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Decision 91-10-048 October 23, 1991

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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Investigation)
on the Commission's own motion to)
develop a policy of nondiscrimina-)
tory access to electricity)
transmission services for non-)
utility power producers.)

ORIGINAL

I.90-09-050

(Filed September 25, 1990)

INTERIM OPINION

(See Appendix A for Appearances.)

I N D E X

<u>Subject</u>	<u>Page</u>
INTERIM OPINION	2
I. Introduction	2
II. Goals of the Investigation	4
A. Promote Competition in Electric Generation	6
B. Integrate Transmission and Generation Resource Planning	7
C. Promote Resource Diversity	8
D. Improve Cost Allocation	8
III. Where We Are Heading	8
A. Jurisdiction of the Commission	12
B. The Buyer of Transmission Service	14
C. The Price of Wheeling Service	17
1. Cost-based Rates	17
2. The Problem of Economy Energy	18
3. Incentives and Transmission Policy	20
D. Nondiscriminatory Service	22
E. Transmission Cost Allocation	23
1. Upgrades	23
2. Line Losses	26
F. Tariffs for Wheeling (Transmission-only) Service	27
G. Protection of Ratepayers of Investor-owned Utilities	28
H. Ownership of Transmission Upgrades	30
I. Changes to Current Planning Processes	32
J. Role of Municipal Utilities	35
IV. Current Waiting List for PG&E Transmission Capacity	37
V. Negotiating Conference	38
VI. Comments on CEC Findings	42

INTERIM OPINION

In today's decision, we give policy direction on key transmission issues that are the subject of this investigation. Our direction is based on our consideration of comments and replies filed in response to the order commencing this investigation. We have also considered the information supplied on March 15, 1991, by the respondent utilities as requested in a ruling by Assigned Commissioner Wilk. This policy direction should lay the groundwork for further proceedings in this investigation, as described later in the decision.

I. Introduction

This transmission investigation complements our efforts in the Biennial Resource Plan Update (Investigation (I.) 89-07-004) to enhance competition among existing and potential suppliers of electricity to serve California's needs. The Update, in conjunction with the Energy Commission's biennial Electricity Report, quantifies those needs and establishes the long-run avoided costs against which suppliers bid. The present transmission investigation concerns the terms and conditions whereby suppliers may transmit their output to wholesale purchasers of electricity in California. Competitive supply procurement and enhanced access to the market are the key elements in this Commission's strategy for ensuring that electrical consumers in California get reliable service at reasonable cost, consistent with the State's environmental policies.

Many parties have responded to our invitation to submit comments.¹ The Assigned Commissioner also requested filings from investor-owned electric utilities regarding their transmission function and practices, including information on the following: planning criteria; computer models; projects and expenditures during the past decade; and involvement in wheeling transactions.

We have carefully reviewed these extensive materials. They reflect a great deal of thought and commitment to the subject of this investigation. We thank the parties for their efforts to date and are now ready to indicate how our thinking has progressed since the original order in this investigation. The policy

1. The following parties filed opening or reply comments: Pacific Gas and Electric Company (PG&E); PacifiCorp; San Diego Gas & Electric Company (SDG&E); Sierra Pacific Power Company (SPPC); Southern California Edison Company (Edison); this Commission's Division of Ratepayer Advocates (DRA); California Energy Commission (CEC); California Department of General Services (DGS); California Department of Water Resources (DWR); Northern California Power Agency (NCPA); Transmission Agency of Northern California (TANC); Northern California Power Pool (NCP); Western Area Power Administration (WAPA), both individually and as a member of NCP; the City of Vernon; the City of Santa Clara, both individually and as a member of NCPA; the Cities of Anaheim, Azusa, Banning, Colton, and Riverside (Southern Cities); National Independent Energy Producers (NIEP); the Geothermal Resources Association and Independent Energy Producers Association (GRA/IEP); California Energy Company, Inc. (CECI); Century Power Corporation (Century); Destec Energy, Inc. (Destec); Hadson Power Systems, Inc. (Hadson); Ronald E. Rulofson; and Trans-Pacific Geothermal Corporation (Trans-Pacific).

Also, various cities and special districts are participating by virtue of their membership in one or more of the joint powers agencies (NCPA, TANC, NCP) filing comments. They are the Cities of Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Redding, Roseville, and Ukiah; Sacramento Municipal Utility District; Truckee Donner Public Utility District; Modesto Irrigation District; Turlock Irrigation District; and Plumas-Sierra Rural Electric Cooperative.

direction indicated in today's opinion should form the basis for a negotiating conference, which is the next step.

II. Goals of the Investigation

This investigation has many goals, which we elaborate below.

A. Promote Competition in Electric Generation

We have a long-term goal of achieving a fully competitive generation market for California. We view nondiscriminatory transmission access as the next crucial and timely step toward this goal.

To date, we have focused on new supply sources as the first step toward a fully competitive generation market. Since the early 1980s, alternative sources of generation have come mostly from qualifying facilities (QFs), who constitute a large class of nonutility generators (NUGs) created under the Public Utility Regulatory Policies Act.² QFs now provide a significant source of generating capacity for California,³ and the present competition to serve new demand in California is largely between them and the regulated utilities. Our Biennial Resource Plan Update enables QFs to underbid, and thereby defer or avoid, new power plants or power purchase opportunities identified by the utilities.

² Appendixes to this decision include a List of Acronyms and a Glossary.

³ This growth is due, in part, to the legal requirement that utilities must interconnect with QFs and buy their output under terms and conditions supervised by this Commission.

In the future, NUGs other than QFs may also compete with California utilities and QFs in the generation market.⁴ This broadening of our capacity solicitation process we refer to here as "all-source bidding." In our most recent Update opinion (Decision (D.) 91-06-022), we indicated our acceptance in principle of the proposition that all-source bidding is a necessary component of a fully competitive resource procurement process.

Growth in alternative generation capacity is only one part of achieving a fully competitive market. Exchanges of energy from seller to a purchasing utility cannot take place unless the energy can be transmitted from the generation site to the buyer's load center. Yet, many NUGs do not own their own transmission lines and are not able to get a transmission-only service from entities that do own lines.

The transmission sector remains a natural monopoly and a "bottleneck" to achieving full competition in the electric market, unless the NUG can get transmission service from the buyer and from any other utility (or other transmission-owning entity, such as a special district or rural electric cooperative) between the NUG and the buyer's load center. (Transmission service from a utility connecting the seller and the purchasing utility is called "wheeling.")

We have recognized the linkage between wheeling and the wholesale generation market:

"Wheeling is critical to achieving a fully competitive market in electric generation. Fully competitive markets have many buyers, many sellers, with ready access to each other. To compete to serve a potential buyer, the QF

⁴ The Commission's current solicitation process for nonutility power does not allow participation by independent power producers (IPPs) other than QFs, and no IPPs currently exist in California. However, it is the intention of the Commission to address transmission access for QFs, IPPs, and the broad class of NUGs in this investigation.

must have reasonable assurance of the cost and other terms under which it may have its output wheeled to that buyer. The terms of wheeling service must ensure both that the wheeling utility gets reasonable compensation and that it cannot use its control of bottleneck facilities to extract monopoly rents." (D.91-06-022, mimeo, p. 9.)

For these reasons, we believe that an efficient market in electric supply depends in part on efficient use of transmission facilities.⁵

In the 1980s, we unbundled gas services and introduced transportation-only service in order to foster a more competitive gas supply market. Unbundling electric service to create a transmission-only service to connect sellers with wholesale buyers will similarly foster competition in electric generation.

B. Integrate Transmission and Generation Resource Planning

We are looking for ways to get the most value from our existing transmission system and to give the utility proper incentives in planning new or expanded transmission capacity. Today and historically, generation costs of electricity are much higher than the transmission costs. The focus has therefore been on generation costs. Nonetheless, the costs of transmission are

⁵ This belief is not new or unique to us. Since the late 1960s, the three largest California investor-owned utilities (IOUs) have participated in the California Power Pool (CPP), and they are three of the now 40 members of the Western Systems Power Pool (WSPP). These power pools provide a market in bulk power. However, both the CPP and WSPP address only short-term power needs. For example, the CPP enables economy energy or emergency capacity transactions for periods of several hours or days. Other services, such as short-term firm service, are provided for up to 45 days. These are significant, cost-saving services, but our concern in this investigation is with long-term assured transmission access, which is critical for resource planning to meet long-term needs.

significant and go beyond the obvious out-of-pocket expenses, since poor transmission planning can also increase generation costs.

For both economic and environmental reasons, we want to avoid overdevelopment of the transmission system. However, we must recognize those changes in the generation market that may require additional investment in transmission. In particular, if we can develop better access to excess power, wherever it is generated, we may be able to save ratepayers money by avoiding or deferring the need for new power plant construction. This will necessitate a better recognition of regional power needs than is possible under traditional transmission planning, where the utility looks solely to the current and future requirements of its native load. We must improve our own and the utilities' responsiveness, so that we use our existing transmission capacity wisely, and add new capacity in a timely fashion.

C. Promote Resource Diversity

Providing competitive NUGs with the ability to obtain access to transmission facilities will diversify California's generation resource mix. Most of California's NUGs either are cogenerators (producers of both electrical and thermal energy from the same fuel source) or generate power from renewable or alternative fuels. They thus differ in generation technology from most utility power plants. They also tend to be smaller and more dispersed geographically than utility plants.

Allowing these generators access to the market will tend to lessen the overall risk in developing new supply sources by making California less dependent on any given size or type of generation. Such access should also lower the price of new supply by increasing the number of potential bidders. Finally, such access is part of an overall strategy of lessening our dependence on fossil fuels by enabling non-fossil fueled technologies, which generally must be developed close to their fuel source, to generate electricity for delivery to distant load centers.

