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PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA SEP 2 5 1990

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Order Instituting Investigation on the Commission's own motion to develop a policy of nondiscriminatory access to electricity transmission services for nonutility power producers.

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(See Attachment 1 for service list.)

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#### ORDER INSTITUTING INVESTIGATION

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#### I. Summary

With this Order Instituting Investigation (OII), the Commission begins an investigation to review existing rules, regulations, and policies on electric utility transmission services provided to nonutility producers of electricity. This investigation will cover utility transmission services provided to nonutility power producers including those known as "qualifying facilities" or "QFs", and "independent power producers" or "IPPs."

The Commission wishes to develop a transmission policy that is nondiscriminatory and promotes competition in the electric generation sector. We believe that an investigation into utility transmission services is necessary at this time to ensure the development of a competitive electricity generation sector in California. Such competition should benefit ratepayers by ensuring lower costs and increasing the diversity of electricity supplies.

In this order, we identify the transmission issues that we will investigate and the goals we desire to achieve with any transmission policy. We separate transmission issues into two general areas: (1) transmission access and cost allocation issues for the utility buying the nonutility power and (2) transmission access, cost allocation, and pricing issues for nonutility power producers that require transmission-only service from a utility.

<sup>1 &</sup>quot;QFs" consist of cogeneraters or small power producers who sell their power to public utilities. (16 U.S.C. § 824a-3.) While we intend to consider proposals to address transmission policy for IPPs, the discussion in this order concentrates on QFs because the Commission's current solicitation process for nonutility power does not allow participation by IPPs and because no IPPs yet exist in California.



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The latter type of unbundled, transmission-only service is commonly known as "wheeling." In each general area, we present several policy options that address the issues. California's major electric investor-owned utilities (IOUs) and other interested parties are requested to file written comments as set forth below containing their favored proposal and other information requested in this order. Based on the comments received, the Commission will consider setting issues for hearing, issuing a rulemaking, or other procedural options. Based on the record developed in this investigation, the Commission will consider changing the rules, regulations, and policies that apply to the issues raised in this order.

There are several reasons why the Commission is investigating transmission access at this time. First and foremost is the developing competitive market in electricity generation. Alternative sources of electricity generation became a significant source of generating capacity in California and the United States after the enactment of the Public Utility Regulatory Policies Act (PURPA) of 1978.<sup>2</sup> In California there are approximately 6,500 megawatts (MW) of QF capacity - nine percent of the State's total dependable generation capacity.<sup>3</sup> These sources of nonutility generation appear varied and viable enough to have the characteristics of a competitive market. Most generation, however, cannot sell in a marketplace without access to a utility's transmission system. In sharp contrast to the generation sector, the transmission facilities of electric utilities retain the characteristics of a natural monopoly. The Commission wishes to avoid instances where access to transmission services is provided

2 16 U.S.C. § 2601 et seq.

3 California Energy Commission, <u>Electricity Report</u>, Draft Final, August 1990, pp. 3-5 and 3-12.

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on a discriminatory basis. Because of the lack of alternatives to the utility transmission system, discrimination, if it exists, could result in inefficient or inequitable electricity transactions.

In recent years, an active debate over transmission access and pricing has been generated within the industry and within state and federal government. The debate is particularly active at the Federal Energy Regulatory Commission (FERC).<sup>4</sup> The California Legislature's interest in the matter has also increased in recent years. The Commission made a commitment to address the issue as it relates to QFs in a July 17, 1989 ruling by the Assigned Commissioner in the Biennial Resource Plan Update (BRPU) proceeding, Investigation (I.) 89-07-004. In that ruling, the Assigned Commissioner said:

> "This Commission has a long-term commitment to healthy competition in the electric generation sector. The ability of eligible QFs to sell power to utilities in or out of their service territory must be part of the Commission's considerations as it works to maintain the competitive environment. In addition, transmission access, and the pricing for that access, is a corollary to our examination of the approaches for5disaggregating utility resource needs..."

The scope and schedule of the current phase of the BRPU, known as Phase 1B, was recently modified by the presiding Administrative Law Judge (ALJ) in rulings dated June 13 and 28, 1990. Currently under consideration in Phase 1B are proposals

4 See FERC, "The Transmission Task Force's Report to the Commission - Electricity Transmission: Realities, Theory and Policy Alternatives," October 1989.

