tariff. |

**ISO ADR Committee** The Committee appointed by the ISO ADR Committee pursuant to Article IV, Section 3 of the ISO bylaws to perform functions assigned to the ISO ADR Committee in the ADR process in Section 13 of the ISO Tariff.

| | |
|---|---|
| **Municipal Tax Exempt Debt** | An obligation the interest on which is excluded from gross income for federal tax purposes pursuant to Section 103(a) of the Internal Revenue Code of 1986 or the corresponding provisions of prior law without regard to the identity of the holder thereof. Municipal Tax Exempt Debt does not include Local Furnishing Bonds. |
| **Municipal Tax Exempt TO** | A Transmission Owner that has issued Municipal Tax Exempt Debt with respect to any transmission facilities, or rights associated therewith, that it would be required to place under the ISO's Operational Control pursuant to the Transmission Control Agreement if it were a Participating TO. |
| **NERC** | The North American Electric Reliability Council or its successor. |
| **Net Negative Uninstructed Deviation** | The real time change in Generation or Demand associated with underscheduled Load (i.e., Load that appears unscheduled in real time) and overscheduled Generation (i.e., Generation that is scheduled in forward markets and does not appear in real time). Deviations are netted for each BEEP Interval, apply to a Scheduling Coordinator's entire portfolio, and include Load, Generation, Imports and Exports. |
| **New Facility** | A planned or Existing Generating Unit that requests, pursuant to Section 5.7 of the ISO Tariff, to interconnect or modify its interconnection to the ISO Controlled Grid. |
| **New Facility License** | A license issued by a federal, state or Local Regulatory Authority that enables an entity to build and operate a Generating Unit. |
| **New Facility Operator** | The owner of a planned New Facility, or its designee. |

| | |
|---|---|
| **New High Voltage Facility** | A High Voltage Transmission Facility of a Participating TO that enters service after the beginning of the transition period described in Section 4 of Schedule 3 of Appendix F, or a capital addition made after the beginning of the transition period described in Section 4.1 of Schedule 3 of Appendix F to an Existing High Voltage Transmission Facility. |
| **New Participating TO** | A Participating TO that is not an Original Participating TO. |
| **Nomogram** | A set of operating or scheduling rules which are used to ensure that simultaneous operating limits are respected, in order to meet NERC and WSCC operating criteria. |

| | |
|---|---|
| | v) metered output is available only for the combined output of related multiple generating components and separate generating component metering is either impractical or economically inefficient. |
| **Planning Procedures** | Procedures governing the planning, expansion and reliable interconnection to the ISO Controlled Grid that the ISO may, from time to time, develop. |
| **PMS (Power Management System)** | The ISO computer control system used to monitor the real time performance of the various elements of the ISO Controlled Grid, control Generation, and perform operational power flow studies. |
| **Power Flow Model** | The computer software used by the ISO to model the voltages, power injections and power flows on the ISO Controlled Grid and determine the expected Transmission Losses and Generation Meter Multipliers. |
| **Preferred Day-Ahead Schedule** | A Scheduling Coordinator's Preferred Schedule for the ISO Day-Ahead scheduling process. |
| **Preferred Hour-Ahead Schedule** | A Scheduling Coordinator's Preferred Schedule for the ISO Hour-Ahead scheduling process. |
| **Preferred Schedule** | The initial Schedule produced by a Scheduling Coordinator that represents its preferred mix of Generation to meet its Demand. For each Generator, the Schedule will include the quantity of output, details of any Adjustment Bids, and the location of the Generator. For each Load, the Schedule will include the quantity of consumption, details of any Adjustment Bids, and the location of the Load. The Schedule will also specify quantities and location of trades between the Scheduling Coordinator and all other Scheduling Coordinators. The |

Preferred Schedule will be balanced with respect to

Generation, Transmission Losses, Load and trades between

Scheduling Coordinators.

**Reliability Must-Run Contract (RMR Contract)** A rate schedule on file at FERC and in effect, or a contract between the ISO and a Generator, giving the ISO the right to call on the Generator to generate Energy or provide Ancillary Services from the Generating Unit as and when required to ensure the reliability of the ISO Controlled Grid, in return for certain payments.

**Reliability Must-Run Generation** Generation that the ISO determines is required to be on line to meet Applicable Reliability Criteria requirements. This includes i) Generation constrained on line to meet NERC and WSCC reliability criteria for interconnected systems operation; ii) Generation needed to meet Load demand in constrained areas; and iii) Generation needed to be operated to provide voltage or security support of the ISO or a local area.