D. Improve Cost Allocation

Transmission access will help us achieve our goal of least-cost planning as most recently articulated in D.91-06-022, i.e., provide reliable, environmentally sound electric service at the lowest overall cost. However, a least-cost resource plan must correctly account for the true costs of the various resource options. One purpose of this investigation is to determine how our existing transmission cost allocation policies, developed for QFs, need to be modified or adapted to ensure that our bidding process captures transmission costs along with all other costs of the bidders and of the benchmark against which they are bidding.

Costs to be considered include not only the cost of transmission on the existing system (basically, line losses), but also the cost of upgrades to the system where necessary to transmit the NUG's output. We intend to achieve our access goals without degrading the reliability of the transmission system.

A primary goal of cost allocation policies is to encourage economically attractive projects. Our current policies regarding transmission may result in hidden subsidies. Such subsidies can hurt both the NUG and the purchasing utility. We do not want to promote uneconomic projects at ratepayer expense, nor do we want otherwise economic projects to fail because, e.g., a disproportionate share of upgrade costs is allocated to them.

III. Where We Are Heading

We want the parties to modify their proposals in response to the principles we endorse later in today's decision. To help them in their modifications, we describe below, in broad terms, how we envision our transmission access program working and how it will relate to integrated resource planning.

Our goal is to promote beneficial exchanges in the electric generation market, both between California participants

and between California and out-of-state participants in this market. We believe that, presently, many potentially beneficial exchanges--especially long-term transactions--are not occurring.

These theoretical failures have practical consequences, all of which cost consumers money. The lowest cost generation is underutilized because of the lack of timely and adequate access between the source and the consumer. The failure to utilize low-cost generation up to its full potential also signifies a wasteful consumption of natural resources. The lack of access may also mean that we are over-investing in new power plants and under-investing in transmission lines that both are cheaper to build than new generation and would permit more efficient use of existing generation.

There are many reasons for this lack of access. Among the most significant reasons are the following. Necessary information is hard to get on a timely and reliable basis. Transaction costs are high. The current regulatory structure encourages utilities to plan transmission looking solely to the needs of their native load and transmission-dependent municipal utilities within their service area; traditional transmission planning does not readily accommodate considerations of regional electric supply strategies. Transmission access, as we envision it, responds to all these concerns.

Information. As part of the resource planning done during the Electricity Report/Resource Plan Update cycle, utilities already file a great deal of information on their transmission systems, their current and future loads, and their plans for meeting them. For purposes of the transmission access program, we see the participating transmission owners compiling and publishing similar data, on the same two-year cycle. The data would reveal

everything that a prospective purchaser of wheeling service on a particular line would need to know from the owner.⁶

With this information, utilities will be able to conduct competitive procurement of generation knowing the total as-delivered cost of energy from each of the bidders, including those bidders whose energy would have to be wheeled. Similarly, prospective bidders will be able to use this information in calculating their bids and in choosing auctions where they have some likelihood of success.

In a nutshell, a utility holding an auction would add each bidder's transmission cost to the bid price to derive total costs for each competing resource. The lowest total-cost bidder would win, and the utility would bear the transmission costs for that resource, just as the utility would do if it were adding a new power plant of its own.

Some utilities do not own transmission facilities. These utilities could still participate in the program, provided that they provide their resource planning information, including need for transmission service, to the transmission owners delivering energy into the transmission-dependent utility's distribution system. We envision that the estimate of need would be binding until updated in the next two-year cycle.

⁶ The information would include such matter as current and anticipated loads, line losses, capacity considered to be available now and in the future, plans for upgrades, and estimated cost of upgrades. Further consideration is needed of what information, whether or not currently compiled on a regular basis, would be necessary for purposes of the program. "Prospective purchasers of wheeling service" are utilities contemplating wholesale purchases as part of their long-run supply strategy; the program is not designed for wheeling to end-use customers.

Transaction Costs. These costs would be minimized, in part because more information would be more readily available than is now the case. Also, wheeling service would not be negotiated case-by-case but, to the greatest extent possible, would be available as a tariffed service on a nondiscriminatory basis. By enabling service arrangements to be made in a minimal amount of time, the auction process would be made shorter and more certain.

Responsibility for making wheeling arrangements would lie with the utility buying the power to be wheeled. However, the seller of the power would be assured of the ability to deliver its output to the wheeling utility at any time the seller is entitled to make deliveries under its power purchase agreement.

Regional Planning. As a result of the information exchange and easier access conditions, a greater degree of regional transmission coordination should result without creating new regulatory proceedings or modifying the existing jurisdiction of regulatory agencies. Wheeling transactions would occur, and upgrades would be built, based on economic advantages demonstrated through competitive resource procurement.

The above outline is very broad. In the rest of Section III, we set forth particular policies and goals, together with our rationale and our anticipation of how they would work in practice. We also identify some issues where further refinement will be needed.

[illegible]

A. Jurisdiction of the Commission

The parties differ widely about this Commission's jurisdictional authority over the rates, terms, and conditions of wheeling, and its authority to order wheeling. Most parties acknowledge that the Federal Energy Regulatory Commission (FERC) regulates the rates, terms, and conditions of wheeling, as relevant to this proceeding.⁷ Many of these parties also believe FERC will incline to take a "hands off" approach to freely negotiated rates, terms, and conditions of wheeling, especially where the negotiations have responded to the statutory criteria in the Federal Power Act that bind FERC in its own determinations on wheeling. (See, e.g., Comments of GRA/IEP, November 30, 1990, at 19-20.) The parties are split as to whether this Commission has authority to mandate wheeling.⁸

We believe that we have jurisdiction over many aspects of transmission access and cost allocation. However, a precise delineation of this jurisdiction is not a prerequisite to making progress in this investigation, and the attempt to make such a delineation is more likely to produce litigation than progress on the substantive issues.

Instead, we conceive of the ultimate product of this investigation as a set of broad, Commission-endorsed principles for transmission access and cost allocation. The most likely next step would be FERC action on proposed wheeling tariffs filed by the

7 The rationale seems to be that FERC clearly has authority over the rates, terms and conditions of interstate wheeling, and under applicable law most of the potential wheeling transactions of concern to us are likely to be deemed interstate.

8 FERC has recently shown interest and activity in transmission access issues. While FERC has chosen, to date, to address these issues on a case-by-case basis, our generic investigation is complementary and timely.

IOUs. If these tariffs, as approved by FERC, are substantially consistent with the principles we have endorsed, that would justify a commensurate opening of our competitive resource solicitation process to additional sellers of electricity besides QFs.⁹ This process should not require either agency to test the scope of its jurisdiction over wheeling.

For example, the three largest California IOUs (PG&E, SDG&E, and Edison) might file proposed wheeling tariffs with FERC in light of this Commission's endorsed principles. FERC, in turn, would have the ultimate authority to approve or disapprove the proposed rates, terms, and conditions.¹⁰

Ideally, the IOUs would propose tariffs that embody the principles adopted in the final decision in this investigation. In actual practice, the parties before the FERC would be free to argue whatever position they wished. However, the tariffs that emerge from FERC review must conform substantially to these principles for us to be willing to lift the current QF-only limitation in the bidding process. In other words, our move to "all-source bidding" is directly linked to relieving the transmission bottleneck for all sources. We hope that this transition can be made in a single leap, but we also recognize that it may have to be accomplished in a series of steps.

We are fully committed to working with FERC to accomplish our program, which we think is broadly consistent with FERC's own

9 We will not necessarily open that process to all prospective sellers immediately. That depends on how successful the approved tariffs are in leveling the playing field (e.g., between in-area vs. out-of-area sellers) and on resolution of certain issues (such as seller affiliation with the purchasing utility) that are beyond the scope of this investigation.

10 Some services under the CPP appear to have gone through a similar FERC approval process.

In determining the winner, the purchasing utility will have to take into account each bidder's associated transmission costs. If, at the purchasing utility is conducting a final Standard Offer 4th round solicitation, it will also be comparing the bids to a benchmark that includes transmission costs associated with the identified, low-cost, deferrable resource (IDR).¹¹

Assuming the winner is outside the purchasing utility's service area, who should arrange for wheeling--the seller or the purchasing utility? The logic of placing responsibility for the transmission costs on the purchasing utility also dictates that the purchasing utility be responsible for contracting for wheeling and for service incidental to the purchase of power for which it accepts a bid.

This placement of responsibility is consistent with the needs and obligations of the various parties affected by the wheeling transaction. The seller primarily needs assurance that it can deliver its output into the transmission grid whenever it is entitled to make such delivery under its power purchase agreement. The question of when and how this output gets to the purchasing utility's load center, on the other hand, is the primary concern of the purchasing utility, whose resource needs are being met. The purchasing utility may not need firm wheeling service at all times;

¹¹ Ratemaking treatment would differ for upgrades on the purchasing utility's system and those on a wheeling utility's system. If an upgrade is required on the purchasing utility's system, the upgrade directly benefits its ratepayers (because the upgrade is part of the lowest total cost option, as revealed by the auction), and the costs of the upgrade should go into its rate base. An upgrade on a wheeling utility's system would at least partially be for the benefit of the purchasing utility, so to that extent the upgrade should not go into the wheeling utility's rate base. The costs of the upgrade would instead be borne by the purchasing utility as part of its costs of service.

it may be able to work out exchanges with the wheeling utility that capture efficiencies for both. The seller may not know about such possibilities and is certainly not in a position to work out such arrangements.¹²

We stress that under this plan for transmission access, all participating municipal and investor-owned utilities (IOUs) will have the obligation to provide transmission costs and other data to each other and to potential bidders. The participating municipal utilities and IOUs will also have the obligation to build upgrades if properly requested by the purchasing utility.