5 I.89-07-004, July 17, 1989 Ruling of Assigned Commissioner, p. 2.

for the restructuring of the long-run standard offer for QFs (Standard Offer 4), reinstatement of Standard Offer 2, treatment of interutility contracts, and incorporation of environmental values in the resource procurement process. The Commission's current goal in the BRPU proceeding is to consider improvements to the standard offer process that could be adopted in the near future.

In the June 13, 1990 ruling in the BRPU, the presiding ALJ stated that the issue of nondiscriminatory transmission access for QFs would be taken up in a separate request for comments coinciding with Phase 1B of the BRPU. Due to the complexity and importance of transmission issues relating to nonutility power production, we will address the issue of nondiscriminatory transmission access for QFs in this separate investigation. Also within the scope of this investigation are proposals for incorporating transmission costs into the Commission's program for soliciting nonutility power. Some portions of the proposals recently made in Phase 1B of the BRPU, if adopted, would affect transmission policy and it will be necessary to defer those portions to this investigation. Phase 1B of the BRPU will determine whether and how the Commission will change the overall form of its bidding or solicitation process and how non-price factors will be considered in the solicitation process.

This transmission OII will consider both whether and how to incorporate transmission costs into the solicitation process in a way that is consistent with the process adopted in Phase 1B of the BRPU. We will consider proposals to incorporate transmission into the solicitation process in this separate investigation because these proposals should be considered in the overall policy framework for transmission that we will begin to develop in this investigation. It is our intent to closely coordinate this investigation and the BRPU to ensure consistency in our regulation of resource planning in California.

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#### II. Procedural Background

The Commission has addressed QF transmission issues several times in the past. Many of the existing policies on transmission were developed in response to the large number of QFs that signed long-term power sales contracts, known as standard offers, with electric utilities beginning in 1982.

Early in 1984, utilities expressed concern that constraints in various areas of their transmission systems would impede their ability to accept power from all QFs that had signed standard offers. The Commission opened an investigation into these issues with I.84-04-077. Decision (D.) 84-08-037 from this investigation adopted an interim policy for transmission access in the only area in which we determined significant constraints existed, the northern part of the Pacific Gas and Electric Company (PG&E) service territory. The adopted policy limited QF development in this portion of PG&E's service territory, known as the Constrained Area, to 1,150 XW.

In the same investigation, we issued D.85-01-038 in which we adopted a procedure for establishing the interconnection priority for QFs. This procedure was later renamed the Qualifying Facility Nilestone Procedure (QFMP) and was revised in subsequent decisions.<sup>6</sup> The QFMP was developed to ensure that QFs diligently pursue their projects, provide utilities with planning information on the progress of these facilities, and clarify the utilities' requirements for providing timely transmission interconnection information to QFs.

In D.85-09-058, the Commission addressed the issue of allocating costs resulting from transmission system upgrades. That

<sup>6</sup> See D.85-08-045, D.85-11-017, D.86-04-053, D.86-11-005, and D.87-04-039.



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decision said that utilities should have their ratepayers pay for new transmission lines that are built to carry QF power and at the same time provide other system-wide benefits. The application of this cost allocation policy became an issue in Application 89-03-026, where Southern California Edison Company proposed to build a 220 kilovolt double-circuit line between its Kramer and Victor Substations in the western Mojave Desert. In D.90-09-059 issued September 12, 1990, we granted the Certificate of Public Convenience and Necessity authorizing the line's construction. We found that the record in that case did not clearly demonstrate that the proposed line would provide systemwide benefits and found it reasonable to allocate portions of the cost of the line to QFs that would be using the line.

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In I.85-11-008, the Commission entered into a separate investigation of transmission access issues for QFs located outside of the service area of the utility purchasing the power. A major issue in this investigation was whether out-of-service-area QFs should receive access to the major transmission lines that connect utilities together. Such interties or bulk transmission lines carry economy energy which could be displaced as a result of accepting power from a QF. By D.88-04-070, we adopted a standard of "economic harm" which requires a utility to accept power from out-of-service-area QFs unless the utility demonstrates that the QF will displace economy energy transactions or cause other economic harm to ratepayers. The value of any such displaced economy energy represents an opportunity cost to ratepayers. The decision also provides that reviews of issues concerning access will be on a case-by-case basis and acknowledges that pricing and curtailment modifications to standard offers may be a way to mitigate economic harm.