**Reliability Must-Run Unit** A Generating Unit which is the subject of a Reliability Must-Run Contract

**Reliability Upgrade** The transmission facilities, other than Direct Assignment Facilities, beyond the first point of Interconnection necessary to interconnect a New Facility safely and reliably to the ISO Controlled Grid, which would not have been necessary but for the interconnection of a New Facility, including network upgrades necessary to remedy short circuit or stability problems resulting from the interconnection of a New Facility Operator to the ISO Controlled Grid. Reliability Upgrades also include, consistent with WSCC practice, the facilities necessary to mitigate any adverse impact a New Facility's interconnection may have on a path's WSCC path rating.

**REMnet** The Wide Area Network through which the ISO acquires meter data.

| | |
|---|---|
| **Replacement Reserve** | Generating capacity that is dedicated to the ISO, capable of starting up if not already operating, being synchronized to the ISO Controlled Grid, and ramping to a specified Load point within a sixty (60) minute period, the output of which can be continuously maintained for a two hour period. Also, Curtailable Demand that is capable of being curtailed within sixty minutes and that can remain curtailed for two hours. |
| **Request for Expedited Interconnection Procedures** | A written request, submitted pursuant to Section 5.7.3.1.1 of the ISO Tariff, by which a New Facility Operator can request expedited processing of its Interconnection Application. |

| | |
|---|---|
| **System Emergency** | Conditions beyond the normal control of the ISO that affect the ability of the ISO Control Area to function normally including any abnormal system condition which requires immediate manual or automatic action to prevent loss of Load, equipment damage, or tripping of system elements which might result in cascading outages or to restore system operation to meet the minimum operating reliability criteria. |
| **System Impact Study** | An engineering study conducted to determine whether a New Facility Operator's request for interconnection to the ISO Controlled Grid would require new transmission additions, upgrades or other mitigation measures. |
| **System Planning Studies** | Reports summarizing studies performed to assess the adequacy of the ISO Controlled Grid as regards conformance to Reliability Criteria. |
| **System Reliability** | A measure of an electric system's ability to deliver uninterrupted service at the proper voltage and frequency. |
| **System Resource** | A group of resources located outside of the ISO Control Area capable of providing Energy and/or Ancillary Services to the ISO Controlled Grid. |
| **System Unit** | One or more individual Generating Units and/or Loads within a Metered Subsystem controlled so as to simulate a single resource with specified performance characteristics, as mutually determined and agreed to by the MSS Operator and the ISO. The Generating Units and/or Loads making up a System Unit must be in close physical proximity to each other such that the operation of the resources comprising the System Unit does not result in significant differences in flows on the ISO Controlled Grid. |

**TAC Area** A portion of the ISO Controlled Grid with respect to which Participating TOs' High Voltage Transmission Revenue Requirements are recovered through a High Voltage Access Charge. TAC Areas are listed in Schedule 3 of Appendix F.

# Attachment C

## 5.7 Interconnection of New Facilities to the ISO Controlled Grid.

### 5.7.1 ~~Submitting Requests to Interconnect~~ Applicability.

~~Any existing or prospective Generator that requests interconnection to the ISO Controlled Grid shall submit a request to interconnect to the Participating TO or UDC that will supply the interconnection and shall copy such request to the ISO. The Participating TO shall coordinate all aspects of the interconnection requests pursuant to the TO Tariff and the TCA. Unless a proposed interconnection is pursuant to an Encumbrance of the ISO Controlled Grid enumerated in the TCA, an existing or prospective Generator shall not be entitled to have its interconnection to the ISO Controlled Grid energized unless and until it has demonstrated to the ISO's reasonable satisfaction that it has complied with or is capable of complying with all of the requirements of this Section 5.~~

For purposes of this Section 5.7, a New Facility shall be:

(a) each Generating Unit that seeks to interconnect to the ISO Controlled Grid;

(b) each existing Generating Unit connected to the ISO Controlled Grid that will be re-powered and increase the total capability of the power plant; and

(c) each existing Generating Unit connected to the ISO Controlled Grid that will be re-powered without increasing the total capability of the power plant but has changed the electrical characteristics of the power plant such that its re-energization may violate Applicable Reliability Criteria and trigger the application of Section 5.7.5(c).

The owner of a planned New Facility, or its designee, is referred to for purposes of this Section 5.7 as a New Facility Operator. Only New Facility Operators that have not submitted a Completed Interconnection Application, as defined under the applicable Interconnecting PTO's TO Tariff, to the Interconnecting PTO as of the effective date of this Section 5.7 are subject to its provisions.

