RET. TO ROOM 2002

COM/JZH/RB1/mak\*

Decision 99-09-028 September 2, 1999

# BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Investigation Into the Power Outage Which Occurred on December 8, 1998 on Pacific Gas & Electric System.

Investigation 98-12-013 (Filed December 17, 1998)

## INTERIM OPINION

#### I. Summary

This investigation addresses the Pacific Gas and Electric Company ("PG&E") power outage that occurred on December 8, 1998 in San Francisco. The outage left more than a million people in San Francisco and San Mateo Counties without power. The outage adversely affected businesses, government agencies, transportation and individuals. It involved transmission, generation and distribution. Its occurrence raised numerous questions with regard to the adequacy of PG&E's system to promote the health, safety and convenience of PG&E customers, employees, and the public. The Commission is concerned with the implication that a major metropolitan area can remain vulnerable to a major outage of extended duration as a result of "simple human error." The intent of our investigation is to discover the root causes of the outage and to identify and implement measures to prevent future outages, and thereby to promote the public welfare.

Parties to this proceeding have provided a number of reports that recommend improvements to PG&E's system and procedures that will enhance safety and reliability and reduce the probability of another similar outage.

- 1 -

Mailed 9/3/99

٩

Independent System Operator ("CAISO") and the Electricity Oversight Board, questions about the extent of the Commission's jurisdiction over the outage have been raised which could hinder our future cooperative efforts. In this Interim Opinion we resolve questions regarding our jurisdiction, and direct our staff to develop protocols with CAISO to ensure that future outages are investigated fully, promptly, cooperatively, and efficiently. In addition, we affirm our commitment to moving forward expeditiously to evaluate the information provided to us and to determine what measures are necessary to avoid future outages, and set a procedural schedule for accomplishing these goals.

## II. Procedural Background

On December 17, 1998, the Commission issued Investigation (I.) 98-12-013 in order to investigate the major power outage that occurred in San Francisco on December 8, 1998.

On December 18, 1998, PG&E sent a letter to Commission President Richard A. Bilas requesting an extension of time to file its report on the outage.

On December 21, 1998, President Bilas sent a letter giving PG&E until January 25, 1999 to submit its report, and setting a prehearing conference for February 8, 1999.

On January 25, 1999, PG&E filed its report on the outage.

On February 8, 1999, a prehearing conference was held. As a result, on February 10, 1999, an Assigned Commissioner's Ruling was issued which set a schedule for submission of parties' reports, submission of rebuttal by PG&E, an additional prehearing conference, and if needed, evidentiary hearings.

On March 31, 1999, CAISO and the Commission's Consumer Services Division (CSD) filed their reports on the outage.

5

....

On April 7, 1999 the Commission's Office of Ratepayer Advocates (ORA) filed its report.

On April 22, 1999 ORA supplemented its April 7, 1999 report and CSD reissued its March 31, 1999 report with appendices. In addition, the City Attorney of the City and County of San Francisco (CACCSF), San Diego Gas and Electric Company (SDG&E), Southern California Edison Company (SCE), and The Utility Reform Network (TURN) filed their responsive reports.

On April 26, 1999, Mr. Gary C. Heath, Executive Director of the Electricity Oversight Board (EOB) wrote a letter to President Bilas. In the letter, Mr. Heath recommended that the reports received in this proceeding be transmitted to CAISO for its consideration in development of a corrective action plan to reduce or eliminate the possibility of future system disturbances. CAISO would be directed to submit its corrective action plan and timetable to EOB for its consideration. CAISO would transmit to the Commission any corrective measures that it believes the Commission should consider for PG&E's distribution system. Additionally, CAISO would be requested to submit to EOB and the Commission, progress reports on PG&E's implementation of the corrective action plan.

On April 27, 1999, Mr. Terry M. Winter, President and Chief Executive Officer of CAISO wrote a letter to Commission President Bilas supporting the April 26,1999 EOB letter.

On April 28, 1999, a second prehearing conference was held and the schedule was suspended. Therefore, the date for submission by PG&E of its rebuttal to the reports was suspended until further order.

On May 14, 1999, CACCSF wrote a letter to the Commission expressing the City's concern over the suspension of the schedule in this matter.

- 3 -

.: .

On June 4, 1999, the Draft Decision of President Bilas was mailed to all parties in this matter.

On June 21, 1999, CACCSF wrote a letter to the Commission urging the Commission not to adopt the draft decision which would have terminated the proceeding.

On July 20, 1999, State Senator John Burton, President Pro Tempore, wrote a letter to Commissioner Bilas expressing his concern with the draft decision, and suggesting that the Commission and CAISO jointly investigate the outage.

### III. Category and Need for Hearings

In our Order instituting this investigation, we preliminarily categorized this proceeding as quasi-legislative, and determined that hearings would be necessary. We now confirm that this is a quasi-legislative proceeding. No hearings have been held. The need for hearings will be determined at the prehearing conference ordered herein, or subsequently.