Many of our policies regarding QF interconnections have been incorporated into Tariff Rule 21 for the electric utilities regulated by the Commission. Rule 21 concerns many issues

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regarding the interconnection of nonutility power including technical standards for interconnection, the availability of capacity, operational requirements, and the cost allocation of utility interconnection facilities.

In an early alternative generation decision, D.82-01-103, we addressed the issue of QF wheeling. We emphasized the importance of wheeling and required utilities to file quarterly reports on their wheeling activity.<sup>7</sup> Additionally, California Public Utility Code sections 2801-2826 address interconnection issues for private energy producers, including the provision of wheeling services by public utilities. To our knowledge, however, very little wheeling of QF power is being provided by California's major electric IOUs.<sup>8</sup>

#### III. Goals of the Commission

In determining a transmission policy for QFs, the Commission desires to achieve the goals listed below. Parties filing comments should craft their proposals accordingly:

#### A. Nondiscrimination and the Promotion of <u>Competition in Electricity Generation</u>

Competition in generation will help assure that ratepayers receive electric services at the lowest possible cost. Essential for the development of a competitive electric generation sector is the provision of utility transmission services to nonutility power producers on a nondiscriminatory basis. Discrimination occurs when different prices are charged for identical services.

<sup>7</sup> D.82-01-103, at pp. 107-112, see also, Ordering Paragraph 23.

<sup>8</sup> We are aware of a SCE contract to wheel a QF's power from the western Mojave Desert to SDG&E and a PG&E contract to wheel a QF's power to SCE.

#### B. Price Services at Cost

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Services priced at cost promote economic efficiency and do not subsidize one class of customers or suppliers over another. We note that different prices for apparently similar transmission services are not discriminatory if the differences in the prices can be justified due to real differences in the costs of providing the services.

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#### C. Least Cost Resource Planning

The Commission seeks proposals that provide reliable utility electricity services at the lowest possible cost. Transmission policy proposals should promote the efficient use of the existing generation and transmission system and give the utility the incentive to make only prudent additions to its system. D. <u>Environmental Sensitivity</u>

We are sensitive to the environmental impacts of our policies. Because of environmental concerns, it appears that additions to the transmission system are becoming increasingly difficult to undertake. Proposals should respond to these concerns.

#### **B.** Feasibility and Simplicity

Transmission proposals that in our judgement unduly overburden parties or staff because, for example, they require vast amounts of information, unreasonable time demands, or that are prone to ongoing disputes will not be favored.

With these goals in mind, respondents and interested parties should file comments on the policy options presented in Sections IV and V below. Section IV covers transmission access and cost allocation for the utility buying the nonutility power. Section V covers transmission access, cost allocation, and pricing for utility wheeling services provided to nonutility power producers. Each section includes a list of questions to be answered in filed comments.

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#### IV. Transmission Access Provided By the Buying Utility and Allocation of Utility Transmission Costs

In this investigation, we will review our existing policies for transmission access provided by the buying utility and related issues of cost allocation. These policies cover transmission provided to QFs selling to their local utility as well as transmission provided by the buying utility to out-of-servicearea QFs that have arranged transmission to an interconnection of the buying utility.

When a QF interconnects with its local electric utility, the QF is generally responsible for costs of transmitting the power from its plant to the first point of utility interconnection. We believe this policy is reasonable and we do not intend to review it in this investigation.

Included in this investigation are costs incurred by the buying utility on its transmission network necessary to take QF power into its system. The current process for soliciting standard offers does not consider transmission costs as a criterion for selection among competing QFs. Rather, our current rules require utilities to perform interconnection studies to develop a method of interconnection <u>after</u> the contract is signed. If the utility is required to upgrade its network to take the power, costs are allocated according to the policy set forth in D.85-09-058. For PG&E, we have adopted the additional policy that limits the number of QFs receiving access in its Constrained Area. A key decision to be made in this investigation is whether transmission costs should become a criterion in the solicitation process.