**5.7.2 ~~Generating Unit Interconnection~~ Requests to Interconnect to the Distribution System.**

~~The interconnection standards and agreements of the interconnecting Participating TO or UDC, which are available upon request, shall govern the interconnection of additional Generating Units including the costs of such interconnection. Protocols and standards developed and adopted by the ISO may supersede, where appropriate, protocols, and standards specific to the Participating TO or UDC, but such ISO protocols and standards may not supersede any instruction provided to the ISO by a Participating TO that relates to an Encumbrance of the ISO Controlled Grid enumerated in the TCA.~~

Any request by a New Facility Operator to connect at distribution level voltage will be processed, as applicable, pursuant to the Wholesale Distribution Access Tariff of the Interconnecting PTO or CPUC Rule 21; provided, however, that the New Facility Operator shall be required to mitigate any adverse impact on reliability on the ISO Controlled Grid in accordance with Section 5.7.5. In addition, each Interconnecting PTO will provide to the ISO a copy of the System Impact Study used to determine the impact of a New Facility on the Distribution System and the ISO Controlled Grid pursuant to a request to interconnect under the applicable Wholesale Distribution Access Tariff.

**5.7.3 ~~Coordination of Critical Protective Systems~~ Interconnection Application.**

~~Generators shall coordinate with the ISO, Participating TOs and UDCs to ensure that ISO Controlled Grid Critical Protective Systems, including relay systems, are installed and maintained in order to function on a coordinated and complementary basis with Generator's, Participating TO's and UDC's protective systems.~~

All New Facility Operators shall submit two copies of a Completed Interconnection Application to the ISO in the form specified by the ISO. The ISO will date stamp all copies of the Interconnection Application, retain one executed copy, and, within 1 Business Day, send the other copy to the Designated Contact Person of the Interconnecting PTO. Within 10 Business Days after the

Interconnecting PTO receives an Interconnection Application, the ISO and the Interconnecting PTO shall determine whether the application is complete and the ISO will notify the New Facility Operator that its Interconnection Application is complete; or, in the event that the ISO, in consultation with the Interconnecting PTO, determines that the Interconnection Application is incomplete, the ISO will notify the New Facility Operator of the deficiencies or omissions in its application.

**5.7.3.1 Expedited Procedures For New Facilities.**

A New Facility Operator may submit a Request for Expedited Interconnection Procedures in accordance with Section 5.7.3.1.1. The ISO will develop and post on the ISO Home Page the Planning Procedures applicable to such expedited processing of Interconnection Applications.

**5.7.3.1.1 Request For Expedited Interconnection Procedures.**

(a) If it elects to expedite processing of its Completed Interconnection Application, a New Facility Operator shall submit a Request for Expedited Interconnection Procedures within 10 Business Days after receiving a copy of the System Impact Study for the proposed interconnection. The request should be submitted in writing to the ISO and the Interconnecting PTO.

(b) Within 10 Business Days after receiving a Request for Expedited Interconnection Procedures, the ISO and Interconnecting PTO shall provide to applicant the results of any studies required in addition to the System Impact Study, and shall tender an Expedited Interconnection Agreement that requires the applicant to compensate the Interconnecting PTO for all costs reasonably incurred pursuant to the terms of the ISO Tariff and the Interconnecting PTO's applicable TO Tariff for processing the Completed Interconnection Application and providing the requested interconnection.

(c) Concurrent with the provision, by the ISO and the Interconnecting PTO, of the studies referenced in subsection b, above, the Interconnecting PTO and the ISO shall provide to applicant their best estimate of the cost of any needed Direct Assignment

Facilities and Reliability Upgrades, Delivery Upgrades, if requested by the New Facility Operator, and other costs that may be incurred in processing the Interconnection Application and providing the requested interconnection, however, unless otherwise agreed by the ISO, and the Interconnecting PTO, and the applicant, such cost estimate shall not be binding and the New Facility Operator shall compensate the ISO and the Interconnecting PTO for all actual interconnection costs reasonably incurred pursuant to the provisions of this Section 5.7 and the Interconnecting PTO's TO Tariff.

(d) The New Facility Operator shall execute and return to the Interconnecting PTO, with a copy to the ISO, such Expedited Interconnection Agreement within 10 Business Days of its receipt or the New Facility Operator's Interconnection Application will be deemed withdrawn. In that event, the New Facility Operator shall reimburse the ISO and the Interconnecting PTO for all costs reasonably incurred in the processing of the Interconnection Application, including the Request for Expedited Interconnection.