### IV. Comments on the Draft Decisions

The draft decision of President Bilas in this matter was mailed to the parties in accordance with Pub. Util. Code Section 311(g), and Rule 7.1 of the Rules of Practice and Procedure. Comments were filed by CSD, ORA, CACCSF, CCUE, PG&E and SDG&E on June 24, 1999 and reply comments were filed by CSD and PG&E on June 29, 1999.

The draft alternate decision of Commissioners Hyatt and Bilas was also mailed out for comments. Comments were filed by PG&E, ORA, TURN, CCSF, and SCE. The California Municipal Utilities Association also filed comments along with a motion to intervene, which was granted by Assigned Commissioner's Ruling. Reply comments were filed by PG&E, CSD, TURN, SDG&E, and CCSF. Minor changes were made to the draft in response to these

- 4 -

comments. We also clarify that it is our intent that the development of outage protocols with the CAISO, as discussed in this order, will be a public process.

#### V. Outage Summary

4

On December 8, 1998, PG&E lost power on all its 115 (kilovolt) kV transmission lines from the San Mateo Substation to San Francisco, and the two San Francisco power plants tripped off line, leaving more than 456,000 customers (electric services) without power. Only the approximately 13,000 customers served from the 230 kV transmission line from San Mateo Substation maintained power. Six hours later, PG&E had restored service to all but 27,000 customers. Within the next two hours, all customers had power.

PG&E's report on the outage states:

"The two events directly precipitating the outage were as follows:

- "A PG&E transmission construction crew working on the #2 115 kV bus, Section D at the San Mateo Substation failed to remove protective grounds that had been installed as a safety measure while the crew was working on the bus section.
- "Before energizing the bus section at the conclusion of this construction work, a PG&E transmission substation operator failed to engage the protective relays that signal the circuit breaker to open when there is a fault on the bus."

"Had either of these failures not occurred, there would have been no outage." <sup>1</sup>

When the bus was energized with the grounds still in place, a three-phase to ground fault occurred and the primary (local) protection did not open (trip)

<sup>&</sup>lt;sup>1</sup> December 8, 1998 Outage Investigation Report, PG&E, January 25, 1999, p.1.

....

the circuit breaker. Had the protective relays been engaged, the circuit breaker would have tripped, stopping (clearing) the fault within about one-tenth of a second and confining the effects of the fault to a single bus in the substation with no resulting outage. Instead, more distant (remote) circuit breakers and circuit breakers on the #1 115 kV bus, Section D, tripped, as designed, approximately one-half second later. As a consequence of the delayed clearing of the fault, the 115 kV transmission line voltages dropped significantly during the fault and the transmission system into San Francisco experienced large power fluctuations after the fault cleared.

The resulting system instability caused San Francisco generation and other transmission circuits breakers to trip. About 11 seconds after the incident began, power was lost on all of the 115 kV lines serving San Francisco, and the two San Francisco power plants had tripped off line. This left more than 456,000 customers without power.

#### VI. Jurisdiction

This matter has been marked from its outset by uncertainty among the parties regarding the extent of the Commission's jurisdiction to investigate the outage in light of Assembly Bill ("AB") 1890's<sup>2</sup> creation of the CAISO with certain statutory duties. The uncertainty stems from questions regarding the Commission's jurisdiction over the reliability of the transmission grid which has been turned over to the operational control of CAISO. However, parties asserting that the Commission lacks jurisdiction to investigate this outage both ignore the Commission's regulation of the safety of utility practices and facilities,

<sup>&</sup>lt;sup>2</sup> Stats. 1996, Ch. 854

.....

and overstate the impacts of AB 1890 on the Commission's jurisdiction over reliability. As set forth more fully below, the Commission retains both the authority and the obligation to fully investigate this outage and others like it, and to develop and require responsive action which will enhance the safety and reliability of PG&E's system and reduce the potential for future outages. Because the CAISO has an important concurrent role in outage investigation, remediation, and prevention, it is imperative that the Commission develop protocols with CAISO to guide the investigation of future outages. We envision that the Oversight Board will play an important role in the development of such protocols.

The Commission has historically been the agency charged by the Constitution and the Legislature with regulation of privately owned public utilities. The Legislature has conferred broad powers on the Commission. For instance, the Commission is charged with "supervis[ing] and regulat[ing] every public utility in the State" and may "do all things . . . which are necessary and convenient in the exercise of such power and jurisdiction." Pub. Util. Code § 701. Section 451 requires the Commission to ensure that every public utility operates in a manner so as to "promote the safety, health, comfort, and convenience" of customers, employees, and the public. Utilities are directed to obey and comply with all Commission orders as to <u>any</u> matter affecting its business as a public utility. Pub. Util. Code § 702.