The Commission recognizes that determining the cost of interconnecting a QF is difficult. QF interconnection costs can include costs from two broad categories: capital and operational. Capital costs can result from the construction and maintenance of new facilities such as transformer upgrades, capacitor bank additions, the re-conductoring of lines, or the construction of entirely new lines. Operational costs can result from line losses; operation, maintenance, and administrative expenses; voltage impacts; and reactive power impacts. For QF power traveling over I.\_\_\_\_ DSP/GAC/dk \*

bulk power lines, another relevant cost is the opportunity cost of the lost benefits from potentially displaced economy energy transactions. As indicated in our discussion regarding I.85-11-008, consideration of opportunity costs is especially important for out-of-service-area QFs.

Some transmission facility upgrades which have been constructed to take QF power will also provide additional systemwide benefits to other users of the utility transmission system. While we investigated system-wide benefits in I.84-04-077, we did not rule on a specific methodology or definition. Installation of a facility upgrade can possibly benefit ratepayers in several ways, including: reduced losses; increased reliability; the provision of capacity for future load growth; and the provision of capacity for future resources, including economy energy. Policy proposals submitted in this investigation should provide criteria for determining the existence of system-wide benefits and a methodology for allocating upgrades which possess such benefits.

In addition to addressing the treatment of upgrades that may possess system-wide benefits, any policy on transmission access and cost allocation must address several key subissues. First, it must consider the type of firm transmission access provided to the QF. Access can be mandatory or subject to available capacity. Second, it must consider whether transmission costs such as those noted above are considered during the QF solicitation process. Third, it must consider whether transmission cost information is provided to project sponsors before they bid. Fourth, if utility system upgrades are necessary, the policy must address who pays: the QF, the utility's ratepayers, or both.

Below, we present four options for addressing transmission access and cost allocation for nonutility power producers. We present these options to facilitate the start of the investigation; we are not endorsing any one of them at this time. Further, some of the options require changes to the overall form of the solicitation process. Such changes, if made, will be done in Phase 1B of the BRPU. The options are summarized in Table 1 according to the key subissues described above.

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#### TABLE 1

#### INTERCONNECTION POLICY OPTIONS FOR QF TRANSMISSION ACCESS AND COST ALLOCATION

Policy <u>Subissues</u>	Option # 1	Option #2	Option 3	Option # 4
(1) Access	Mandatory to all winning QFs	Mandatory to all winning QFs <u>up to á MW</u> <u>cap</u> in a co strained ar	n–	Same as 1
(2) Does the solicitation process conside transmission costs?	No r	Not specifiéd	Yes, as weights considered in the solicitatio	Yes, as payment adders or sub- tractors
(3) Is trans- mission cost info provided to QF sponsors before bid is submitted?	No	Not specified	Yes	Yes (4a) No (4b)
(4) Who pays for upgrades? t	Costs allocated to QFs and ratepayers after pro- jects are selected	Ratepayers for MN be- low a cap. Above cap, QFs pay (if construction of addition capacity is feasible)		Ratepayers are responsible for the transm'n costs of the avoided re- source. If QF interconnection costs are higher, QF pays via a subtractor

t NOTE: Subissue 4 (Who pays?) is closely related to Subissue 2 (Are costs considered in the solicitation process?). For example, while ratepayers pay for transmission costs in Option 3, the fact that the solicitation process considers transmission costs helps assure that the transmission upgrades paid for by ratepayers, if any, are cost effective.

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# A. Option 1

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OF contracts are selected in the competitive solicitation process without consideration of transmission costs. All QFs that are selected are guaranteed access. The cost of system upgrades necessary to take the power are allocated later when they are better known. If the necessary transmission upgrades are constructed solely for the utility to take the QF's power, the QF pays the costs. If the necessary transmission upgrade has systemwide benefits, then its costs are allocated according to a predetermined rule. There are several types of rules or methodologies that could be used to allocate the costs. Transmission upgrades that have any system-wide benefits could be allocated completely to ratepayers. This rule is commonly known as the "all or nothing" rule. Another cost allocation rule could have ratepayers pay in proportion to the system-wide benefits that result from the upgrade. Yet another possibility is to hold ratepayers responsible for system upgrade costs that are at or below a dollar-perkilowatt-hour (\$/kW) cap. Upgrade costs above the cap would be paid for by the QF.

