

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Investigation into Implementation of
Assembly Bill 970 Regarding the Identification of Electric
Transmission and Distribution Constraints, Actions to
Resolve Those Constraints, and Related Matters Affecting
the Reliability of Electric Supply.

Investigation 00-11-001
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**COMMENTS OF THE
CALIFORNIA WIND ENERGY ASSOCIATION
ON THE TRANSMISSION COST WORKSHOP REPORT**

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Pursuant to the March 17, 2005, ruling of Administrative Law Judge TerKeurst (“Ruling”), the California Wind Energy Association (“CalWEA”) submits these comments on the CPUC Staff Workshop Report on Transmission Costs Used in RPS Procurements, as more fully set forth in the Ruling.

In particular, we comment on the question stated in the Ruling: What steps should the Commission take toward resolving the problem of up-front financing of transmission upgrades needed for RPS purposes? We are pleased to see this problem – i.e., the inability of most renewable energy project developers to shoulder the financing burden – raised once again, as it is the linchpin in meeting RPS goals but is far from resolved.

Seeking to better understand these issues ourselves, CalWEA commissioned a white paper last month, which we include here in an attachment. We hope this paper – “Legal Issues Associated with Transmission Upgrades to Renewable Resource Areas in California” by attorney Scott Hempling -- will be helpful to the Commission and to the parties as we work together to understand and address the financing issues.

Before addressing the issue of up-front financing, it is necessary to discuss the determination of whether an upgrade is "integrated" with the transmission network, because, under 30 years of FERC precedent, it is only in that case that the ultimate cost responsibility falls on the full universe of transmission customers (i.e., costs are “rolled in”), rather than on the interconnecting generator alone.¹ Only if an “integration”

¹ SCE’s recent FERC Petition [Southern California Edison Company's Petition for Declaratory Order before the FERC (Docket No. EL05-80), March 23, 2005] seeks to create an avenue for rolled-in treatment of renewable resource “trunk lines” that, according to SCE, are not integrated with the grid. As discussed in the attached paper, there is no Federal Power Act precedent at FERC for rolling in costs which do not provide benefits to all users of the grid. This problem will go away in the context of the Tehachapi upgrades if the FERC finds, based on evidence provided by others, that those upgrades in fact do provide network benefits. In CalWEA’s April 6 comments in this docket on the Tehachapi Collaborative Study Group report, we suggested how the Commission might respond at FERC to SCE’s filing.

determination is made do we get to the issue of which party (the generator or the transmission owner) finances the cost initially. Therefore, our white paper describes the issues associated with achieving “integrated” status before turning to the question of financing.

To summarize the recommendations in our white paper, we suggest that the Commission take these steps toward resolving the upgrade financing problem:

1. Recognize that FERC’s criteria for “integrated” (or “network”) status are general and that there is room for FERC discretion in determining whether an upgrade is network or non-network. Recognize also that a "network" designation for a facility is legally sustainable even though the facility has both network and non-network (sometimes called “gen-tie”) characteristics.
2. Recognize that determinations by this Commission can influence the FERC’s determinations. The California Legislature recognized this ability in Public Utilities Code section 399.25, adopted as part of the RPS legislation. With that section, the Legislature obligated the Commission to make these findings.
3. To determine whether “network” status is appropriate, the Commission should convene engineering-oriented meetings of the CAISO, the transmission-owning utilities, and interested parties to (a) identify those facilities, existing and future, that are likely locations for generator interconnection which require immediate commencement of the construction process in order to achieve RPS goals,² and (b) determine which facilities should be deemed to be "network" and "non-network."
4. From these meetings, the CPUC should produce a "consensus document" identifying areas of agreement and disagreement. The utility then would file the document at FERC for resolution. (If the utility declines to follow the CPUC's order and instead proposes different designations, the CPUC can intervene and present its findings to FERC directly.) FERC would give independent review of the areas of agreement, but would likely adopt the areas of agreement. For the disagreement facilities, the group can present a unified request that FERC resolve all the disagreements in a single hearing.

This approach is less labor-intensive and less time-intensive than the expensive case-by-case litigation at FERC that few developers can afford, and which otherwise would be necessary to obtain rulings on the network status of each upgrade. The approach will also greatly increase the likelihood of achieving RPS goals on time.

² Though not discussed in the attached paper, these facilities should be designated as “necessary to facilitate” achievement of RPS goals under P.U. Code Section 399.25, as was the first phase of the Tehachapi upgrade.