**5.7.3.2 Good Faith Deposit**

(a) Each New Facility Operator that submits an Interconnection Application will on the date of submission also provide a Good Faith Deposit to the ISO. The ISO shall hold the Good Faith Deposit in trust for each applicant in a separate, interest-bearing account.

(b) The ISO shall refund the Good Faith Deposit, with accrued Interest, in the event that:

(i) The ISO determines that the New Facility is not responsible for any interconnection costs, other than study costs; or

(ii) The applicant withdraws its Interconnection Application or its Interconnection Application is deemed withdrawn.

**5.7.3.3 Posting of Interconnection Applications and Non-disclosure.**

The ISO will maintain on its OASIS site an updated list of all pending Interconnection Applications. As soon as practicable after the ISO receives a Completed Interconnection

Application, the ISO will post the nearest substation, the capacity (MW) of the New Facility and the year the New Facility is proposed to begin operations. At the time it submits its Interconnection Application, a New Facility Operator may request in writing that the ISO and Interconnecting PTO not publicly disclose the identity of such New Facility Operator. Upon such request, the ISO and Interconnecting PTO will not disclose the identity of the applicant while its Interconnection Application is pending, unless disclosure is permitted under Section 20.3.1 or in the event that an applicant's identity becomes otherwise publicly known.

**5.7.4 Interconnection.**

**5.7.4.1 Detailed Planning Procedures.**

The provisions set forth in this Section 5.7 shall govern the interconnection of New Facilities to the ISO Controlled Grid, including the costs of such interconnection. The ISO shall also maintain on the ISO Home Page detailed Planning Procedures and interconnection standards for all such interconnections. The ISO will develop, and post on the ISO Home Page, detailed procedures for updating the Planning Procedures.

**5.7.4.2 Studies.**

(a) Except as provided in Section 5.7.4.2(d), for each Completed Interconnection Application, the ISO will direct the Interconnecting PTO to perform the required System Impact Study and Facility Study, and any additional studies the ISO determines to be reasonably necessary.

(b) The Interconnecting PTO will complete or cause to be completed all studies directed by the ISO within the timelines provided in this section. Any studies performed by the ISO or by a third party at the direction of the ISO shall also be completed within the timelines provided in this section.

(c) Each New Facility Operator shall pay the reasonable costs of all System Impact and Facility Studies performed by or at the direction of the ISO or the Interconnecting PTO, and any additional studies the ISO determines to be reasonably necessary in response to

the Interconnection Application, including any iterative study costs required for other New Facility Operator's that have established a new queue position due to the New Facility Operator either withdrawing its Interconnection Application or because its queue position has been modified pursuant to the procedures in Section 5.7.4.4. A New Facility Operator shall also pay the reasonable cost of Interconnecting PTO review of any System Impact Study or Facility Study that is performed by a New Facility Operator or its designee pursuant to subsection (d).

(d) A New Facility Operator may perform its own System Impact Study and Facility Study, or contract with a third party to perform the System Impact Study and Facility Study, and shall so notify the ISO and the Interconnecting PTO of this election at the time it submits its Interconnection Application. Any such study or studies performed by a New Facility Operator or third party must be completed within the timelines identified in Sections 5.7.4.2.1 and 5.7.4.2.2. To the extent that the ISO and Interconnecting PTO disagree on the adequacy of the New Facility Operator or third party-sponsored study, the ISO will determine the adequacy of the study, subject to the ISO's ADR Procedures. The ISO and Interconnecting PTO shall complete their review of the New Facility Operator's study within 30 calendar days of receipt of the completed study. The results of any study or studies performed by a New Facility Operator or third party must be approved by both the ISO and the Interconnecting PTO.

**5.7.4.2.1 System Impact Study Procedures.**

Within 10 Business Days after receiving a Completed Interconnection Application by the Interconnecting PTO, the ISO and the Interconnecting PTO will determine, on a non-discriminatory basis, whether a System Impact Study is required. The ISO and the Interconnecting PTO will make such determination based on the ISO Grid Planning Criteria and the transmission assessment practices outlined in the ISO Planning Procedures posted on the ISO Home Page. The ISO and Interconnecting PTO will utilize, to the extent possible, existing transmission studies. The System Impact Study will identify whether any Direct Assignment Facilities or Reliability Upgrades are needed, as well as, if requested by the New Facility

Operator, whether any Delivery Upgrades are necessary to deliver a New Facility's full output over the ISO Controlled Grid. The System Impact Study will also identify any adverse impact on Encumbrances existing as of the Completed Application Date.