With respect to health, safety and reliability, the Commission may order construction or modification of facilities or equipment, and changes to rules or services, in order to address "unjust, unreasonable, unsafe, improper, inadequate, or insufficient" utility rules, practices, equipment, appliances, facilities or service. Pub. Util. Code §§ 761, 762, 768. The Commission may order changes in a utility's facilities to promote the security or convenience of

- 7 -

employees or the public. Pub. Util. Code § 762. It may fix the utility's rules, practices, and service to promote safety, reliability, and other goals. Pub. Util. Code § 761. It may direct a utility to use particular safety devices (Pub. Util. Code § 768). The Commission may fix standards and services to be furnished by utilities. Pub. Util. Code § 770. The Commission exercises jurisdiction over the safety and adequacy of electric powerlines. Pub. Util. Code §§ 8001 et seq. In addition, no utility may construct a transmission line (or other utility facility) without first obtaining a certificate of public necessity and convenience from the Commission. Pub. Util. Code § 1001. <u>See generally Orange County Air</u> <u>Pollution Control District v. Public Utilities Commission (1971) 4 Cal.3d 945, 948, 951; Public Utilities Commission v. Energy Resources Conservation & Development Commission (1984) 150 Cal.App.3d 437, 452.</u>

AB 1890 left intact the Commission's obligation to ensure that utility facilities and services do not endanger the health, safety and welfare of the public. <u>See e.g.</u> Pub. Util. Code § 451; 701; 761. As the Legislature recognized in AB 1890, "reliable electric service is of paramount importance to the safety, health, and comfort of the people of California." Pub. Util. Code § 334; <u>see also</u> § 330(g) ("reliable electric service is of utmost importance to the safety, health, and welfare of the state's citizenry and economy"). Reliability and safety are thus inextricably linked.<sup>3</sup> Both are impacted by major outages.

Until the enactment of AB 1890, it was undisputed that the Commission \_ had, and had exercised, full jurisdiction over the transmission systems and

<sup>&</sup>lt;sup>3</sup> <u>See also</u> comments filed in July 1999 by Southern California Edison and Sierra Pacific in A.96-11-004, arguing that safety of employees and the public could be compromised by proposed benchmarks for utilities to restore service following power outages.

4

facilities of public utilities, including general responsibility for the reliability of such systems. <u>See</u> Pub. Util. Code § 761; <u>Public Utilities Commission v. Energy</u> <u>Resources Conservation & Development Commission</u> (1984) 150 Cal.App.3d 437, 452; <u>Re rules, Procedures and Practices Applicable to Transmission Lines Not</u> <u>Exceeding 200 Kilovolts</u> (1994) 55 CPUC 2<sup>nd</sup> 87, 112 (D.94-06-014, COL No. 8) ("all utility owned electric transmission lines, substations and facilities remain under the Commission's exclusive jurisdiction . . .").

AB 1890 established CAISO with certain specific statutory duties. Pursuant to § 345, CAISO shall "ensure efficient use and reliable operation of the transmission grid." CAISO is required to adopt maintenance, repair, and replacement standards for the transmission facilities under its control, and to adopt standards for reliability and safety during periods of emergency and disaster. Pub. Util. Code § 348. CAISO is further required to perform a review following a major outage affecting 10% of customers in the service territory of a utility, and is empowered to order appropriate sanctions if warranted. Pub. Util. Code § 349. Section 334, adopted as part of AB 1890, noted that the restructuring of the electricity industry "would transfer responsibility for ensuring short- and long-term reliability away from electric utilities and regulatory bodies" to CAISO and the market. The Legislature sought to ensure that the "change in locus of responsibility for reliability" did not expose Californians to undue risk in connection with system reliability. Pub. Util. Code § 334.

AB 1890 thus empowered CAISO to operate the grid, and to carry out certain reliability-related functions. AB 1890 did not, however, deprive the Commission of its related safety jurisdiction. AB 1890 did not, for instance, repeal the statutes, some of which are identified above, under which the

-9-

÷.,

Commission has exercised jurisdiction over the safety of utility facilities or services, whether transmission or distribution.<sup>4</sup> Moreover, in § 330(f), also added by AB 1890, the Legislature affirmed the Commission's ongoing authority with respect to the transmission system, declaring that "the delivery of electricity over transmission and distribution systems is currently regulated, and will continue to be regulated to ensure system safety, reliability, environmental protection, and fair access for all market participants. Pub. Util. Code § 330(f).<sup>5</sup>

Nor did AB 1890 strip the Commission wholesale of its historic jurisdiction with respect to reliability. There is no dispute, for instance, that the Commission retains its historical jurisdiction over reliability of the utilities' distribution systems, notwithstanding the broad language used in § 334. In fact, AB 1890 gave the Commission specific new duties related to distribution system reliability in § 364, akin to the specific duties required of CAISO under sections 348 and 349. Moreover, AB 1890 did not repeal the statutes, such as § 761 et seq., under which the Commission has exercised jurisdiction over transmission facilities, services, and reliability.

The Legislature's guidance in AB 1890 with respect to the allocation of transmission reliability-related functions is less than perfectly clear. On the one hand, § 334 refers to a "transfer" of such functions to CAISO. Some parties,

<sup>&</sup>lt;sup>4</sup> AB 1890 did result in a shift of ratesetting authority for transmission to the Federal Energy Regulatory Commission.