This Commission does not have jurisdiction over municipal utilities. Accordingly, it will be necessary to develop appropriate means for the IOUs and municipal utilities to make the reciprocal commitments necessary to implement this transmission access policy. We have no prescription for how these commitments should be made but note this is an important issue to be addressed at the next stage of this proceeding. (See Section III.J below.)

¹² Although the seller would not have the responsibility to make wheeling arrangements, we would expect it to cooperate fully with the other parties to the extent they have a legitimate need for information regarding the seller's plans for performance of its obligations under the power purchase agreement. Similarly, the other parties must cooperate with the seller in any aspect of the wheeling arrangements that relate to the seller's deliveries to the wheeling utility.

There are suggestions in the record that the seller could be made a third party beneficiary to the wheeling arrangement. We express no judgment on the suggestion beyond observing that, much like the issue of ownership of upgrades (see Section III.H), we are more committed to the goals of this proceeding than to particular means to achieve them. If inclusion as third party beneficiary would provide important assurances to the seller, and is otherwise consistent with our policies and FERC's, then the suggestion is worth exploring.

C. The Price of Wheeling Service

Pricing, and the need to give correct signals to transmission-owning utilities regarding the use of their transmission lines, is the most difficult issue in this investigation and one that affects many of the other issues. Moreover, FERC's authority over rates charged for wheeling services is extensive.

Thus, our observations in this section are not intended to be either prescriptive or exhaustive. Instead, we try to indicate the conflicting pressures that policy makers must ultimately resolve if opening up the transmission network is to achieve the desired results. The challenge for us and the parties is to devise transitional measures to ensure that the costs during the transition period do not fall disproportionately on any sector of the electricity market.

In this section, we address broadly the following questions. Are rates to be cost-based, and if so, is the basis "embedded" costs or "incremental" costs? Does wheeled power have priority over economy energy transactions, and if so, should the costs recovered in wheeling rates include an "opportunity" cost element reflecting economy energy purchases that the wheeling utility has foregone? What are IOUs' incentives to wheel under the current regulatory regime?

1. Cost-based Rates

We think the solution to market power exercised through control of transmission facilities is broad, nondiscriminatory access to such facilities. However, such access must be under terms and conditions that result in the transmission owner receiving reasonable compensation for the use of its facilities. In other words, it should recover its costs.

The costs depend on what facilities are needed to provide the service. If the requested wheeling can be accomplished over existing facilities, the wheeling utility's embedded costs should

be the basis for the rate charged. If upgrades are required, then the rate charged should reflect the additional capital invested for that purpose. The problem here is that the upgrade may serve several purposes besides serving the customer whose request for wheeling originally prompted the upgrade. This is a cost-allocation question that we discuss later. (See Section III.E.1 below.)

2. The Problem of Economy Energy

The most intractable problem related to transmission access is probably its impact on economy energy purchases. We are promoting such access to optimize long-run supply planning. That probably requires firm transmission service if a utility is to rely on a distant resource for part of its future supply. But many parties argue that economy energy purchases by the wheeling utility should have priority over wheeling service where the transmission capacity cannot handle both. These parties say that the existing grid was created to serve the native load customers of the franchised utilities, and that these utilities should therefore always be able to make short-term off-system purchases (or sales) whenever such transactions would reduce rates of native load customers.¹³

We stress, above all, that our transmission access program starts with the proposition that the native load customers

13. It is worth noting the many ways in which this fundamental problem--wheeling service vs. economy energy--can come up. It can be characterized as a cost-of-service question (as in the text) or as a priority-of-service question (whose deliveries are curtailable, and in what order). It could also materialize in the analysis of whether a potential wheeling utility has capacity available for wheeling on its existing system, i.e., can the utility keep some amount of transmission capacity idle most of the time in order to take advantage of economy energy transaction opportunities when they arise? This is probably best characterized as a cost-allocation question.

of the wheeling utility will always have their firm electricity needs served reliably. Those needs take priority over wheeling service.

The question here, however, concerns the transmission owner's non-firm transactions in relation to third-party firm transactions. Over time, the latter transactions may provide greater benefits than the former. Unfortunately, these social benefits may be unevenly distributed, i.e., the ratepayers of the utility purchasing the wheeling service may be much better off, while the ratepayers of the wheeling utility are somewhat worse off for providing the service.

We do not purport to have the solution to this problem, nor can we solve it alone. Both the CEC and the FERC are addressing it, and we intend to work closely with these agencies, as well as to solicit further comment in this investigation.

We are committed to keeping electricity costs down. That does not mean, however, that a high volume of economy energy transactions is always good. (Many such transactions may mean, for example, that the transmission system has been overbuilt, with resulting under-utilized capacity.) Moreover, vigorous competition in electric generation, which transmission access will promote, should ultimately benefit all ratepayers. Ideally, we want all beneficial exchanges to take place, both short- and long-term, but there is no formula for determining what mix of these transactions is ideal.

We think there are two aspects of this debate to which too little attention has been paid. First, we began our discussion with the assumption that wheeling service must be firm. How valid is that assumption, especially given the existence of such large power pools as the CPP and the WSPP? Are there ways for the wheeling utility and the purchasing utility to work out curtailment provisions (much as we seem to have had some success in doing in the case of standard offer contracts) that would accommodate a

reasonable level of economy energy transactions by the wheeling utility?

Second, we recognize that open access offered by a single utility without reciprocal arrangements with interconnected utilities might raise serious concerns for that utility's native load customers. Our transmission access program, on the other hand, would be a regional program involving many entities assuming reciprocal obligations for wheeling service and transmission planning. How far does the regional character of this program go to mitigate the impact of potential reduction of economy energy transactions for individual utilities?

We believe the mitigating effect could be substantial, so that over time all participants will in fact be beneficiaries. In part for this reason, we welcome the interest shown by the various municipal utilities and their organizations. We also appreciate the efforts in this investigation of PacifiCorp and SPPC, both of which are large interstate utilities with relatively small service areas in California. With the continued input of all these parties, we believe that reasonable solutions will be found to this and the many other problems in providing transmission access.

3. Incentives and Transmission Policy

On the one hand, transmission lines are the bottleneck facility in the electric industry. As in the telephone and natural gas industries, competition in the electric industry will ultimately require open access and unbundled service over the bottleneck facilities. This necessarily precludes a pricing structure that allows the owners of such facilities to extract monopoly rents.

On the other hand, there is something to be said for allowing transmission owners to make money on wheeling service. For example, potential profits from wheeling service would give transmission owners incentives to plan their transmission systems with regional needs in mind, to explore ways to operate their

systems to accommodate more wheeling (and wheeling-type service), and to market the service creatively and aggressively.

In addition, the traditional rate-basing of transmission lines actually discourages the provision of wheeling service. By providing the transmission owner assurance of full cost recovery, irrespective of foregone wheeling opportunities, the current regulatory regime results in the owner seeing no revenue gains if it does improve utilization of the grid, and suffering no financial consequences if it fails to obtain wheeling revenues. Critics of the current regulatory regime claim that, given the obligation to serve native load reliably, and the lack of financial consequences for underutilization, a conservatively managed company may decide not to take on any transmission obligations that do not directly relate to serving its native load.¹⁴

This is a classic problem of public utility regulation. We must avoid monopoly abuses, but we need the gains in efficiency and utilization that incentives can provide.

It is premature to explore transmission service incentive mechanisms when we are still grappling with the basic problem of providing meaningful access to firm wheeling service at cost-based rates. Until that problem is solved, "incentives" may result simply in the transmission owner being able to exercise market power. However, in I.90-08-006, we are taking a broad look at incentive regulation initiatives for the energy utilities. We expect that investigation will consider a coherent set of incentives recognizing the many recent regulatory developments affecting both the transmission network and supply- and demand-side management.

14 See, e.g., A. Brown and T. Barnich, "Transmission and Ratebase: A Match Not Made in Heaven," Public Utilities Fortnightly (June 1, 1991) 12, 14-15.

D. Nondiscriminatory Service

A key element to our transmission access program is that it be nondiscriminatory. This means that a wheeling utility may not discriminate unreasonably on the basis of the source of power to be wheeled. This nondiscrimination principle is broad in scope. It applies both to QF-generated power and to power generated by other NUGs. It also applies to any utility purchasing the wheeled power, including municipal utilities, so long as that utility has assumed reciprocal obligations under our transmission access program with respect to its own transmission system. The principle also applies whether the wheeled power is generated at a site within or outside the service area of the wheeling utility.

Historically, public utilities have always been required to provide service on a nondiscriminatory basis. This is a cornerstone of public utility law and is also essential to our present goals (promote competitive generation and level the playing field in preparation for all-source bidding).

If the competitors do not stand on an equal footing, all-source bidding will not perform its intended competitive function. In particular, the availability of wheeling under open access tariffs must not hinge on whether the NUG is outside the wheeling utility's service area. Failure of any of the large California IOUs (PG&E, SDG&E, and Edison) to reasonably extend wheeling service for power from outside its service area will preclude our implementation of all-source bidding.

The principle of nondiscrimination does not require identical wheeling terms and conditions for all power; not all "discrimination" is unreasonable discrimination. We recognize that there will be differences, for example, in the cost of providing wheeling service. However, we must ensure that different pricing does not result from differences in bargaining power. Thus, a wheeling utility must show that any disparate treatment is

reasonably necessary under the circumstances, and is also consistent with the principles of our transmission access program.

E. Transmission Cost Allocation

1. Upgrades

In D.85-09-058, we considered cost allocation in the context of power integration. We decided that, where an upgrade was required for that purpose, ratepayers would bear the reasonable cost of the upgrade as long as it had some "system-wide benefits."