B. Option 2

In Option 2 the total transmission capacity made available for QFs is capped in an area that has transmission constraints. QFs with access below the cap pay nothing for system upgrades. QFs above the cap are turned away or are required to pay the full cost of any upgrades necessary for the utility to take the power, provided such upgrades are feasible. Because this option could cap an area's available capacity at a quantity less than the demand for the capacity, a type of rationing system - such as a waiting list - may be necessary.

#### C. Option 3

Under Option 3, utility ratepayers pay the cost of utility transmission system upgrades necessary to take the QF power. Unlike Option 1, however, the cost of transmission, I.\_\_\_\_\_ DSP/GAC/dk \*

including line losses and the cost of necessary upgrades, would be taken into account during the solicitation process by determining location-specific weights or points that reflect the estimated transmission costs of the proposed project. Such weights/points would be provided to potential bidders before they submit their proposal. QF project sponsors, knowing this information, would be free to adjust either the project price or its location. Such changes to the bid could improve its likelihood of selection. Because the posted weights/points would be considered when projects are selected, a project that otherwise would be rejected might be accepted if its transmission costs are lower than the costs of its competitors.<sup>9</sup> Because transmission cost information would be provided in advance of the solicitation, however, it would necessarily be simplified - not all costs can be calculated for each potential QF ahead of time. Some projects, in fact, could cost more or less to interconnect than estimated at the time of solicitation. If the estimates provided by the utility to the QF are binding, ratepayers would bear the risk of paying QF interconnection costs in excess of those forecasted at the time of the solicitation.

D. Option 4

In this option, ratepayers would be responsible for a cost equal to the interconnection cost of the utility's avoided

<sup>9</sup> For example, suppose two proposed QF projects, A and B, are submitted as competitive bids with capital costs of \$1,850 and \$1,900 per kW, respectively. Further, assume that the size and the variable costs of the two projects are identical but that their locations are different. The utility has notified the project sponsors that the transmission costs are \$150/kW for the site chosen by Project A and are \$50/kW for the site chosen by Project B. These transmission costs would be treated as weights in the selection process. The least cost solution is for the utility to select Project B, pay the bid price of \$1,900/kW, and have its ratepayers pay for the \$50/kW upgrade.

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resource. If the interconnection costs of a QF were higher than the utility's avoided resource, QFs would pay the difference via a subtractor to the contract price. Conversely, if QF interconnection costs were lower than the interconnection cost of the avoided resource, the QF would be eligible for a payment adder.

With respect to the subissue of whether pre-bid information is provided, two variations to Option 4 are feasible. In one variation (Option 4a), the location-specific adders or subtractors are provided as pre-bid information. With this variation, project sponsors would be able to tailor their bid in response to the posted adders/subtractors, much as in Option 3. In another variation (Option 4b), the solicitation process could take place without the posting of the location-specific adders or subtractors. Instead, the utility would determine the adder/subtractor after the solicitation but would apply it to the contract price before payment. While this would preclude QFs from fully internalizing the cost of transmission as in Options 3 and 4a, it could allow for the determination of more accurate, projectspecific estimates of adder/subtractors.

# B. OII Issues and Questions

The Commission will consider in this investigation changing rules, regulations, and policies in the areas identified in the following questions. Respondents and interested parties are to file proposals that respond to each of the following questions:

1. Do the four options provided in this OII reasonably describe the range of alternatives for addressing nonutility power producer transmission access provided by the buying utility, the incorporation of transmission costs into the solicitation process, and the allocation of upgrade costs? If not, what are other reasonable options consistent with the Commission's goals?

2. Which option, if any, do you support? Describe, in detail, your plan for incorporating transmission access and cost allocation into Commission's solicitation process for nonutility

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power. At a minimum, all proposals should address the subissues raised in this investigation and listed in Table 1.

3. How does your proposal provide access to out-of-servicearea QFs?

4. Does your proposal differentiate between solicitations for Standard Offer 2's and Final Standard Offer 4's? For Final Standard Offer 4, should the Identified Deferrable Resource include the cost of transmission?

5. How does your próposal address interconnection issues for the short-run Standard Offer 1?

6. How should the cost of upgrades providing system-wide benefits be allocated between ratepayers and QFs? What is a reasonable definition for system-wide benefits?