If the ISO and the Interconnecting PTO determine that a System Impact Study is necessary, the Interconnecting PTO shall within 20 Business Days of receipt of a Completed Interconnection Application, tender a System Impact Study Agreement that defines the scope, content, assumptions and terms of reference for such study, the estimated time required to complete it, and pursuant to which the applicant shall agree to reimburse the Interconnecting PTO for the reasonable actual costs of performing the required study. The New Facility Operator shall execute the System Impact Study Agreement and return it to the Interconnecting PTO within 10 Business Days, together with payment for the reasonable estimated cost, as provided by the Interconnecting PTO, of the System Impact Study. Alternatively, a New Facility Operator can request that the Interconnecting PTO proceed with the System Impact Study and abide by the terms, conditions, and cost assignment of the System Impact Study Agreement as determined through the ISO ADR Procedures, provided that such request is accompanied by payment for the reasonable estimated cost, as provided by the Interconnecting PTO, of the System Impact Study. If a New Facility Operator elects neither to execute the System Impact Study Agreement nor to rely upon the ISO ADR Procedures, such New Facility Operator's Completed Interconnection Application will be deemed withdrawn. If the New Facility Operator's application is deemed withdrawn, the New Facility Operator will compensate the Interconnecting PTO for all reasonable costs incurred to that date in processing the Completed Interconnection Application.

The Interconnecting PTO will use due diligence to complete the System Impact Study within 60 Calendar Days of receipt of payment and the executed System Impact Study Agreement or initiation of the ISO ADR Procedures. If the Interconnecting PTO cannot complete the System Impact Study within 60 Calendar Days, the Interconnecting PTO will notify the New Facility Operator, in writing, of the reason why additional time is required to complete the required study

and the estimated completion date.

**5.7.4.2.2 Facility Study Procedures.**

If a System Impact Study indicates that additions or upgrades to the ISO Controlled Grid are needed to satisfy a New Facility Operator's request for interconnection, the Interconnecting PTO shall, within 15 Business Days of the completion of the System Impact Study, tender to a New Facility Operator a Facilitiy Study Agreement that defines the scope, content, assumptions and terms of reference for such study, the estimated time to complete the required study, and pursuant to which the applicant agrees to reimburse the Interconnecting PTO for the actual costs of performing the required Facility Study. The New Facility Operator shall execute the Facility Study Agreement and return it to the Interconnecting PTO within 10 Business Days, together with payment for the reasonable estimated cost, as provided by the Interconnecting PTO, of the Facility Study. Alternatively, a New Facility Operator may request that the Interconnecting PTO proceed with the Facility Study and abide by the terms, conditions, and cost assignment of the Facility Study Agreement as determined through the ISO ADR Procedures, provided that such request is accompanied by payment for the reasonable estimated cost, as provided by the Interconnecting PTO, of the Facility Study. If a New Facility Operator elects neither to execute the Facility Study Agreement nor to rely upon the ISO ADR Procedures, such New Facility Operator's Completed Application will be deemed withdrawn. If the New Facility Operator's application is deemed withdrawn, the New Facility Operator will compensate the Interconnecting PTO for all reasonable costs incurred to that date in processing the Completed Application.

The Interconnecting PTO will use due diligence to complete the Facility Study within 60 Calendar Days of receipt of payment and the Facility Study Agreement or initiation of the ISO ADR Procedures. If the Interconnecting PTO cannot complete the Facility Study within 60 Calendar Days, the Interconnecting PTO will notify the New Facility Operator, in writing, of the reason why additional time is required to complete the required study and the estimated completion date.

A New Facility Operator shall only be entitled to amend its Completed Interconnection Application once without losing its queue position. Such amendment shall occur on or before 10 Business Days following the date the Interconnecting PTO tenders a Facility Study Agreement. Specifically, as an alternative to executing and returning a Facility Study Agreement, a New Facility Operator may submit an amendment to its Completed Interconnection Application to reflect a revised configuration for its New Facility. The amended Completed Interconnection Application shall be treated in accordance with Section 5.7.4.2.1 and the New Facility Operator's Completed Interconnection Application shall not be deemed withdrawn, and it shall maintain its existing queue position, if (a) the amended Completed Interconnection Application is received by the Interconnecting PTO within 10 Business Days of the Interconnecting PTO's tender of a Facility Study Agreement; and (b) the New Facility Operator has not submitted a previous amendment to the Completed Interconnection Application. In the event a New Facility Operator amends its Completed Interconnection Application, it will be responsible for any additional study costs that result from that amendment, including costs associated with revisions to studies for other applicants holding later queue positions.