QFs generally would be responsible only for the cost of facilities, such as those from the power plant to the point of interconnection with the utility's transmission grid, that existed solely to serve the QF. (See *id.*, 19 CPUC 2d 15, 23-24.) We also indicated that all bulk transmission lines and nearly all area lines have some system-wide benefits. Finally, we noted that an exception might be made where a transmission facility's cost outweighed its system-wide benefits, but we prescribed no particular method for doing such cost-benefit analysis. (*Ibid.*)

In D.87-05-060, we construed the system-wide benefits test in the context of Standard Offer 4, our competitive procurement program for long-run capacity additions. We held that the transmission costs associated with the IDR would generally not be included in payments to QFs because, under the system-wide benefits method of allocation, QFs would generally not avoid such costs to ratepayers.¹⁵

¹⁵ We made an exception for out-of-service area transmission costs of the IDR and also for instances where a major new transmission line had to be constructed to get power from the IDR to the utility's load center. We defined the latter exception as in-service-area transmission lines with over 100 miles of 230 kV line. These exceptional costs are avoidable by QFs, and so are included in payments to final Standard Offer 4 QFs. (See D.87-05-060, 24 CPUC 2d 253, 268-69.)

We do not envision any changes to the existing rules regarding cost of direct interconnection and other facilities that do not have any system-wide benefits. Those costs will continue to be borne by the NUGs, including QFs.

PG&E, SDG&E, Edison, and DRA recommend that, for upgrades that do have system-wide benefits, the existing cost allocation rule be reassessed. They would see transmission costs as part of a resource's total cost that should be reflected in the bidding process. GRA/IEP recommend that existing cost allocation rules be retained.

We believe that the system-wide benefits test may result in overvaluing the power from some plants and undervaluing the power from others. The utility procuring power must see the total cost, including the costs of transmission, of the competing resource options. The following procedure would accomplish that goal.

Transmission costs would be included in setting the IDR benchmark against which the NUGs will bid. In its auction, the utility would publish information regarding transmission costs at various locations in its territory. In determining the winning bid, the utility would take into account the transmission costs associated with the respective bids by adding the appropriate cost to each bid. In-service-area transmission upgrades associated with the winning bid would be paid for by the utility and put in the utility's rate base. The NUG bidder would also be able to figure before submitting its bid the transmission costs that would be

of the NUG's bid. The NUG's bid would be added to the transmission costs to determine the total cost of the NUG's bid. The NUG's bid would be compared to the IDR benchmark to determine if the NUG's bid is the winning bid. If the NUG's bid is the winning bid, the utility would pay for the transmission costs associated with the winning bid and put it in the utility's rate base. The NUG bidder would also be able to figure before submitting its bid the transmission costs that would be

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associated with its facility and could calculate its bid accordingly.¹⁶ We can see difficulties in implementing this procedure. Without appropriate provisions, the procedure could result in one NUG subsidizing later NUG development, or even subsidizing the ratepayers of the purchasing (or wheeling) utility. For example, if a utility built a sizeable upgrade to accept one NUG, later NUGs in the same vicinity might also benefit from the additional transmission capacity.¹⁷ In essence, the purchasing utility sees the first NUG as too expensive and the later NUGs as too cheap, when an equitable cost allocation among the various NUGs might lead to more (or less) NUG development in the area. As another example, the utility might have built the upgrade in any event--the NUG simply accelerated the project.

These are not the only allocation problems. For example, an upgrade might have reliability, stability, and power flow benefits that are not necessarily reflected by computing the proportion of the line's capacity utilized by the NUG over a given time-frame. The large IOUs differ in their recommendations for accounting for these effects.

Avoidance of subsidies is important if we are to achieve a fully competitive generation market. The parties will need to consider ways to deal with these kinds of problems, consistent with our overall goal of having comparative transmission costs figure

16 Thus, the NUG bidder whose transmission costs were high relative to the IDR's would have to lower its bid proportionally in order to remain competitive. As a practical matter, the NUG bidder of this type really does bear part of the transmission cost because it can win the auction only by beating the IDR's cost on an as-delivered basis.

17 For economic and technical reasons, an upgrade might have to be sized much larger than might be deduced simply from the capacity of the NUG whose addition would require the upgrade.

directly in the bidding rather than netting out such costs as we do at present.¹⁸

2. Line Losses

PG&E, SDG&E, and Edison indicate that line losses constitute an important part of transmission costs. Since these losses vary significantly by site of generation, PG&E and Edison recommend estimating transmission costs associated with losses for each substation bus on their respective systems.¹⁹

We agree in principle that line losses should be location-specific and should be included in the transmission costs of the IDR benchmark and in bid evaluation.²⁰ We also recognize that QFs question the technical feasibility of fairly measuring comparative line loss impacts in most cases. Many QFs also believe that including line losses would hinder development of renewable resources (such as wind, solar, and geothermal) that are generally restricted to sites remote from utility load centers.

These objections are significant but are ultimately outweighed by other considerations. First, to the extent utilities

¹⁸ Joint ownership of transmission facilities and some mechanism for reimbursement over time are possible approaches to these problems. See Section III.H below for a fuller discussion.

¹⁹ The current treatment of line losses for calculating payments to QFs is essentially to assume that losses in transmitting QF power equal the system average. Thus, for most QFs, no payment adjustment (plus or minus) is made based on their line loss impact. However, we have expressly authorized utilities to calculate line loss adjustment factors on a case-specific basis for "remote" QFs. (See, e.g., D.89-02-017, 31 CPUC 2d 13, 24-25.)

²⁰ PG&E says that the location of some IDRs may not be known with sufficient specificity to enable calculation of their line losses. In such cases, we are inclined not to calculate line losses for competing bidders; it would be unfair to include a category of costs for competitors that is omitted from the benchmark against which they bid.

actually consider line losses in choosing among candidate IDRs, it is appropriate that this cost category also apply to competing NUGs (always with the proviso that the utility use consistent assumptions and methods in making the comparisons). Second, regarding renewable resources, our decision to pursue them must rest on a full recognition of their costs along with their benefits. The benefits may be overwhelming, but we will not make them appear greater than they are by the device of ignoring one category of their costs.

PG&E suggests that certain NUGs may have positive impacts on the transmission system. Such impacts could include unloading of heavily loaded lines through reduction of loop flows and deferral of transmission upgrades through changes in power flows. PG&E recommends that the NUG be given credit for such impacts, where applicable. Again, we agree in principle with this recommendation.²¹

F. Tariffs for Wheeling (Transmission-only) Service

As described in Section III.B, there are two types of transmission access: power integration and wheeling. For power integration, no new tariffs will be necessary. (The IOUs already have interconnection tariff rules which are part of their power purchase agreements with QFs.) Transmission costs will be included in setting the resource benchmark and in determining the winning bid.

For wheeling service, in which a utility provides transmission access to another utility, California IOUs do not

²¹ The foregoing principles regarding line losses are approved solely for implementation with our long-run resource planning process (final Standard Offer 4 and, ultimately, all-source bidding). Possible adjustment of line loss factors for QFs now operating under standard or non-standard power purchase agreements is beyond the scope of this investigation.

currently have open access tariffs. There is an issue here over whether there should be such tariffs at all. PG&E and SDG&E seem to believe that wheeling service, especially where the wheeled energy is coming from outside the wheeling utility's service area, should be provided on a case-by-case basis through negotiated contracts.

This is an important issue. Individually negotiated wheeling contracts are clearly inadequate to the needs of a competitive generation market. That market requires greater speed and greater certainty than would be possible where wheeling arrangements for many of the market participants would have to be worked out on an ad hoc basis.

Structurally, the case is analogous to our gas transportation program. There, too, we had to decide between contract service and tariffed service. We chose the latter, over PG&E's objections, for both intra- and inter-utility gas transportation. The same reasoning applies here.

In preferring tariffed service, we are not ignoring the technical concerns that may differentiate electric transmission from gas transportation, nor are we requiring the utilities to scrap any existing agreements to provide transmission service to other IOUs, municipalities, etc. What we are saying is that we will look carefully at the quality of access actually provided for wheeling purposes, and that an important aspect of quality is how easy it is for the customer to get the service. Our decision on the timing of the transition to all-source bidding depends heavily on the ease and assurance of transmission access that results from this investigation.

G. Protection of Ratepayers of Investor-owned Utilities

Wheeling service should not harm the interests of the ratepayers of the wheeling utility; in particular, when an IOU wheels, service to its native ratepayers should continue to be safe

should be carefully limited and should not, in any event, compromise reliability of electric service to the wheeling utility's ratepayers or wholesale customers. Finally, any utility that requests wheeling must also commit to provide wheeling over its own transmission facilities under corresponding terms and conditions.

Another adverse impact on IOU ratepayers might occur if two municipal utilities are able to get firm wheeling service on demand from IOUs. The problem is that municipal utilities are entitled to a statutory preference in acquiring output from certain low-cost federal generation sources. The combination of the statutory preference with improved transmission access might skew competition among energy purchasers in favor of municipal utilities.

There may be ways to deal with the problem of municipal preference, such as some sort of waiver of the municipal preference. For the time being, we note the problem without prescribing any particular solution. However, we emphasize that any workable transmission proposal should address this problem to protect IOU ratepayers. We invite the parties to comment on this problem in their responses to this interim opinion. (See also below, Section V below.)

H. Ownership of Transmission Upgrades

Who should own transmission upgrades required to provide wheeling service? This issue splits the parties. Edison and DRA generally favor sole ownership of such upgrades by the wheeling utility, which they argue is necessary to maintain system reliability. PG&E and SDG&E would consider joint ownership under certain circumstances. QFs such as GRA/IEP favor a policy that ownership results from payment--i.e., if a QF pays for an upgrade, it should own the upgrade.