<sup>&</sup>lt;sup>5</sup> CAISO is not a regulatory agency. It is not a state agency at all. Rather, it is a nonprofit public benefit corporation under the California Corporations Code. Pub. Util. Code § 340.

including PG&E and CAISO,<sup>6</sup> argue that §§ 334, 345, 348, and 349 broadly deprive the Commission of jurisdiction over the transmission system, including transmission facilities, management and employees assigned to transmission functions, and the reliability of the transmission system.<sup>7</sup> That view, however, is in conflict with § 330(f), which affirms the Commission's ongoing role in regulating the transmission system for the purpose of ensuring reliability, safety, and other goals, and with the fact that, as discussed above, AB 1890 did not modify the Commission's traditional sources of jurisdiction over reliability, such as §§ 451, 701, and 761.

Where there is an apparent conflict between two statutes, the courts will attempt to harmonize them by giving effect to both statutes. <u>San Diego Gas &</u> <u>Electric Company v. City of Carlsbad</u> (1998) 64 Cal.App.4<sup>th</sup> 785, 793. Ordinarily, the Commission's jurisdiction is exclusive. Thus, where the Commission's authority is pitted against that of a local government on a matter of statewide concern, the Commission has been held to have paramount jurisdiction. <u>Id</u>. at 796-804; <u>Orange County Air Pollution Control District v. Public Utilities</u> <u>Commission</u> (1971) 4 Cal.3d 945, 950-51. However, where its jurisdiction conflicts with other than a local agency, Commission directives have not been

<sup>&</sup>lt;sup>6</sup> CAISO has not filed a formal appearance in this proceeding, but has provided its comments by letter. The protocols to be developed as a result of this Order should address the manner in which the Commission and CAISO will participate in each other's processes.

<sup>&</sup>lt;sup>7</sup> PG&E's view of our jurisdiction apparently differs depending on the intended audience. CSD has brought to our attention a filing made jointly by PG&E and SDG&E in February 1999 in the state Court of Appeal. There PG&E argued that the Commission "possesses the power to regulate [Southern California Edison's] <u>operation</u> <u>and maintenance</u> of its overhead <u>transmission</u> lines." Apparently, PG&E has taken simultaneous, diametrically opposed views of our jurisdiction in different forums.

.....

given such controlling effect. <u>Id.</u> For instance, in the <u>Orange County</u> case, the Commission's jurisdiction overlapped with that of the Air Pollution Control District. The court held that neither agency had exclusive or paramount authority. Rather, where the jurisdiction of two state agencies overlaps, jurisdiction is concurrent. In such cases, subject to judicial review, a utility must comply with the rules and regulations of both agencies. <u>Orange County</u>, 4 Cal.3d at 947, 950-51. <u>Orange County</u> demonstrates the appropriate manner of reconciling apparently conflicting jurisdictional statutes pertaining to two statecreated entities.

Although not directly on point, the Public Utilities Commission v. Energy Resources Conservation & Development Commission (1984) 150 Cal.App.3d 437 (hereinafter "<u>CEC</u>") case is instructive on the issue of the extent to which a new legislative grant of authority impacts on Commission jurisdiction. In CEC, the question was the extent of the Energy Commission's jurisdiction over siting transmission lines. The question arose in light of the Warren-Alquist Act, which created the Energy Commission and transferred authority for the siting and licensing of certain power plants and appurtenant transmission lines from the Commission to the Energy Commission. Among the points the court relied on to reach its conclusion was the fact that the Warren-Alquist Act's grant of jurisdiction over power lines to the Energy Commission was specific, while the Commission's "extensive jurisdiction" over transmission systems was both undisputed and not otherwise changed by the Act. Id. at 452. For instance, even where the Energy Commission had undisputed jurisdiction over generating plants and radial lines, the CPUC still retained authority to issue a certificate of public convenience and necessity ("CPCN") for a site or related facilities, provided that the certificate may not be issued until the utility has obtained a certificate from the Energy Commission. Id. (citing Public Resources Code

- 12 -

.....

§ 25518, 25518.5). Nor had the Legislature explicitly stripped the Commission of its siting authority over interconnected transmission lines, for example by \_\_\_\_\_\_ amending § 1001. Id. The court thus rejected the Energy Commission's expansive interpretation of its jurisdiction over transmission lines pursuant to the Warren-Alquist Act, which would have deprived the Commission of its jurisdiction under existing statutes. Id. at 447.

The <u>CEC</u> case supports the proposition that a limited grant of jurisdiction to a new entity does not deprive the Commission of its existing jurisdiction under statutes not changed by the new Act. Like the Warren-Alquist Act, AB 1890 makes specific grants of authority to CAISO without expressly limiting, amending, or repealing the sources of the Commission's traditional jurisdiction over the transmission system and its reliability. It is undisputed, for instance, that after AB 1890 the Commission still retained jurisdiction over transmission siting. In addition, the Warren-Alquist Act demonstrates the Legislature has the ability to deprive the Commission of specific jurisdiction when it so intends. Section 25500 of the Public Resources Code, for example, provides that the Energy Commission has "exclusive" power to certify power plants. AB 1890, in contrast, did not explicitly strip the Commission of its jurisdiction over transmission systems and reliability. The responsibility accorded to CAISO in §§ 345, 348 and 349, is not made "exclusive." To the contrary, as discussed above, § 330(f) reaffirmed the Commission's ongoing role in regulation of transmission for the purposes of ensuring safety, reliability, and other goals.