**5.7.4.3 Execution of Interconnection Agreement.**

Within 10 Business Days of receipt of a completed Facility Study, a New Facility Operator shall request the Interconnecting PTO to provide to such applicant an Interconnection Agreement. The Interconnecting PTO shall provide an Interconnection Agreement to an applicant within 30 Business Days of receipt of the request for an Interconnection Agreement. If the ISO and Interconnecting PTO determine, pursuant to Sections 5.7.4.2.1, that either:

(a) a New Facility Operator's Interconnection Application can be accommodated and that such New Facility Operator will not incur costs for Reliability Upgrades, the New Facility Operator shall execute the Interconnection Agreement within 10 Business Days of receipt of the Interconnection Agreement; or

(b) a New Facility Operator's Interconnection Application will necessitate Reliability Upgrades, the New Facility Operator shall execute the Interconnection Agreement within

30 Business Days of receipt of the Interconnection Agreement or, if a New Facility Operator and the Interconnecting PTO are unable to agree on the rates, terms and conditions of the Interconnection Agreement, the New Facility Operator may request that the Interconnecting PTO file an unexecuted Interconnection Agreement at FERC. If a New Facility Operator does request that the Interconnecting PTO file an unexecuted Interconnection Agreement at FERC, the New Facility Operator shall agree to abide by the rates, terms and conditions of such Interconnection Agreement ultimately determined by FERC to be just and reasonable.

**5.7.4.4 Queuing.**

(a) The ISO and Interconnecting PTO will process all Interconnection Applications based on the New Facility's Completed Application Date.

(b) The queue position for each New Facility that has submitted an Interconnection Application will be established according to the Completed Application Date and the New Facility's compliance with the milestones set forth in Section 5.7.4.4.1.

(c) For any New Facility Operator that has submitted a request to interconnect to a Interconnecting PTO prior to the date that FERC makes Section 5.7 effective, such New Facility Operator's position in the queue will be based on its Completed Application Date as that term was defined in the Interconnecting PTO's TO Tariff in effect at the time the New Facility Operator submitted a request to interconnect to the Interconnecting PTO.

**5.7.4.4.1 Queuing Milestones.**

(a) To maintain its queue position, each New Facility Operator must timely comply with the requirements of the ISO Tariff and the TO tariff of the Interconnecting PTO and must, within 6 months of its Completed Application Date, satisfy all applicable Data Adequacy Requirements of state and local siting and other regulatory authorities. Any New Facility Operator not subject to state siting requirements must satisfy the information requirements set forth in 18 C.F.R. §2.20. The ISO will permit a New Facility Operator to

retain its queue position if such New Facility Operator requests an extension of the six-month period at least 5 Business Days prior to the expiration of such period. Such extension will be limited to one period of 30 Business Days and additional extensions shall not be granted. A New Facility Operator that does not maintain its queue position, but later satisfies the Data Adequacy Requirements, or the requirements of 18 C.F.R. § 2.20 if applicable, will be placed in a queue position comparable to that of other New Facility Operators that have satisfied the Data Adequacy Requirements, or the requirements of 18 C.F.R. § 2.20, as of the same date. At that time, the ISO and the Interconnecting PTO will determine whether a new System Impact Study or Facility Study must be performed based on the revised queue position of such New Facility Operator.

(b) Upon satisfaction of the Data Adequacy Requirements, or the requirements of 18 C.F.R. § 2.20 if applicable, each New Facility Operator, in order to maintain its queue position, must obtain a New Facility License within 15 months after satisfying the Data Adequacy Requirements. A New Facility Operator that does not obtain a New Facility License within the allowed time and does not maintain its queue position, but later obtains a New Facility License, will be placed in a queue position comparable to other New Facility Operators that have satisfied comparable milestones as of that date.

(c) Any New Facility whose New Facility License or building permit expires or is rescinded will not maintain its queue position.

(d) A New Facility Operator that has submitted a dispute under Article 13 of the ISO Tariff regarding any part of this Section 5.7 may request that the presiding judge, arbitrator, or mediator of the dispute suspend its obligation to meet milestones in order to maintain its queue position. In the event such a suspension is granted, the New Facility Operator must satisfy the missed milestones specified in this Section 5.7.4.4.1 within 30 calendar days of the date the decision on the dispute becomes final.

**5.7.4.5 Coordination of Critical Protective Systems.**

New Facility Operators shall coordinate with the ISO, Participating TOs and UDCs to ensure that a New Facility Operator's Critical Protective Systems, including relay systems, are installed and

maintained in order to function on a coordinated and complementary basis with ISO Controlled Grid Critical Protective Systems and the protective systems of the Participating TOs and UDCs. The ISO and Participating TOs will make available all information necessary for a New Facility Operator to determine whether its Critical Protective Systems are compatible with those of the ISO, Participating TOs and UDCs. The ISO and New Facility Operators shall also coordinate with entities that own, operate or control facilities outside of the ISO Controlled Grid to ensure that a New Facility's Critical Protective Systems function on a coordinated and complementary basis with such entities Critical Protective Systems.