We recognize the importance of having reliable transmission service. However, sole IOU ownership of the transmission lines is not a prerequisite, nor does it equate to

reliable service. Some transmission lines are already jointly owned, and joint ownership is compatible with reliable operation, as long as a single party clearly has charge of operations within a specified control area.

We do not adopt a specific policy on ownership at this time. Generally, the parties should be free to work out any ownership arrangement that helps ensure new or expanded capacity gets built in a timely manner. In some cases, that will mean sole ownership, but in others, joint ownership may be preferred for various reasons.

Concern for recovery of the investment in an upgrade underlies much of this debate. This concern is particularly acute where the upgrade has to be sized larger than what would be strictly necessary to transmit the wheeled power. We share this concern, which is not mooted by our determination, in Section III.B above, that the utility purchasing the wheeled power (and not the QF or other entity selling the power) should pay for the wheeling service.

Just as ratepayers should not subsidize the cost of wheeling service, the purchaser of such service should not subsidize the transmission system of the wheeling utility. Such subsidization could occur, e.g., if a purchaser pays the whole cost of an upgrade that would have been required (albeit at a somewhat later date) to serve the wheeling utility's ratepayers, or if the upgrade is used by subsequent purchasers of wheeling service without pro rata reimbursement of the original purchaser. Such subsidization could prevent economically attractive power sales and chill the further development of competition in the electric generation market that wheeling service should promote.

Proponents of sole ownership by the wheeling utility argue that allowing purchasers of wheeling service to get an equity interest in upgrades could be used by the purchaser to frustrate the wheeling utility's own use of the upgrade or to prevent further

upgrades to serve other purchasers or the wheeling utility's ratepayers. We think this objection could be met by a provision that any upgrade constructed pursuant to the transmission access policies adopted in this investigation will be treated as part of the wheeling utility's transmission system for all purposes, including subsequent requests for wheeling service from that utility.²³

In short, the parties need to discuss ways to ensure that upgrade costs are accurately allocated; as far as possible, no party to the wheeling transaction should be required to subsidize associated upgrades. Various solutions (including shared ownership or reimbursement as in the case of line extensions) are possible, and it is also conceivable that more than one may be made available to the party paying for the upgrade.

I. Changes to Current Planning Processes

Transmission access, as we envision it, does not entail guesswork on the part of the potential wheeling utilities about the needs and plans of third party electricity buyers and sellers. The utilities will continue to project loads on their systems and plan their generation and transmission facilities accordingly. Part of the planning process is compiling information on their transmission systems, including current and anticipated loads and capacity, and costs of upgrades.

What is new is that this information will be available to parties planning power sales that might utilize new or existing capacity on other parties' transmission lines. The potential wheeling utilities' information essentially creates a base case for other parties' planning purposes. The integrity of that

²³ An entity could presumably pay for and construct a transmission line for its sole ownership and use if it wanted to avoid paying for a utility upgrade under this provision. We expect that such transmission lines would seldom be feasible or economic.

information is ensured, in large part, by the fact that the potential wheeling utility is relying on the same information for its own resource planning purposes.

Some parties believe that transmission access requires new regulatory proceedings and procedures. We are not convinced.

We view long-term transmission planning as part of our overall long-term resource planning process, and not a separate process in itself. The generation costs of electricity far exceed the transmission costs of such electricity. However, we must address both generation and transmission issues in order to do least-cost planning. Therefore, it is more efficient and makes more sense to integrate transmission planning into the overall resource planning process than to address this planning issue separately. Put differently, there is no true least-cost transmission plan except in the context of a least-cost electric supply plan.

Integrating our transmission and generation planning process requires no radical changes to our current planning processes. We therefore reject proposals such as those made by Edison advocating preliminary certificates of public convenience and necessity for transmission upgrades, and proposals for an omnibus transmission planning proceeding. We also reject Edison's proposal that project developers be required to give information to any utility in whose service area they are planning NUGs. Such information is commercially sensitive and is not reasonably necessary for the utility's planning purposes.

For PG&E, SDG&E, and Edison, the Electricity Report/Resource Plan Update cycle already provides a logical public forum in which the transmission information needed for the wheeling program could be filed and subjected to appropriate scrutiny. Relevant data would include planned transmission upgrades and costs, loads and anticipated load growth on the IOU's system, the existing capacity in various areas on the system, and surplus

capacity available for wheeling. Municipal utilities would also be required to publish such information for their systems.²⁴

The CEC already collects much of this information in preparing its Electricity Report (ER). We are also aware that the CEC is investigating these issues and has published a draft report to the Legislature on transmission system planning. (See Section VI below.) We hope to complement the CEC's efforts on these issues, and we solicit the CEC's comments on this interim opinion, particularly on matters of interagency coordination such as we discuss in this section.

We envision that the transmission data established in each ER/Update cycle would be in effect until supplanted by data approved during the following cycle. IOUs not participating in the ER would be expected to publish comparable transmission data for their systems, and make wheeling services available on their own facilities on a comparable basis, in order to be eligible to request wheeling services from PG&E, SDG&E or Edison.

The parties have voiced concern and have offered various proposals in order to ensure that the transmission data provided by the utilities are reasonable and reliable. We endorse this objective and suggest the following requirements. First, the projections, costs, analytical techniques, etc., used by the utility in providing the transmission data must be the same as those used by the utility in planning for its own resources. Second, the upgrade costs quoted by the utility must be binding on the utility in making wheeling upgrades (at least up to a reasonable amount of new capacity in a particular area). The quoted upgrade costs and other data (e.g., line losses) must also

²⁴ See Section III.J below for further discussion of the role of municipal utilities, including special districts, rural electric cooperatives, and other transmission-owning entities that are not investor-owned.

be consistent with data used in figuring the transmission costs, as well as associated with candidate IDRs and applied to NUGs in the utility's own auction.

The use of consistent, published data for all of the above purposes seems fair, conforms with our other resource planning decisions, and offers a simple and administrable check on the way utilities respond to wheeling requests. We also believe that, as a practical matter, any wheeling program would not work if it requires us to routinely hold evidentiary hearings into the minutiae of transmission modeling and engineering.

We recognize that the utilities' market power in transmission derives not only from their control of the facilities but also from superior access to information. Nevertheless, in commenting on these transmission planning and data validation problems, the parties should give weight to what is administratively feasible. Their emphasis should be not on what they would like to know but on what they need to know.

J. Role of Municipal Utilities

In the Order Instituting Investigation, we asked whether our policy on wheeling should differentiate between wheeling provided to IOU buyers of power and buyers which are non-IOU utilities. This also raises a more basic issue, namely, the role of municipal utilities and non-profit utilities, such as special districts and rural electric cooperatives, in this proceeding.

We affirm that these governmental and non-profit utilities belong in this proceeding. (For convenience, we will refer to them all as municipal utilities.) Such utilities serve a

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substantial part of California's population.²⁵ In many instances, they control substantial transmission and generation facilities. Some Municipal utilities are potential providers of wheeling service and generators of wheeled power, as well as potential buyers of wheeled power. For these reasons, they inevitably affect California's resource planning.

The municipal utilities' extensive participation in the WSPS shows that there are significant potential benefits to including them in a program to promote competition and economic efficiency in the electric generation market. Furthermore, the California Municipal Utilities Association has formed the new Western Association for Transmission Systems Coordination (WATSCO), whose founders are large and small California municipal utilities. WATSCO has been formed to address transmission issues, including wheeling issues. The founders hope ultimately to broaden WATSCO's membership to include both IOUs and NUGs. Therefore, affirming the municipal utilities' participation in these proceedings will assure us that our transmission and wheeling policies will encompass as many of California's transmission and generation facilities as possible.

The basis of the municipal utilities' participation in these proceedings must be reciprocal rights and obligations. This means that participating municipal utilities must be prepared to provide wheeling service, where requested, on terms and conditions comparable to the wheeling service provided them by participating IOUs.

²⁵ For example, 29 members of the California Municipal Utilities Association (a trade association representing California municipal water, electric, and gas utilities) provide electric service to about one-quarter of California's population. (Comments of the Northern California Power Agency and the City of Anaheim for the July 16, 1991 Scoping Meeting, at 2, n. 1.)

Furthermore, the participation of municipal utilities must not jeopardize reliable, low-cost service to the IOUs' ratepayers. In this regard, we are encouraged to note certain "guiding principles" endorsed by the municipal utilities in forming WATSCO. Under these principles, utilities owning transmission would have an obligation to add capacity where necessary to accommodate firm wheeling transactions, but the obligation would be on a "best efforts" basis and "should not place the utility's native load customers at an unreasonable financial or operational risk." (Comments of the Northern California Power Agency and the City of Anaheim for the July 16, 1991 Scoping Meeting, at 7.)

Finally, if municipal utilities are to participate, they must share information on the same basis as the IOUs. This information would include, among other things, loads and projected load growth on the participant's system, the capacity of the participant's existing transmission system and the availability of surplus capacity, planned additions to the participant's generation and transmission facilities, and the projected cost of transmission upgrades. (See also Sections III and III.I above.) This information would be updated periodically, and would be the basis for wheeling services contracted for during the update cycle.

As noted earlier, we do not have jurisdiction over municipal utilities, and the problem of how to provide for the reciprocal commitments envisioned in this transmission access policy is one of the major tasks to be addressed in the next stage of this proceeding. (See Section III.B above.) While the task is not easy, it has been accomplished in other settings, such as the Western Systems Power Pool.