7. In the context of defining system-wide benefits, what is the definition of a "bulk" power line? What is the definition of an "area" power line?

8. If QFs pay for utility system upgrades, who should ultimately own the line?

9. In future QF solicitations, how should transmission access be provided in the PG&E Constrained Area? Should the existing Constrained Area waiting list be used in any future solicitations?

10. What information is necessary to determine the availability of utility transmission capacity and the system-wide benefits of transmission upgrades? To what extent should utility transmission system information be provided to nonutility parties?

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11. For the purpose of developing a utility transmission policy for nonutility power producers, what should be the definition of an IPP?<sup>10</sup>

12. Should the Commission's transmission access and cost allocation policy for utilities buying nonutility power differentiate between QFs and IPPs? If yes, how?

#### V. Wheeling Services for Nonutility Power Producers

"Wheeling" is used to describe electric transmission services which are provided on an unbundled, stand-alone basis. Such services allow electric power to move over utility transmission lines that are not owned by either the seller or the buyer of the power.

There are two general types of wheeling:

- o <u>Retail Wheeling</u>: A retail customer acquires electric generation capacity and energy independent of the local utility and has it delivered to the retail customer's premises via the utility's transmission system. A special case of retail wheeling is "self-service" wheeling for retail customers that also own generation resources. Here, the wheeling utility brings power from the customer's own generation source to the customer's retail load.
- <u>Wholesale Wheeling</u>: When the buyer of wheeled power is itself an electric utility or other entity that will resell its power to its final customers, the wheeling is wholesale.
   Wholesale wheeling can include the wheeling of either utility or nonutility power, including QF power, so long as the buyer of the power is a wholesale customer.

<sup>10</sup> In its Notice of Proposed Rulemaking on IPPs, the FERC defined an IPP as a wholesale power producer that (1) sells power to customers that do not reside in any retail utility service territory that may be granted to the producer (or its affiliates), and (2) does not control transmission facilities essential to its customers. See FERC "Regulations Governing Independent Power Producers, Notice of Proposed Rulemaking," Docket No. RM88-4-000, March 16, 1988.

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This investigation will <u>not</u> consider proposals for retail wheeling. The purpose of this investigation is to consider proposals for utility wheeling services provided to nonutility power producers selling to electric public utilities, both investor- and government-owned. This investigation is not to be construed as a challenge to the franchised retail service territories of public utilities.

In principle, wholesale transactions of power among utilities, if pursued far enough, could eliminate any demand for wheeling. Such transactions would tend to drive the avoided costs of electricity to equality across utilities or, more accurately, to the point where any remaining differences would simply be a reflection of the true costs of transmission between loads and resources. But the fact is that the avoided costs of electricity do appear to vary among utilities. To the extent that these differences reflect more than the costs of transmitting electricity, there is an opportunity for wheeling to reduce differences in avoided cost and the overall cost of electricity to ratepayers. Given our stated goals in this proceeding which include the promotion of competition and least-cost resource planning, it is appropriate to consider the development of a utility wheeling policy for nonutility power producers.

Any policy on QF wheeling must address several key subissues including (1) access, (2) pricing, (3) identification of the entity requesting the service, (4) how the solicitation process incorporates wheeling costs, and (5) any other characteristics, such as generation pricing flexibility, that are integral to the policy.

Pricing of wheeling is an especially important subissue that requires further discussion. Electric transmission systems have several properties that make pricing difficult. Since utility transmission networks are highly interconnected and since electricity follows along the path of least resistance, power I.\_\_\_\_\_ DSP/GAC/dk

wheeled for a QF may flow over multiple transmission paths. As discussed in Section IV, the cost of transmission is actually made up of several distinct types of costs, making the basis for pricing difficult. Further, facility additions to the network tend to come in large or "lumpy" increments and may serve multiple uses.

Pricing policies can fall in one of three general categories. First, <u>embedded cost</u> pricing is based upon the amortized historical cost of existing facilities plus any current variable costs. The embedded cost of facilities can be tracked on a facility-by-facility basis or the embedded cost of a large number of facilities can be averaged together for the purposes of pricing.