**5.7.5 Cost Responsibility of New Facility Operators.**

(a) Each New Facility Operator shall pay the costs of required studies in accordance with Section 5.7.4.2 and the costs identified in this Section 5.7.5. The ISO and Interconnecting PTO will provide each New Facility Operator an estimate of its total cost responsibility under this Section. A New Facility Operator shall be responsible for the actual costs of all Direct Assignment Facilities and Reliability Upgrades necessitated by its Completed Interconnection Application. The Interconnecting PTO will provide each New Facility Operator a detailed record of the actual costs assessed to it under this Section. A New Facility Operator may request the Interconnecting PTO to provide any additional information reasonably necessary to audit the actual costs the New Facility Operator is assessed.

(b) The ISO and Interconnecting PTO will process all Interconnection Applications, and determine the cost responsibility of each New Facility Operator based on the New Facility Operator's Completed Application Date or, if applicable, based on the queue position determined by the procedure described in Section 5.7.4.4.1(b). The ISO and Interconnecting PTO will process simultaneously all interconnection requests with the same Completed Application Date.

(c) Each New Facility Operator shall pay the costs of planning, installing, operating and maintaining the following facilities: (i) Direct Assignment Facilities, and, if applicable, (ii)

Reliability Upgrades. In addition, each New Facility Operator shall implement all existing operating procedures necessary to safely and reliably connect the New Facility to the facilities of the Interconnecting PTO and to ensure the ISO Controlled Grid's conformance with the ISO Grid Planning Criteria, and shall bear all costs of implementing such operating procedures. The New Facility Operator shall be responsible for the costs of Reliability Upgrades only if the necessary facilities are not included in the ISO Controlled Grid Transmission Expansion Plan approved as of the New Facility Operator's Completed Application Date, or the date for the installation of a facility is advanced by the interconnection of the New Facility, in which case the New Facility Operator shall be responsible only for the incremental costs associated with the earlier installation of the facility.

(d) Each New Facility Operator may, at its own discretion, sponsor, pursuant to Section 3.2 of the ISO Tariff, any Delivery Upgrades.

**5.7.5.1 Maintenance of Encumbrances.**

No New Facility shall adversely affect the ability of the Interconnecting PTO to honor its Encumbrances existing as of the time a New Facility submits its Interconnection Application to the ISO. The Interconnecting PTO, in consultation with the ISO, shall identify any such adverse effect on its Encumbrances in the System Impact Study performed under Section 5.7.4.2.1. To the extent the Interconnecting PTO determines that the connection of the New Facility will have an adverse effect on Encumbrances, the New Facility Operator shall mitigate such adverse effect.

**5.7.5.2 Settlement of Interconnection Costs.**

Payment for Direct Assignment Facilities and Reliability Upgrades shall be made by the New Facility Operator to the Interconnecting PTO pursuant to the terms of payment set forth in the Interconnection Agreement between the parties.

**5.7.6 Energization.**

Neither the ISO nor the Interconnecting PTO shall be obligated to energize, nor shall the New Facility Operator be entitled to have its interconnection to the ISO Controlled Grid energized, unless and until an Interconnection Agreement has been executed, or filed at FERC pursuant to Section 5.7.4.3, and becomes effective and such New Facility Operator has demonstrated to the ISO's reasonable satisfaction that it has complied with all of the requirements of this Section 5.2.

**ISO TARIFF APPENDIX A**

**Master Definitions Supplement**

| | |
|---|---|
| **Completed Application Date** | For purposes of Section 5.7, the date on which a New Facility Operator submits an Interconnection Application to the ISO that satisfies the requirements of the ISO Tariff and the TO Tariff of the Interconnecting PTO. |
| **Completed Interconnection Application** | An Interconnection Application that meets the information requirements as specified by the ISO and posted on the ISO Home Page. |

* * * * *

| | |
|---|---|
| **Data Adequacy Requirement** | Any applicable minimum data requirements of the state agency responsible for generation siting or of any Local Regulatory Authority. |

* * * * *

| | |
|---|---|
| **Delivery Upgrade** | The transmission facilities, other than Direct Assignment Facilities and Reliability Upgrades, necessary to relieve constraints on the ISO Controlled Grid and to ensure the delivery of energy from a New Facility to Load. |
| **Designated Contact Person** | The person designated by each Participating TO to coordinate with the ISO on the processing and completion of all Interconnection Applications. |

* * * * *

**Direct Assignment Facility** The transmission facilities necessary to physically and electrically interconnect a New Facility Operator to the ISO Controlled Grid at the point of interconnection.