IV. Current Waiting List for PG&E Transmission Capacity

An issue raised in the Order Instituting Investigation is what to do regarding the waiting list of QFs already seeking

allocation of transmission capacity in PG&E's Northern constrained area. The waiting list was created pursuant to orders in I.84-04-077. Therefore, the resolution of the above issue will be left in I.84-04-077, where the issue will be taken up shortly, and will not be addressed further here.

V. Negotiating Conference

We have always intended to hold evidentiary hearings in this investigation. Such hearings are appropriate when the issues are clear, the parties understand each other's position, and we have a strong sense of what the key conflicts are. We are still not at that point, which is understandable given the complexity of the subject and the importance and far-reaching character of the changes under consideration.

Today's decision moves us a step closer to hearings and ultimate resolution in this proceeding. Two things should happen before hearings are set. First, the parties should consider the goals and policies articulated here, and modify their earlier positions accordingly.²⁶ The parties may be helped in this effort by information provided in the utilities' data responses and presentations in the transmission workshops.

Second, the parties should have an opportunity to meet intensively over an extended period to narrow the issues and, so far as possible, develop consensus approaches. At a minimum, this should enable us to focus the subsequent hearings on a limited

²⁶ Two other decisions that may affect parties' positions in this proceeding are our decision on the proposal to merge Edison and SDG&E (D.91-05-028) and our decision on investor-owned utilities' participation in the California-Oregon Transmission Project. (D.91-04-071.)

number of issues, and on a limited number of positions on those issues.

Accordingly, the parties are invited to serve comments responding to today's decision. A party's comments should indicate any changes made (for whatever reason) to its original position in this proceeding. Parties who have developed a common position are encouraged to file joint comments or otherwise indicate their agreement. Parties are also encouraged to indicate major areas of disagreement with other positions taken in this proceeding. These comments should be filed and served no later than Friday, December 6, 1991.

We will then convene a negotiating conference. The conference will start on Monday, December 16, 1991 and continue as set by the presiding officer (see below).

Generally, we give leeway to the conferring parties on how best to use conference time. However, our experience with such conferences leads us to set forth several rules, as follows.

A person to be designated from our Strategic Planning Division or the Commission Advisory and Compliance Division should act as presiding officer. The presiding officer, in consultation with the conferring parties, may hold preliminary meetings, set schedules, adopt conference procedures, organize working groups, and in general take whatever procedural steps seem useful and appropriate to facilitate the work of the conference.

The settlement rules in our Rules of Practice and Procedure apply to the conference and to our deliberations on the recommendations of the conferees. Parties should particularly note Rule 51.9, which is designed to promote flexibility and free and open discussion by ensuring that a party's materials and oral

Two other decisions are being made in this proceeding. One is a decision on the record and the other is a decision on the merits. The record decision is being made by the ALJ (I.90-09-050) and the merits decision is being made by the Commission (I.90-09-050). The record decision is being made by the ALJ (I.90-09-050) and the merits decision is being made by the Commission (I.90-09-050).

presentations at the conference cannot be used at subsequent hearings unless the participating parties consent to such use.²⁷

Starting December 16, 1991, and for so long as the conference continues, ex parte communications between the parties (or their agents) and Commissioners, Commissioners' advisors, or assigned administrative law judges are prohibited. This is to ensure that the negotiations are conducted head-to-head, not through a triangular relationship between parties and Commissioners.²⁸ The presiding officer should contact the assigned administrative law judges on any matter arising during the conference that requires Commission direction.

Certain subjects of this investigation are unlikely to be fruitful topics for negotiation. We do not anticipate that parties could agree, for example, on the jurisdictional questions, and we are uncertain what binding effect such agreement could have even if it were reached. Indeed, one of the chief functions of the negotiating conference is to help us make significant progress towards broad transmission access in the absence of a definitive

27 Rule 51.9 says "No discussion, admission, concession or offer to stipulate or settle, whether oral or written, made during any negotiation on a stipulation or settlement shall be subject to discovery, or admissible in any evidentiary hearing against any participant who objects to its admission. Participating parties and their representatives shall hold such discussions, admissions, concessions, and offers to stipulate or settle confidential and shall not disclose them outside the negotiations without the consent of the parties participating in the negotiations."

"If a stipulation or settlement is not adopted by the Commission, the terms of the proposed stipulation or settlement are also inadmissible unless their admission is agreed to by all parties joining in the proposal."

28 We have occasionally used such limited restrictions on ex parte communications where circumstances warranted. See, e.g., Ordering Paragraph 8 of D.88-11-030, mimeo. pp. 9-10.

resolution of the jurisdictional issues. (See Section III.A above.) Also, although the parties can certainly make recommendations on what procedures and forums need to be created at this Commission in order to implement transmission access, we must decide this for ourselves.²⁹ Parties should not make their substantive proposals contingent on our acceptance of their procedural recommendations on implementation.

Subject to the above reservations, all of the issues raised in this investigation are on the table at the conference. Specifically, we reject proposals of some parties to deal with transmission cost allocation issues either before or after the transmission access issues. It is clear that different parties attach different importance to the various issues. To deal now with some issues, while deferring others, would inevitably empower some parties relative to others at the conference. Negotiations are more likely to be fruitful when the parties, so far as possible, have equal stakes in the outcome.³⁰

DRA, PG&E, SDG&E, and Edison should be represented at the conference by persons with substantial authority, i.e., their representatives should be able to make binding commitments on behalf of the respective parties they represent. We ask other conferring parties to delegate similar authority to their representatives. This may not be possible for some governmental entities (e.g., municipal utilities), so we ask that their

29 An example of such a recommendation is that of Edison to create a "Preliminary Certificate of Public Convenience and Necessity" for certain transmission upgrades.

30 Nothing in our discussion is intended to limit the presiding officer's discretion to organize the conference in any way that seems productive and ensures that both transmission access and cost allocation issues are covered.

representatives be empowered at least to make recommendations on the behalf of the entity's staff to its governing body. We do not

We do not prescribe how the conference is to vote or how it otherwise ratify its results, but whatever the procedure, the onus should fall on objecting parties to make their objections known. Absence (or silence) is assent.

VI. Comments on CEC Findings

In September, 1991, the CEC published its draft report on "Transmission System and Right of Way Planning for the 1990s and Beyond."³¹ The report responds to Senate Bill 2431 (Garamendi, passed 1988) and addresses many of the issues of transmission access and cost allocation that are the subject of this investigation.

The CEC has tentatively scheduled its adoption hearing for the report on October 23, 1991, after receiving written comments through October 7. We have analyzed the draft report and have submitted written comments. However, we take this opportunity to acknowledge the excellent work that has gone into the report. We are also gratified to note that our perceptions, regarding both the nature of the problems and their solution, are in many respects close to the CEC's.

The CEC's major findings are set out in Chapter II of the draft report. We comment below on several of these findings.

Coordinated Transmission Planning The draft report endorses development of an "industry-sponsored transmission planning process." This process would involve the participation of all interested parties, including utilities, transmission developers, and state and federal agencies. The process would be designed to identify and resolve transmission planning issues in a coordinated manner.

³¹ Also, on September 12, 1991, Edison submitted an "Amendment" to its original response to the Order Instituting Investigation. This amendment (with such further changes as Edison may wish to make) should be made part of Edison's comments responding to today's decision. (See Section V above.) Wherever we refer in the text to Edison's position, the reference is to Edison's original response.

association for California." The purpose would be to ensure that energy electricity buyers and sellers have nondiscriminatory access to "the wholesale power markets through "coordinated transmission planning." A coordinated planning process is one in which "all parties affected or interested parties can examine the information, the data, the assumptions and tools that utilities use to determine the need for and availability of transmission capacity, and the need for and cost of transmission improvements."

This proposal is close to what we have set forth in this Interim Opinion. We emphasize that coordination does not require any transmission-owning entity to surrender its planning autonomy. Coordination does require an agreed-on planning cycle, publication of the results, and assurance that the results for each entity are adequate for purposes of the proposed transmission services. (The latter requirement probably requires both completeness of the data provided and consistent use of terminology among the planning entities.)

Cost-based Rates. The draft report recommends that the transmission association recognize certain guiding principles on pricing access services. Generally, these services should be provided under rates, terms, and conditions to ensure that "one utility's ratepayers [do not] subsidize the transmission services provided to other utilities or nonutility generators."

Specifically, according to the draft report, transmission service should get a priority commensurate with the cost of that service, and the "cost" of the service should include "the cost of lost opportunities, provided the utility can demonstrate or otherwise justify those costs." Economy energy purchases may sometimes be foregone to accommodate a request for transmission service, creating an opportunity cost for which "the transmission subscriber should compensate" the service provider.

We share the concerns and general outlook expressed on these points in the draft report. (Cf. Sections III.C and III.G above.) Nevertheless, we think caution is advisable when turning "opportunity cost" theory into practice.

First, the existence of surplus power at any given time and place does not necessarily imply an "opportunity" to be gained or lost. For example, there might not have been a sufficient assurance regarding the price and availability of such power to economically justify maintaining transmission capacity to move such power when it materializes. In other words, the transmission subscriber should not have to pay for a "lost opportunity" that the service provider would not have had anyway, or that might cost more than it was worth.

Second, the service providers not only control the transmission facilities but also the information about how these facilities are or might be used. In these circumstances, there is considerable danger that market power could be exercised in the guise of "opportunity costs."