Second, <u>incremental cost</u> pricing charges users of the transmission system the cost of incremental facilities that are added to the system to meet the wheeling request. There are several ways to measure incremental cost. One is to charge wheeling customers for new facilities that are constructed to meet the customer's request. If long-range planning is conducted to determine additions to the transmission system, incremental cost prices can be consistent with prices based on long-run marginal costs. Compared to embedded cost pricing, incremental cost pricing better protects retail ratepayers from subsidizing wheeling customers.

Third, <u>value-based</u> pricing charges users a price that is based on the service's worth rather than its cost. Examples of value-based pricing are "split-the-difference" rate methods where the wheeling utility receives a fraction of the production-cost benefits created by the wheeling transaction. Another value-based method is bidding where the price charged for the service is determined in an auction attended by potential users of a proposed wheeling service.

The following discussion presents three options for developing a policy on utility wheeling services provided to nonutility power producers. The options are summarized in Table 2.

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# TABLE 2

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# OPTIONS FOR WHEELING NONUTILITY POWER

Policy <u>Subissues</u>	Option # 1	Option # 2	Option # 3
(1) Access	Voluntary (except for certain conditioning powers)	Mandatory	Voluņtary
(2) Pricing of Transmission Service	Generally embedded cost	Embedded cost	Incremental cost for new facilities; embedded cost for existing
(3) Who Requests Transmission Service?	Utilities, but active participation by QFs necessary	QFs or utility can make a request	Utilities on behalf of QFs
(4) Does the Solicitation Incorporate Wheeling costs into its criteria?	No	Yes	Yes, but incremental cost pricing makes it more difficult
(5) Other Attributes			In return for improved access, may require allow- ing flexible, market-based prices for utility power



# A. Option 1

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Wheeling services for QFs are provided by utilities on a voluntary basis. Notable exceptions to the voluntary basis are possible transactions resulting from the FERC, our conditioning authority in merger cases, or transactions resulting from antitrust cases. Pricing is set by the FERC, usually at embedded cost rates. The wheeling utility usually requires another utility to request the service but, as a practical manner, the nonutility power producer must also actively request and negotiate a wheeling contract. This option basically describes the status quo. B. <u>Option 2</u>

Mandatory wheeling at embedded cost. This option would require utilities to provide wheeling services to nonutility power producers winning a utility contract through a competitive solicitation process. Prices are at embedded cost. The nonutility power producer has the right to make the request for the wheeling service and ascertain a wheeling price for incorporation into its bid. Utility selection of contracts includes both the cost of generation and the cost of wheeling.

As a variation to mandatory access, there have been various proposals to "leverage" utilities into providing wheeling services. In the FERC's 1988 Notice of Proposed Rulemaking (NOPR) on bidding, it proposed requiring utilities to provide QF wheeling as a prerequisite for the utilities' participation in competitive bidding programs<sup>11</sup>. We will consider such proposals that promote access if they are consistent with the Commission's goals and existing law.

11 FERC, "Rules Governing Bidding Programs, Notice of Proposed Rulemaking," Docket No. RM88-5-000, March 16, 1988, pp. 79-91.

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# C. Option 3

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Utilities voluntarily take on the obligation to provide QF wheeling services in return for incremental-cost pricing and, in addition, the ability to price its generation at flexible, marketbased prices. Pricing would be based on incremental cost if new facilities are required. If the existing network can handle the request, embedded cost pricing would be used. Utilities would provide the access voluntarily because the incremental cost pricing of QF wheeling would not affect rates of the utility's retail customers and because the utility would have the opportunity to profit from bulk power transactions priced at market-based rates. Utilities (buyers) arrange for wheeling on behalf of QFs (sellers). Because pricing of services using new facilities would be based on incremental cost, case-by-case determination of wheeling rates for QFs would probably be required. The solicitation process could take the cost of wheeling into account, to the extent that the case-by-case cost estimates are known at the time of the solicitation.

# D. OII Issues and Questions

The Commission will consider in this investigation changing rules, regulations, and policies in the areas identified in the following questions. Respondents and interested parties are to file proposals that respond to each of the following questions:

1. What is the legal authority of the Commission to mandate utility wheeling of nonutility power?

2. Do the three options described above reasonably describe the range of alternatives for addressing wheeling access and pricing for nonutility power producers? If not, what are other reasonable options consistent with the Commission's goals?