5. If an upgrade is "integrated" with the transmission grid, the cost responsibility lies with all transmission customers, not with the interconnecting generator. But FERC allows the transmission owner to require the generator to finance the upgrade initially, which can kill otherwise economic projects. While the state's legal ability to direct the utility's choice on this point has been called into question, the recent court decision on this issue was not dispositive. Consistent with its statutory obligations, the CPUC should proceed in making that direction for facilities that meet the necessary criteria.
6. Alternatively, the Commission (or another party) could petition FERC to revise its Order 2003 approach, which allows the utility to impose upfront financing on the generator, at least in circumstances where a state has shown its willingness to have its ratepayers bear the risk of unused capacity, as with P.U. Code Section 399.25(b)(4).

In addition, we support the Tehachapi Collaborative Study Group's recommendation that the CAISO Tariff be amended to allow for approval of transmission facilities in advance of interconnection requests. The Commission should convene a meeting of the parties' legal experts in this area to discuss how this can be accomplished.

Although we offer these steps, we do not pretend to have all of the answers to these complicated questions, and we look forward to continued dialogue with the Commission and the parties. The Commission should recognize, however, that these issues must be speedily resolved if the RPS goals are to be met on time with California's in-state resources.

Respectfully submitted,

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April 8, 2005

**Legal Issues Associated with Transmission Upgrades
to Renewable Resource Areas in California**

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Prepared for
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March 11, 2005

Overview

California's Renewables Portfolio Standard (RPS) law requires each retail seller of electricity to increase its total procurement of eligible renewable energy by at least an additional 1% of retail sales per year so that 20% of its retail sales are procured from eligible renewable energy resources no later than December 31, 2017. (P.U. Code §399.15) Subsequently, the state's energy agencies adopted an "Energy Action Plan" which contains a goal of achieving the 20% RPS target by 2010. (The acceleration of the goal is also contained in pending legislation.) Achieving this goal will require a significant amount of new transmission capacity to be built quickly. This memorandum describes various uncertainties and sources of confusion that must be addressed if the state's RPS is to succeed. We then present several solutions.

1) Background: Generation Interconnection and Cost Allocation

A generator that interconnects with a utility's distribution or transmission system injects electric current at the point of interconnection. If the amount of current injected is large relative to the capacity of the utility's system, upgrades to that system will be necessary to accommodate the new power flow. The question then arises: who should pay for the upgrades -- the interconnecting generator alone, or all users of the utility's transmission system?

Placing the full cost of a major upgrade on a single generator can make the generation project uneconomic, whereas spreading the upgrade cost over millions of ratepayers will make the cost negligible to any single customer. A practice of charging individual generators for interconnection costs benefiting all customers will prevent the state from achieving its renewables goals.

FERC has exclusive jurisdiction over transmission rates. On the question of cost responsibility for upgrades, FERC has provided a seemingly simple answer: if the upgrade is "integrated" with the transmission network, then all transmission users pay; if the upgrade is not "integrated," the interconnecting generator alone pays.

The problem is that the criteria for determining "integrated" status are unclear, and the process for making these determinations complex and inefficient. The absence of clear answers to the integration question, in general and with specific facilities, has caused financial uncertainty to generators seeking to interconnect with California utilities. This uncertainty arises for several reasons:

- i) two separate legal jurisdictions (FERC and the CPUC) have authority over the interconnection process;
- ii) two separate business organizations (the transmission owning utility and the CAISO) have responsibility for, or influence over, the process;
- iii) these four entities (FERC, CPUC, the utility and CAISO) have different and sometimes conflicting objectives;
- iv) the legal and engineering principles for determining who bears the cost of interconnection are vague and evolving; and
- v) the process for determining cost responsibility -- in both jurisdictions and both corporate entities -- is neither standardized nor predictable, causing time-consuming negotiation and sometimes litigation.

Even where the upgrade is "integrated" (so that the cost is borne by all transmission users), FERC allows the utility to require the generator to pay the full cost initially. The utility then would reimburse the generator, over a period beginning with the date of the upgrade's commercial operation, and ending as much as 20 years later. This financing burden is untenable for most developers of renewable energy projects.

The resulting uncertainty is affecting a number of projects, including those in the Tehachapi wind region and the San Geronio Pass wind region (where interconnection disputes are now active between SCE and the Whitewater and Cabazon wind projects).