Conceivably, "opportunity costs" could be projected and revealed, along with other information about the service provider's resource plan and wheeling capability, before subscription to the service. This projection would be speculative at best, because the service provider might have to forecast short-term transactions far into the future.³²

In short, the concept of a "lost opportunity" component of cost-based rates has some appeal. However, implementing that concept in a way consistent with the objectives supporting it will be hard. We are open to proposals regarding this and other cost-based pricing concepts. The goal is fairness to all ratepayers, both of service providers and of transmission subscribers. We should also bear in mind that under the transmission access guidelines set out here and in the draft report, a utility may be,

32 In Section III.E.2 above, in the context of line losses, we accepted PG&E's assertion that NUGs may sometimes have positive impacts on the transmission system. The same theoretical possibility exists here. In other words, over the long term, the transmission provider's ratepayers may prefer revenues from firm wheeling to cover part of the fixed costs of the transmission system, as opposed to occasional fuel cost savings from purchases of surplus power.

and probably often will be, both a provider of and subscriber to transmission service.

Binding Dispute Resolution. The draft report says that one aspect of the organization the CEC envisions to promote coordinated planning and nondiscriminatory access would be a dispute resolution mechanism that would be binding on the organization's members. The CEC makes some recommendations on how such a mechanism would work.

In this investigation, we have not focused on dispute resolution. However, our preference for open access tariffs over individually negotiated contracts (see Section III.F above) is premised in part on our belief that tariffed service would provide greater assurance of access and involve fewer disputes over whether the transmission-owning utility was dealing fairly. If the utilities do not have open access tariffs, the need for a dispute resolution mechanism is to that extent more compelling.

Finding of Fact

The foregoing goals and policies constitute a reasonable basis from which the Commission can proceed in this investigation.

Conclusions of Law

1. The parties should consider the goals and policies articulated above, and should file comments responding to today's decision. These comments should be filed and served no later than Friday, December 6, 1991.

2. Because the parties' comments are to be filed and served no later than December 6, 1991, and because a negotiating conference in this proceeding is imminent, this order should be effective today.

INTERIM ORDER

IT IS ORDERED that:

1. The parties' comments responding to today's decisions shall be filed and served no later than Friday, December 6, 1991.
2. The Commission will convene a negotiating conference in this proceeding. The conference will start on Monday, December 16, 1991 and continue as set by the presiding officer. The Director of the Commission Advisory and Compliance Division, the Director of Strategic Planning, or their designee, will act as presiding officer of this conference. The presiding officer may hold preliminary meetings, set schedules, adopt conference procedures, organize work groups, and in general take whatever procedural steps are useful and appropriate to facilitate the work of the conference.
3. The settlement rules of the Commission's Rules of Practice and Procedure apply to this negotiating conference.

RECEIVED BY THE COMMISSION
DECEMBER 16, 1991
12:00 PM

4. Ex parte communications are prohibited starting December 16, 1991 for as long as the negotiating conference continues. The presiding officer may contact the assigned administrative law judges on any matter arising during the conference that requires Commission direction.

This order is effective today.

Dated October 23, 1991, at San Francisco, California.

PATRICIA M. ECKERT

President

JOHN B. OHANIAN

DANIEL Wm. FESSLER

NORMAN D. SHUMWAY

Commissioners

I CERTIFY THAT THIS DECISION
WAS APPROVED BY THE ABOVE
COMMISSIONERS TODAY

NEAL J. SHULMAN, Executive Director

MASTER LIST

90-09-050 (new list)

REVISED: 09/11/91

CORRESPONDENCE: 09/11/91

OC I.D. #X08874

APPEARANCES

James D. Squeri/John Clark,
ARMOUR, GOODIN, SCHLOTZ
& MACERIDE
505 Sansome Street, Suite 900
San Francisco, CA 94111

Michael P. Alcantar, Atty at Law
ATER, WYNN, HEWITT, DODSON
& SKERRITT
222 S. W. Columbia, Suite 1800
Portland, OR 97201-6618

Paul J. Kaufman/Mark P. Trincheri
ATER, WYNN, HEWITT, DODSON
& SKERRITT
One Embarcadero Center, Suite 2420
San Francisco, CA 94111

Melissa Metzler, Research Associate
BARAKAT AND CHAMBERLIN
180 Grand Avenue, Suite 1090
Oakland, CA 94612

Ba R. R. Barkovich, Consultant
BARKOVICH AND YAP
1918 University Avenue, Suite 3A
Berkeley, CA 94704

Mohamed M. El-Gasseir, Attorney at Law
BARRINGTON-WELLESLEY GROUP, INC.
3243 Gloria Terrace
Lafayette, CA 94549

Reed V. Schmidt
BARTLE WELLS ASSOCIATES
1636 Bush Street
San Francisco, CA 94109

R. T. Beach/C. M. Elder
BRADY & BERLINER
820 Delaware Street
Berkeley, CA 94710

Maryanne Armbrust/Kathy Craig
DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
P.O. Box 3621
Portland, OR 97208

Donna Stone/Robert Grow - Energy Divsn.
CALIFORNIA DEPARTMENT OF WATER RESOURCES
P. O. BOX 942836
Sacramento, CA 94236-0001

J. Chandley/P. Bittner/Caryn Hough/
W. Chamberlin, Attorneys at Law
CALIFORNIA ENERGY COMMISSION
1516 Ninth Street
Sacramento, CA 95814

Byron D. Sher, Chairman
CALIFORNIA LEGISLATURE ASSEMBLY
NATURAL RESOURCES COMMITTEE
P.O. Box 942849
Sacramento, CA 94349-0001

Neal A. Johnson
CALIFORNIA WASTE MANAGEMENT BOARD
1020 - 9th Street, Suite 300
Sacramento, CA 95814

Steven McArthur, General Counsel
CALIFORNIA ENERGY COMPANY
601 California Street, Ste. 900
San Francisco, CA 94108

Timothy A. Ingraham, Vice President
and General Counsel
CENTURY POWER CORPORATION
3567 East Sunrise Drive, Suite 235
Tucson, AZ 85718

David R. Stevenson, Asst. Gen Counsel
CHEVRON U.S.A., INC
575 Market Street, Room 2740
San Francisco, CA 94105

V. John White, Executive Director
COALITION FOR ENERGY EFFICIENCY AND
RENEWABLE TECHNOLOGIES (CEERT)
1100 - 11th Street, Suite 321
Sacramento, CA 95814

John D. Quinley
COGENERATION SERVICE BUREAU
1415 Dawes Street
Novato, CA 94947

Philip A. Stohr, Attorney at Law
DOWNEY, BRAND, SEYMOUR AND ROHWER
555 Capitol Mall, 10th Floor
Sacramento, CA 95814-4686

Barry F. McCarthy, Attorney at Law
DONCAN, WEINER, MILLER AND PEMERKE
3945 Freedom Circle, Suite 620
Santa Clara, CA 95054

Karen Edson, Attorney at Law
EDSON AND MODISSETTE
1303 "J" Street, Suite 770
Sacramento, CA 95814

Randolph Wu/Richard Baish
Attorneys at Law
EL PASO NATURAL GAS COMPANY
555 California St., Ste 2940
San Francisco, CA 94104

Kenneth R. Meyer
ENERGY CONSULTING GROUP
P. O. Box 841
San Anselmo, CA 94960

Steven M. Harris, Dir-Reg Affrs.
ENRON/TRANSWESTERN PIPELINE CO
101 California St., Ste 3170
San Francisco, CA 94111

Alice Levine
DEPARTMENT OF GENERAL SERVICES
717 "K" Street, Suite 409
Sacramento, CA 95814

Channing Strother, Jr., Atty at Law
GOLDBERG, FIELDMAN AND LATHAM
1100 - 15th Street, N.W.
Washington, D.C. 20005

Martin A. Mattes/David Marchant
Peter Hanschen, Attys. at Law
GRAHAM AND JAMES
One Maritime Plaza, Suite 300
San Francisco, CA 94111

Matthew V. Brady, Attorney at Law
GREVE, CLIFFORD, DIEPENBROCK & PARAS
1000 "G" Street, Suite 400
Sacramento, CA 95814

Dian M. Grueneich, Attorney at Law
GRUENEICH, ELLISON AND SCHNEIDER
50 California Street, Suite 800
San Francisco, CA 94111

Christopher T. Ellison, Atty at Law
GRUENEICH, ELLISON AND SCHNEIDER
2311 Capitol Avenue
Sacramento, CA 95816

Jan Hamrin
HANSEN, MCCOAT AND HAMRIN, INC.
50 California Street, Ste 2535
San Francisco, CA 94111

David Branchcomb
SUNWOOD ENERGY SERVICES, INC.
2555 - 3rd Street, Suite 110
Sacramento, CA 95818

J. Smutny-Jones, Exec Director
INDEPENDENT ENERGY PRODUCER ASSN.
1112 "I" Street, Suite 380
Sacramento, CA 95814

Thomas P. Corr, Attorney at Law
INDEPENDENT POWER CORPORATION
2101 Webster Street, Ste 1650
Oakland, CA 94612

Jeffrey A. Nahigian
JBS ENERGY, INC.
311 "D" Street, Suite A
West Sacramento, CA 95605

David L. Modisette, Program Dir
JOINT COMMITTEE ON ENERGY REGULATIONS
AND THE ENVIRONMENT
1414 "K" Street, Suite 216
Sacramento, CA 95814

James M. Laschober
CITY OF LOS ANGELES
DEPARTMENT OF WATER AND POWER
111 North Hope Street, Room 1149
Los Angeles, CA 90051

Lizbeth McDannel/Don Clary
LUZ INTERNATIONAL
924 Westwood Boulevard, Suite 1000
Los Angeles, CA 90024

David Kates
DAVID MARK & COMPANY
9201 West Olympic Blvd.
Beverly Hills, CA 90212

Emilio E. Varanini, III/E. L. Reid/
Melanie S. Best
MARRON, REID & SHEEHY
805 "K" St., Suite 2100
Sacramento, CA 95814-3521