In light of these authorities, we conclude that the Commission and CAISO share concurrent jurisdiction over elements of the transmission system and transmission reliability. The Commission retains its extensive jurisdiction over transmission and reliability, pursuant to provisions of the Public Utility Code unmodified by AB 1890. The Commission must, however, share its jurisdiction

- 13 -

.....

in the areas where CAISO has been given specific authority and responsibility. Subject to judicial review, utilities must comply with the rules, regulations and orders of both CAISO and the Commission. <u>Orange County</u>, 4 Cal.3d at 947, 950-51. The apparent conflict between the statutes discussed above can only be reconciled in this manner.

Although CAISO is not a state agency, it is more closely analogous to a state agency as to which the Commission must share jurisdiction than to a local agency as to which Commission jurisdiction is paramount. Like a state agency, CAISO was created by the Legislature. CAISO's duties and responsibilities were likewise created by the Legislature, rather than by a local entity. And there is no question that CAISO's responsibilities are matters of statewide, rather than merely local, concern. See e.g. Orange County, 4 Cal.3d at 950-951 and n. 5. Thus, concurrent jurisdiction is appropriate, despite the fact that CAISO is not a state agency.

Review of major outages affecting both transmission and distribution is clearly an area which impacts both safety and reliability, and both the Commission and CAISO have jurisdiction. The Commission has both the authority and the obligation to fully investigate such events. The Commission further has both the jurisdiction and the obligation to ensure that PG&E has in place, or puts in place, all facilities, measures, standards, services, and practices necessary to promote the public health, safety, and welfare. We emphasize that even if the courts ultimately disagree with our conclusions regarding our continuing authority over reliability, our undisputed jurisdiction over safety provides us with full authority to investigate outages and prescribe corrective action. In reviewing outages, the Commission must recognize the concurrent jurisdiction of CAISO. As we have noted, we will do so formally for future

outages by developing outage investigation protocols with CAISO through an open and public process.

There are sound legal and policy reasons for the Commission to exercise its jurisdiction to investigate major outages, and require responsive action. These reasons are particularly applicable to an outage as extensive as the one that occurred on December 8, 1998. The Commission is obligated by § 451 to ensure that every public utility operates in a manner so as to "promote the safety, health, comfort, and convenience" of customers, employees, and the public. CAISO does not have authority to regulate any utility's activities as they relate to the health, safety, or welfare of the public. CAISO's authority to review outages pursuant to § 349 concerns several specified factors, while the Commission has authority to broadly investigate a utility's practices, facilities, and management. We have specific authority to ensure that all statutory provisions related to public utilities are enforced and obeyed, except where enforcement is specifically vested in "some other officer or tribunal." Pub. Util. Code § 2101. CAISO has no consumer protection mandate.

In addition, the state Constitution requires the Commission to afford the public due process in its procedures. Cal. Const. Article XII, § 2. Although CAISO develops its policies in an environment which is open to market participants and interested parties, and CAISO has made many documents publicly available on its internet site, CAISO does not have a forum or tribunal in which to hold evidentiary hearings or otherwise formally receive public input.

These and similar factors convince us that we cannot simply leave investigation of outages which physically initiate on the transmission system to CAISO. Rather, we must exercise our jurisdiction to fulfill our responsibility to the public, and ensure that major outages are fully investigated and that remedial action, if necessary, is taken. We will do so in a coordinated fashion

- 15 -

with CAISO. We will keep this proceeding open to complete our investigation, subject to procedures discussed below.

Finally, we note that although the Commission does not have the discretion to ignore the jurisdiction vested in it by the Legislature, we do have some flexibility in the manner in which we exercise our jurisdiction. For instance, in <u>Re Rules, Procedures and Practices Applicable to Transmission Lines</u> <u>Not Exceeding 200 Kilovolts</u> (1994) 55 CPUC 2<sup>nd</sup> 87, 112 (D.94-06-014) we issued rules regarding the permitting of transmission facilities of 50 kV and above. However, we decided to continue to exempt lines under 50 kV from the permitting process. Instead, the Commission's complaint procedure is the vehicle for addressing issues relating to such lines. The Commission's decision was based on several practical reasons, including the fact that lines below 50 kV are generally distribution lines which are located on existing right of ways, and had not been the subject of sufficient concern to warrant the extent of regulation imposed on larger lines.

The Commission's shared jurisdiction with CAISO over outages and transmission reliability will require a practical approach as well. Like many of the parties, we have no desire to duplicate CAISO's work. With respect to outages, the Commission may, for example, decide that it should focus on safety issues and distribution reliability, and let CAISO take the lead on issues relating solely to transmission reliability. As discussed, we are today directing our staff to develop protocols with CAISO to guide us in future outage investigations. In addition, we have no intention of actively regulating day-to-day transmission reliability activities. Ensuring reliability in real time is clearly at the core of CAISO's mission. We will, however, assert our jurisdiction over issues such as

maintenance and outages.<sup>8</sup> Open lines of communication, and substantial amounts of cooperation between CAISO and the Commission are essential to continue to implement electric restructuring in ways that will evolve and sustain a vigorous and effective marketplace, serving the larger interests of California electricity consumers.