3. Do the pricing methods described above provide an adequate assessment of the options for pricing wheeling services? If not, what other options should be considered? Give your reason why.

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4. Which policy option, if any, do you support? Describe, in detail, your plan for providing wheeling services to nonutility power producers. Your proposal should address the five subissues identified in Table 2 as well as the following:

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- a. If wheeling is requested along a path that is constrained, how should access be allocated? Should the utility have the obligation to build new facilities?
- b. How much information on wheeling access and pricing would be available to QFs at the time of utility solicitation? How would the negotiation of the wheeling contract and any required approval by the FERC be coordinated with the utility solicitation?
- C. Who pays for the wheeling service? The QF or the buying utility?
- d. Does your plan for wheeling differentiate between requests made by (1) in-service-area QFs wishing to wheel out, and
  (2) requests made by out-of-service-area QFs that wish to wheel through a utility's system?
- e. How are disputes over access or pricing resolved? What should the Commission's oversight role be for assuring that utilities pursue wheeling arrangements in good faith? What authority exists for the Commission's oversight role?
- f. Does your proposal require new legislation? If yes, what kind?
- g. Is your proposal affected by California Public Utility Code sections 2801-2826, which addresses transmission access for private energy producers?

5. Should the Commission's policy on wheeling differentiate between wheeling provided to buyers of QP power that are IOUs and buyers that are government-owned utilities, such as municipal utilities? If yes, why?

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6. Should the Commission's policy on wheeling differentiate between wheeling provided to QFs and wheeling provided to IPPs?<sup>12</sup>

#### <u>O R D B R</u>

#### IT IS ORDERED that:

 An investigation on the Commission's own motion is instituted for the purpose of reviewing existing rules, regulations, and policies on electric utility transmission services provided to nonutility power producers selling to electric public utilities. This investigation will cover (1) transmission access and cost allocation for the utility buying the nonutility power, and (2) transmission access, cost allocation, and pricing of utility wheeling services provided to nonutility power producers. Included in this investigation are the issues raised in Sections IV.E and V.D of this order. Based on the record developed in this investigation, the Commission will consider changing its rules, regulations, and policies that apply to the issues raised in this order.

2. Pacific Gás and Electric Company, Southern California Edison Company, and San Diego Gás & Electric Company are made respondents to this proceeding.

3. Respondents and interested parties shall file formal comments in accordance with Rule 14 of the Commission's Rules of Practice and Procedure containing their proposals for the provision of utility transmission services for nonutility power producers including answers to the questions listed in Sections IV.E and V.D in this order within 45 days of the date of this order. Any party filing comments shall file the original and 12 copies with the Commission's Docket Office as well as one copy to all parties

12 See related questions Nos. 11 and 12 in Section IV.E (p. 17).

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listed in Attachment 1, including parties listed in the Information Only category.

4. Respondents and interested parties shall file reply comments within 20 days of the final filing date for the proposals as set forth in paragraph 3 above.

5. Within a reasonable time after the reply comments are filed, the assigned Administrative Law Judge shall schedule a prehearing conference to establish a new service list and to determine the future course of the investigation.

6. The service lists in I.89-07-004, I.84-04-077, and I.85-11-008 are consolidated in Attachment 1 to this order, which shall be used until a new service list is established for this proceeding.

7. The Executive Director shall serve a copy of this order upon all parties listed in Attachment 1.

This order is effective today.

Dated SEP 25 1990, at San Francisco, California.

G. MITCHELL WILK President FREDERICK R. DUDA STANLEY W. HULETT PATRICIA M. ECKERT Commissioners

Commissioner John B. Ohanian, being necessarily absent, did not participate.

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

M. Executivo Dilector

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ATTACHMENT 1

MASTER LIST 189-07-004,84-04-077,85-11-008 REVISED: 09/13/90 CORRESPONDENCE: 09/13/90 DOC. I.D. #X05866

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DECISION NO.\_\_\_\_\_ NO. OF PAGES.\_\_\_\_\_ BILLING CODE.\_\_\_\_\_ DEC. SIGNED.\_\_\_\_\_ (CONFERENCE DATE)

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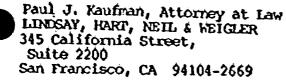
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