Donald H. Maynor, Attorney at Law
LAW OFFICES OF DONALD H. MAYNOR
3220 Alpine Road, Suite A
Portola Valley, CA 94028

George M. Knapp/Roger B. Wagner
Attorneys at Law
McDERMOTT, WILL & EMERY
1850 K Street, N.W., Suite 500
Washington, D.C. 20006

A. Kirk McKenzie, Attorney at Law
LAW OFFICES OF A. KIRK MCKENZIE
425 California Street, 19th Floor
San Francisco, CA 94104

Joseph G. Meyer
JOSEPH MEYER ASSOCIATES
115 Lomita Avenue
San Francisco, CA 94122

Joseph R. Bloom/Lynn M. Haug
Attorneys at Law
MORRISON AND FOERSTER
345 California Street
San Francisco, CA 94104-2675

Robert B. Weisermiller
MORSE, RICHARD, WEISERMILLER AND
ASSOCIATES, INC.
1999 Harrison Street, Suite 1440
Oakland, CA 94612

SARA STECK MYERS,
Attorney at Law
122 - 28th Avenue
San Francisco, CA 94121

Ralph Cavanagh/David Goldstein,
Attorneys at Law
NATURAL RESOURCES DEFENSE COUNCIL
90 New Montgomery Street
San Francisco, CA 94105

Wallace Gibson
NORTHWEST POWER PLANNING COUNCIL
851 S.W. - 6th Avenue, Suite 1100
Portland, OR 97204-1348

Douglas K. Porter/Steven D. Patrick
PACIFIC ENTERPRISES
633 West - 5th Street, Suite 5400
Los Angeles, CA 90034

William V. Manheim/M. S. Hindus/
J. Guardalabene/H. Golub/B. Benson
PACIFIC GAS AND ELECTRIC COMPANY
P. O. Box 7442, Legal Department
San Francisco, CA 94106

Dennis Steinberg
PACIFIC POWER AND LIGHT COMPANY
920 SW - 6th Avenue
Portland, OR 97204

Scott D. Rasmussen, Asst. Gen. Counsel
CITY OF PASADENA
150 S. Los Robles Ave.
Suite 200
Pasadena, CA 91101

Edward B. Lozowicki
Attorney at Law
PELITTI & MARTIN
333 West Santa Clara
San Jose, CA 95113-1717

Philip J. Di Virgilio
AGRI-CO COGENERATION CORP.
P.O. Box 59
San Joaquin, CA 93660

Douglas H. Rosenberg/Elizabeth Thomas
PRESTON, THORGRIMSON, SHIDLER, GATES
AND ELLIS
5400 Columbia Center//701 - 5th Ave
Seattle, WA 98104

Andrew Safir, President
RECON RESEARCH CORP.
6380 Wilshire Blvd.
Suite 1604
Los Angeles, CA 90048

Donald W. Schoenbeck
REGULATORY & COGENERATION SERVICES
Lloyd Center Tower
825 N.E. Multnomah, Suite 1060
Portland, OR 97232

Douglas K. Kerner, Attorney at Law
ROBERTS AND KERNER
100 North Barranca Avenue, 7th Floor
West Covina, CA 91791

Allan R. Watts, Atty at Law
ROURKE & WOODRUFF
701 South Parker Street
Suite 7000
Orange, CA 92668

Linda Hensley
SACRAMENTO MUNICIPAL UTILITY
DISTRICT
P.O. Box 15830
Sacramento, CA 95852-1830

DONALD G. SALOW
1717 Haggin Grove Way
Carmichael, CA 95608

E. Gregory Barnes/Wayne Sakarias/
Nancy W. Doyne, Attorneys at Law
SAN DIEGO GAS AND ELECTRIC COMPANY
P.O. Box 1831
San Diego, CA 92112

John C. Roukema, Manager
CITY OF SANTA CLARA
Power Supply/License Division
1500 Warburton Avenue
Santa Clara, CA 95050

Robert Weatherwax, Library & Research
SIERRA ENERGY & RISK ASSESSMENT, INC.
One Sierragate Plaza, Suite 225A
Roseville, CA 95678-6603

A. A. Glodowski/David A. Norris,
Attorneys at Law
TERRA PACIFIC POWER COMPANY
P.O. Box 10100
Reno, NV 89520

Ray Holtzelaw/James Hunting
TERRA PACIFIC RESOURCES
P.O. Box 30150
Reno, NV 89502-3150

Steven Greenwald, Attorney at Law
KADDEN, ARPS, SLATE, MEAGHER AND FLOM
4 Embarcadero Center, Suite 3750
San Francisco, CA 94111

Glenn Berger, Attorney at Law
KADDEN, ARPS, SLATE, MEAGHER AND FLOM
100 South Grand Avenue, 34th Floor
Los Angeles, CA 90071-3144

Mike A. Nazemi, Planning Manager
SOUTH COAST AIR QUALITY MANAGEMENT DIST.
150 Flair Drive
El Monte, CA 91731

Julie A. Miller/S. Pickett/F. Cooley
J. Schmid-Frazee/B. Joyce/R. Durant
SOUTHERN CALIFORNIA EDISON COMPANY
244 Walnut Grove Avenue
Rosemead, CA 91770

Thomas E. Taber, Attorney at Law
SOUTHERN CALIFORNIA EDISON COMPANY
244 Walnut Grove Avenue
Rosemead, CA 91770

Joan LaSage, Atty at Law
SOUTHERN CALIFORNIA GAS COMPANY
33 West 5th Street
Suite 5400 ML52C
Los Angeles, CA 90071

John W. Gould, Attorney at Law
FEARS, LUBERSKY, CAMPBELL, BLEDSOE,
ANDERSON AND YOUNG
20 SW Yamhill Street, Suite 800
Portland, OR 97204

Thomas H. Nelson/James C. Paine
STOELS, RIVES, BOLEY, JONES AND GREY
900 SW - 5th Street, Suite 2300
Portland, OR 97204-1268

Michel P. Florio/Joel Singer
Attorneys at Law
TOWARD UTILITY RATE NORMALIZATION
525 Polk Street, Suite 403
San Francisco, CA 94102

Jack Pigott, Vice President
TRANS-PACIFIC GEOTHERMAL CORP.
1330 Broadway, Ste. 1525
Oakland, CA 94612-2514

Harry K. Winters
UNIVERSITY OF CALIFORNIA
300 Lakeside Drive, 21st Floor
Oakland, CA 94612-3550

Frank H. Wilson
WILSON - 7 ENERGY SYSTEMS
62 Ficket
Irvine, CA 92714

William A. Chapman
WINDMASTER
P.O. Box 669
Byron, CA 94514-0669

Carl Angle
YUBA WATERSHED COALITION
P.O. Box 317
Sierra City, CA 96125

G. Alan Connes/Hallie S. Yacknin/
Steve Linsey/Patrick S. Berdge/
John Scadding
DIVISION OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION

APPENDIX B
Page 1

List of Acronyms

BRPU	- Biennial Resource Plan Update
CEC	- California Energy Commission
CECI	- California Energy Company, Inc.
Century	- Century Power Corporation
CPP	- California Power Pool
Destec	- Destec Energy, Inc.
DGS	- California Department of General Services
DRA	- Division of Ratepayer Advocates
DWR	- California Department of Water Resources
Edison	- Southern California Edison Company
ER	- Electricity Report
FERC	- Federal Energy Regulatory Commission
GRA/IEP	- Geothermal Resources Association and Independent Energy Producers Association
Hadson	- Hadson Power Systems, Inc.
I.	- Investigation
IDR	- Identified Deferrable Resource
IOU	- Investor-owned Utility
NCCP	- Northern California Power Pool
NCPA	- Northern California Power Agency
NIEP	- National Independent Energy Producers
NUG	- Nonutility Generator
PG&E	- Pacific Gas and Electric Company

APPENDIX B
Page 2

QF	- Qualifying Facility
SDG&E	- San Diego Gas & Electric Company
Southern Cities	- Cities of Anaheim, Azusa, Banning, Colton and Riverside
SPPC	- Sierra Pacific Power Company
TANC	- Transmission Agency of Northern California
Trans-Pacific	- Trans-Pacific Geothermal Corporation
WAPA	- Western Area Power Administration
WATSCO	- Western Association for Transmission Systems Coordination
WSPP	- Western Systems Power Pool

(END OF APPENDIX B)

APPENDIX C

GLOSSARY

As used in the interim opinion in I.90-09-050, these terms are defined as follows.

- o **Nonutility Generator (NUG)**
 - A QF or another independent producer of power.
- o **Transmission Access**
 - The ability of NUGs to have their output transmitted along a utility's transmission lines for wholesale delivery to the load center of the transmitting utility or another utility.
- o **Power Integration**
 - The transmission service performed by a utility for a seller of electricity when the utility transmits the seller's output from a point of interconnection with the utility's transmission grid to the utility's load center.
- o **Wheeling**
 - The transmission service performed by a utility for another utility that purchases the service in order to take delivery of the output of a third party seller of electricity. A given seller and purchasing utility may need wheeling from one or several utilities for purposes of a given purchase.
 - "Wheeling-in" is a kind of power integration, consisting of transmitting power from a seller outside a utility's service area to its load center.
 - "Wheeling-out" is wheeling from a seller located within a utility's service area to another utility.
 - "Wheeling-through" is wheeling from a seller located outside a utility's service area to a load center also outside the utility's service area.
- o **Upgrade**
 - Construction of new transmission capacity or expansion of existing capacity.

NOTE: Depending on the context, the term "utility" as used in the interim opinion may include IOUs, municipalities, special districts, and other entities selling electricity at retail.

(END OF APPENDIX C)