## VII. Coordination of Outage Investigations and Development of Outage Protocols

The foregoing lengthy discussion of our jurisdiction and the concurrent jurisdiction of CAISO demonstrates that it is imperative that we develop protocols with CAISO for investigating outages promptly. Efforts to enhance system safety and reliability in the San Francisco area and to avoid similar future outages require a coordinated, systemwide effort. An effort fragmented into transmission, generation and distribution, and dealt with separately by different agencies in an uncoordinated manner, would not be in the public interest. Protocols are necessary to clarify and delineate the relationship between the Commission and the CAISO in outage investigations in order to ensure that coordinated, systemwide investigations are undertaken, and that the public welfare is fully protected when outages occur. Such protocols should also enable the Commission, CAISO, the utilities, and interested parties to move forward on outage investigation and remediation without costly and time-consuming disputes over which entity is responsible for what. Thus, we will direct our Energy Division to immediately continue its efforts with CAISO to develop

<sup>&</sup>lt;sup>8</sup> Our GO-95, for example, remains in effect to the extent that it applies to transmission facilities.

outage investigation protocols. We envision that the Oversight Board will play and important role in the development of these protocols.

The process for developing the protocols will be an open one, which affords all interested parties the opportunity to provide input. The assigned commissioner will issue a Ruling issuing a draft of protocols, which will be posted on our internet site as well as mailed to the service list, and upon which interested parties may comment. We will adopt the protocols by means of a resolution, upon which all parties will have a further opportunity to comment.

With respect to this outage, CAISO advises us by letter that it has already taken certain steps, including commencing implementation of the recommendations for enhancing PG&E's reliability identified in CAISO's March 31, 1999, report, and assessing a penalty of \$440,000 on PG&E . In addition, on June 18, 1999, CAISO launched a transmission planning study for identifying and evaluating alternatives for enhancing the future reliability of the transmission system serving the San Francisco area.

The Commission's ongoing process with respect to the outage must take into account CAISO processes which are already in progress. This information should be included in the record of this proceeding. Accordingly, we will order PG&E to file a statement setting forth: (1) steps the CAISO has required in response to the outage; (2) additional steps, if any, which are under discussion but have not been required by CAISO; and (3) what steps PG&E has implemented to date. We also invite, but cannot require, CAISO to similarly advise us by entering an appearance in our proceeding and filing a statement addressing these issues. We will further require PG&E to file periodic updates as to implementation of such activities. We also will order PG&E to provide responses to CSD's data requests pursuant to Pub. Util. Code §§ 581 and 582.

Both the Commission and the CAISO should make it a goal of the coordinated investigation of this and future outages to avoid duplicative or conflicting requirements. Nonetheless, the Commission may determine that additional, different, or stricter measures than those required by the CAISO are necessary to protect and promote the safety of PG&E's employees, customers, and the general public, and to enhance the reliability of its system and services.

#### VIII. Further Procedures

The reports filed by PG&E, CAISO, CSD and CACCSF discuss the outage in detail, point out errors and opportunities for improvement, and recommend improvements to PG&E's system and procedures that will enhance reliability and reduce the probability of other similar outages. Generally, these recommendations are intended to cover: (1) prevention of such occurrences; (2) containment if they do occur; and (3) rapid recovery.

While we have not fully evaluated these reports, and our action today should not be read as an endorsement of any particular position expressed in the various reports, we can say that the reports raise important issues regarding the safety and reliability of PG&E's system and services, and regarding the reasonableness of its management of its employees, facilities, and services. We must now move to complete our evaluation of the reports, and order appropriate measures to enhance the safety and reliability of PG&E's system and procedures. As one aspect of this, we will consider whether there are potentially corrective actions that should be implemented over distribution matters, including consumer protection. For example, there may be a need to consider protocols for restoring power in specific localities along the distribution systems. We also may need to consider questions relating to informing customers about the outage as it develops and ebbs, and about the claims process after the fact.

Parties (other than PG&E) generally agree that PG&E should enhance or improve its operations in the following areas:

- 1. <u>Procedures and practices</u>. Are instructions and manuals clear and easily understood? Are there sufficient checks and oversight in order to insure tasks are completed?
- 2. <u>Communications</u>. Do the communication links within PG&E provide timely and accurate information? between PG&E and its external stakeholders (e.g. the public, local cities and counties, emergency services, ISO, PUC)?
- 3. <u>Human Factors Performance</u>. Are corporate policies in place? are they clearly understood and complied with by management, supervisors, and staff? Is the training program adequate?
- 4. <u>San Francisco Operating Criteria</u>. Does this document need improvement? Should the network be redesigned? reconfigured?
- 5. <u>Maintenance</u>. Is there adequate maintenance? Is there any deferred maintenance that may lead to reduced reliability?
- 6. <u>Implementation</u>. What systems does PG&E have to ensure that that practices and procedures are implemented and updated?

At the April 28 prehearing conference the schedule in this proceeding was suspended. As we have now resolved questions of jurisdiction and determined to move forward to complete this investigation, and will set a new schedule, including a prehearing conference. Parties should submit prehearing conference statements which address the six issues set forth immediately above, the extent to which corrective action is necessary, and recommended solutions which the Commission may require. Parties may also address other issues in a similar fashion. In addition, parties should address whether, how, and to what extent the outage protocols to be developed should be applied to this proceeding.