* * * * *

**Expedited Interconnection Agreement** A contract between a party which has submitted a Request for Expedited Interconnection Procedures and an Interconnection PTO under which the ISO and an Interconnecting PTO agree to process, on an expedited basis, the Interconnection Application of a New Facility Operator and which sets forth the terms, conditions, and cost responsibilities for such interconnection.

* * * * *

**Facility~~ies~~ Study Agreement** An agreement between a Participating TO and either a Market Participant, Project Sponsor, or identified principal beneficiaries pursuant to which the Market Participants, Project Sponsor, and identified principal beneficiaries agree to reimburse the Participating TO for the cost of a Facility Study.

* * * * *

**Facility Study ~~Agreement~~** An engineering study conducted by a Participating TO to determine required modifications to the Participating TO's transmission system, including the cost and scheduled completion date for such modifications that will be required to provide needed services.

**Good Faith Deposit** The deposit paid to the ISO by a New Facility Operator with

| | |
|---|---|
| | submission of its Interconnection Application in accordance with Section 5.7.3.2, in an amount equal to $10,000, including any interest that accrues on the original amount, less any bank fees or other charges assessed on the escrow account. A New Facility Operator may satisfy its deposit obligation through any commercially available financial instrument determined to be satisfactory by the ISO. |
| | * * * * * |
| **Interconnecting PTO** | For purposes of Section 5.7, the Participating TO that will supply the connection to the New Facility. |
| | * * * * * |
| **Interconnection Application** | An application that requests interconnection of a New Facility to the ISO Controlled Grid and that meets the information requirements as specified by the ISO and posted on the ISO Home Page. |
| | * * * * * |
| **New Facility** | A planned or existing Generating Unit that requests, pursuant to Section 5.7 of the ISO Tariff, to interconnect or modify its interconnection to the ISO Controlled Grid. |
| **New Facility License** | A license issued by a federal, state or Local Regulatory Authority that enables an entity to build and operate a Generating Unit. |
| **New Facility Operator** | The owner of a planned New Facility, or its designee. |
| | * * * * * |
| **Planning Procedures** | Procedures governing the planning, expansion and reliable interconnection to the ISO Controlled Grid that the ISO may, from time to time, develop. |

| | |
|---|---|
| | * * * * * |
| **Reliability Upgrade** | The transmission facilities, other than Direct Assignment Facilities, beyond the first point of Interconnection necessary to interconnect a New Facility safely and reliably to the ISO Controlled Grid, which would not have been necessary but for the interconnection of a New Facility, including network upgrades necessary to remedy short circuit or stability problems resulting from the interconnection of a New Facility to the ISO Controlled Grid. Reliability Upgrades also include, consistent with WSCC practice, the facilities necessary to mitigate any adverse impact a New Facility's interconnection may have on a path's WSCC path rating. |
| | * * * * * |
| **Request for Expedited Interconnection Procedures** | A written request, submitted pursuant to Section 5.7.3.1.1 of the ISO Tariff, by which a New Facility Operator can request expedited processing of its Interconnection Application. |
| | * * * * * |
| **System Impact Study** | An engineering study conducted to determine whether a New Facility Operator's request for interconnection to the ISO Controlled Grid would require new transmission additions, upgrades or other mitigation measures. |

# Attachment D

**NOTICE SUITABLE FOR PUBLICATION IN THE FEDERAL REGISTER**

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

| | | |
|---|---|---|
| **California Independent System Operator Corporation** | ) | **Docket No. ER01-___-000** |

**Notice of Filing**

[ ]

Take notice that on April 2, 2001, the California Independent System Operator Corporation ("ISO") tendered for filing Amendment No. 39 to the ISO Tariff. The ISO states that Amendment No. 39 is intended modify the ISO Tariff's provisions with respect to new generator interconnections.

The ISO requests that the filing be made effective on June 1, 2001.

The ISO states that this filing has been served on the California Public Utilities Commission and all California ISO Scheduling Coordinators.

Any person desiring to be heard or to protest the filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 C.F.R. §§ 385.211 and 385.214). All such motions or protests must be filed in accordance with § 35.9 of the Commission's regulations. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection in the Public Reference Room. This filing may also be viewed on the Internet at http://www.ferc.fed.us/online/rims.htm (call 202-208-2222 for assistance).