We will set the following schedule: ACR issuing draft Outage Protocols Comments on Draft Protocols Draft Resolution Adopting Protocols PG&E Statement re CAISO Outage Response PG&E Rebuttal to Parties' Reports Prehearing Conference Statements Prehearing Conference

September 17, 1999 October 1, 1999 October 18, 1999 October 20, 1999 October 20, 1999 November 12, 1999 November 23, 1999

Energy Division staff should accelerate its negotiations of draft protocols with CAISO immediately. It is our intent to have the Assigned Commissioner issue working draft protocols which have been discussed by Commission and CAISO staff, in order to obtain public input at a relatively early stage of the development of the protocols. We anticipate additional discussions between Commission and CAISO staff upon the receipt of comments on the draft. In order to adopt protocols agreed to by Commission and CAISO staff by our November 18, 1999, meeting, as we intend, all parties must aggressively pursue their development.

The prehearing conference will address procedures for further development of the record in this proceeding. Dates for hearings, if necessary, will be addressed at that time. We will not decide now whether a separate adjudicatory proceeding is necessary. Rather, as we stated in the OII, staff should recommend opening of a adjudicatory separate enforcement docket if and when it obtains evidence warranting such a proceeding.

- 21 -

## **Findings of Fact**

1. On December 8, 1998, a major power outage occurred on PG&E's sytem affecting the San Francisco area.

2. The outage left more than a million people in San Francisco and San Mateo Counties without power. The outage adversely affected businesses, government agencies, transportation and individuals.

3. The outage involved PG&E's system at the transmission, generation, and distribution levels.

4. On December 17, 1998, the Commission issued I.98-12-013 to investigate the outage.

5. PG&E has admitted that the direct causes of the outage were human errors by PG&E employees.

6. Efforts to enhance PG&E system safety and reliability and avoid future similar outages require a coordinated, systemwide effort.

7. Parties to this proceeding have provided a number of reports that recommend improvements to PG&E's system and procedures that will enhance safety and reliability and reduce the probability of another similar outage. Generally, these recommendations are intended to cover: (1) prevention of such occurrences; (2) containment if they do occur; and (3) rapid recovery.

8. Parties other than PG&E generally agree on certain substantive areas in which PG&E should enhance its operations, as set forth in the body of this order.

9. Questions raised about the extent of the Commission's jurisdiction over the outage could hinder our efforts to work cooperatively with CAISO and the Electricity Oversight Board.

10. Review of major outages affecting both transmission and distribution is an area which impacts both safety and reliability.

11. It is imperative that the Commission develop protocols with CAISO to guide the investigation of future outages.

12. Protocols are necessary to clarify and delineate the relationship between the Commission and the CAISO in outage investigations in order to ensure that coordinated, systemwide investigations are undertaken, and that the public welfare is fully protected when outages occur.

#### **Conclusions of Law**

1. PG&E is responsible for the outage.

2. The Commission retains both the authority and the obligation to fully investigate this outage and others like it, and to develop and require responsive action which will enhance the safety and reliability of PG&E's system and reduce the potential for future outages.

3. AB 1890 did not deprive the Commission of its obligation to ensure that utility facilities and services do not endanger the health, safety and welfare of the public.

4. AB 1890 did not explicitly strip the Commission of its jurisdiction over transmission systems and reliability.

5. The Commission retains its historical jurisdiction over reliability of the utilities' distribution systems, notwithstanding the broad language used in § 334. In addition, AB 1890 gave the Commission specific new duties related to distribution system reliability in § 364.

6. In § 330(f) the Legislature affirmed the Commission's ongoing regulatory authority with respect to the transmission system for the purpose of ensuring reliability, safety, and other goals.

7. AB 1890 did not modify the Commission's traditional sources of jurisdiction over reliability and § 330(f) affirms the Commission's ongoing role in regulating the transmission system for the purpose of ensuring reliability, safety, and other goals, authority which is complemented by the ISO's authority under §§ 334, 345, 348, and 349.

8. Where there is an apparent conflict between two statutes, the courts will attempt to harmonize them by giving effect to both statutes.

9. Where the jurisdiction of two state agencies overlaps, jurisdiction is concurrent. In such cases, subject to judicial review, a utility must comply with the rules and regulations of both agencies.

10. The Commission and CAISO share concurrent jurisdiction over elements of the transmission system and transmission reliability. The Commission retains its extensive jurisdiction over transmission and reliability, pursuant to provisions of the Public Utility Code unmodified by AB 1890. The Commission must, however, share its jurisdiction in the areas where CAISO has been given specific authority and responsibility. Subject to judicial review, utilities must comply with the rules, regulations and orders of both CAISO and the Commission.

11. Concurrent jurisdiction with CAISO is appropriate, despite the fact that CAISO is not a state agency.

12. The Commission's undisputed jurisdiction over safety provides it with full authority to investigate outages and prescribe corrective action.

- 24 -

#### INTERIM ORDER

#### IT IS ORDERED that:

1. The Commission's Energy Division shall immediately continue its efforts with California Independent System Operator (CAISO) to develop outage investigation protocols.

2. The assigned commissioner will issue a Ruling issuing a draft of protocols, which will be posted on our internet site as well as mailed to the service list, and upon which interested parties may comment. We will adopt the protocols by means of a resolution, upon which all parties will have a further opportunity to comment.

3. Pacific Gas and Electric Company (PG&E) shall file a statement setting forth: (1) steps the CAISO has required in response to the outage; (2) additional steps, if any, which are under discussion but have not been required by CAISO; and (3) what steps PG&E has implemented to date.

4. PG&E shall file monthly updates as to implementation of activities required by CAISO.

5. PG&E shall promptly provide responses to Consumer Services Division's data requests pursuant to Pub. Util. Code §§ 581 and 582.

6. Parties shall adhere to the schedule set forth in the body of this order. This order is effective today.

Dated September 2, 1999, at San Francisco, California.

RICHARD A. BILAS President HENRY M. DUQUE JOSIAH L. NEEPER JOEL Z. HYATT CARL W. WOOD Commissioners

I will file a written concurrence.

/s/ RICHARD A. BILAS President I.98-12-013 D.99-09-028

## **Concurring Opinion of President Bilas**

I have co-authored this order along with my colleague Commissioner Hyatt because I concur with the legal analysis contained herein that finds the Commission retains jurisdiction over safety and reliability of California transmission systems and shares jurisdiction of aspects of the transmission system and its reliability with the ISO. Although, the initial draft never stated the Commission no longer had jurisdiction over these elements, many construed this silence on the topic to imply the Commission was abdicating its jurisdiction. At the time I authored the initial draft, it seemed to make sense on a "good government" rationale to close the Commission's investigation and reopen it later if needed, rather than have concurrent and potentially overlapping investigations by two separate agencies. Unfortunately, in closing down the investigation even for a short time, many feared the Commission was ignoring its responsibilities. I never intended for the original order to overlook the Commission's statutory and constitutional duties. I agree with the legal analysis in this alternate order that finds the Commission and the California ISO share concurrent jurisdiction over elements of the transmission system and transmission reliability. I also agree with the conclusion that the Commission has an ongoing role in regulating the transmission system for the purpose of ensuring reliability, safety and other goals.

Some who read this analysis may find the order's tone somewhat abrupt and I myself had some misgivings that the order might hurt the cooperative relations we have worked hard to establish with the ISO. I can understand those concerns and I urge those who read this order to view it purely as a legal argument and not read more into the words on these pages to imply any intent to reduce the Commission's commitment to cooperation with the ISO. I myself remain committed to full cooperation and coordination. I do not want to create an environment of overlapping bureaucracy and inefficiency merely because a legal interpretation of statutes points to jurisdiction by two entities.

I believe the quick development of protocols for future outage investigations is clearly the answer to successful coordination. That is why, after reading the extensive comments of the parties on the initial order, I was persuaded that concurrent CPUC and ISO investigations can proceed viably. I am confident that the protocols, which we intend to develop and finalize through a public process, will prevent any inefficiencies threatened by simultaneous inquiries. I consider the order to complete protocols the most important outcome of this alternate, rather than the legal jurisdictional analysis. I intend to do everything I can to ensure these protocols are established quickly.

1

I.98-12-013 D.99-09-028

The Commission has a strong obligation to protect the safety of Californians. It also has a dedication to the public interest as shown from its history of ensuring safety and reliability. The ISO, although newly created, has tremendous expertise at hand as well. This order fulfills the Commission's obligations while at the same time respecting the new role of the ISO in the restructured electric industry. I am confident that once we establish protocols for future investigations, the Commission and the ISO can each rely on its organization's capabilities to produce a valuable outcome for California.

I also want to clarify my views on an issue that the order does not address, but that was raised in comments. The California Municipal Utilities Association (CMUA) filed comments on the draft of this order urging the Commission to revise it to clarify that assertions of Commission jurisdiction are limited to the transmission systems of investor-owned utilities, and not publicly-owned utilities. This issue had not been raised earlier in the proceeding, and indeed, CMUA was not even involved in the case until these comments were filed. I am sympathetic to the argument of CMUA, and recognize that this is virtually the same issue CMUA has raised in a petition to modify D.98-03-036 which prescribes distribution facility maintenance and inspection practices. Nevertheless, this order does not address CMUA's issue. The legal analysis merely notes Commission jurisdiction over transmission, but remains completely silent on how far this jurisdiction extends, primarily because this was never examined on the record of this case. As I read the order, the legal analysis has not shown one way or the other whether our jurisdiction does extend as far as CMUA fears it does. However, my own thoughts are that if indeed the Commission's transmission jurisdiction does extend to publicly owned utilities, the Commission should forbear from exercising its jurisdiction over them. It is my hope and intent that when we develop our protocols for outage investigations with the ISO, this issue of jurisdiction over publicly owned utilities can be clarified at that time.

RICHARD A. BILAS Commissioner

San Francisco, California September 2, 1999