The potential exists for consistency between FERC's legal obligations and California's renewable goals. But there also is potential to place these goals in conflict, leading to legal uncertainty and legal vulnerability that will impede achievement of California's RPS goals. This memorandum describes the problems and offers solutions.

II. Clarification of the procedures for determining the allocation of upgrade costs is necessary to facilitate efficient, economical decisionmaking

In this Part II, we discuss four problems, and then present some alternative solutions. The four problems are:

- a. The generality of FERC's criteria for "network" status impedes consensus;

- b. There are disputes over the legal relationship between the CPUC's processes and the FERC process;
- c. The existing boundaries distinguishing ISO-controlled (network) facilities from utility-controlled (non-network) facilities were drawn eight years ago using criteria that differ from FERC's integration criteria; and
- d. The utilities are able to use FERC-granted discretion to discriminate against interconnecting generators in upgrade financing decisions.

Each is discussed next.

A. The generality of FERC's criteria for "network" status impedes consensus

1. Background

FERC has exclusive jurisdiction over transmission service provided by the California utilities. The generation interconnection process is a component of transmission service, and therefore is subject to FERC jurisdiction as well. The FERC process includes determining whether a transmission upgrade is "integrated" with the "network" (in which case the upgrade costs are allocable to the utility, for recovery from all transmission ratepayers) or is "non-network" (with costs therefore assignable to the interconnecting generator).

Over 30 years, FERC has issued many orders applying its integration standard to particular facilities, always requiring that there be benefits to the network before allocating the costs to all transmission customers. More recently, FERC has codified its criteria in Order 2003, which contains general rules on interconnection. The FERC there stated that the

"[t]ransmission system is a cohesive, integrated network that operates as a single piece of equipment, and that network facilities are not 'sole use' facilities but facilities that benefit all Transmission Customers. The Commission has reasoned that, even if a customer can be said to have caused the addition of a grid facility, the addition represents a system expansion used by and benefiting all users due to the integrated nature of the grid."

Order No. 2003-A, at para. 585 (footnotes omitted). So if an upgrade is "integrated" with the transmission network, the ultimate cost responsibility falls on the full universe of transmission customers, not on the interconnecting generator alone. (As discussed at Part III below, the utility still is free to impose the initial financing responsibility on the generator, who then is reimbursed over a period not to exceed 20 years from the commercial operation date of the upgrade. See Order 2003-B at para. 35.)

To determine whether an upgrade is "integrated" with the network, FERC applies five factors (the *Mansfield* factors):

1. Whether the facilities are radial, or whether they loop back into the transmission system;
2. Whether energy flows only in one direction, from the transmission system to the customer over the facilities, or in both directions, from the transmission system to the customer, and from the customer to the transmission system;
3. Whether the transmission provider is able to provide transmission service to itself or other transmission customers . . . over the facilities in question;
4. Whether the facilities provide benefits to the transmission grid in terms of capability or reliability, and whether the facilities can be relied on for coordinated operation of the grid; and,
5. Whether an outage on the facilities would affect the transmission system.

Mansfield Municipal Electric Department v. New England Power Co., 97 F.E.R.C. para. 61,134 at p.61,613-15 (2001). FERC has stated that "[o]n the question of how to determine whether a facility is a network facility, ... a showing of any degree of integration is sufficient." *Northeast Texas Electric Cooperative*, 108 FERC para. 61,084 (July 29, 2004) (emphasis added), *aff'g* 100 FERC para. 63,033 (2002) (Initial Decision).

2. Problems

FERC's statement that "any degree of integration is sufficient" seems to lower the hurdle for interconnecting generators. But the *Mansfield* factors are general and subjective. They leave much room for disagreement. Where a transmission-owning utility has a history of resistance, the lack of FERC guidance translates into uncertainty and delay for generators. There are dozens of litigated FERC cases reflecting these disagreements. Many of these cases come from California.

B. There are disputes over the legal relationship between the CPUC's processes and the FERC process

1. Background

Although FERC has exclusive jurisdiction to determine who bears an upgrade cost, the California Legislature has directed the CPUC to try to influence the FERC outcome in certain circumstances.

Specifically, in an effort to increase the role of renewable generation, the California Legislature in 2002 enacted a policy favoring ratepayer responsibility for the costs of certain upgrades necessitated by generation interconnection. Public Utilities Code section 399.25, adopted as part of the RPS legislation, requires, under subsection (b), that the CPUC –

1. make findings, when supported by evidence, that transmission facilities necessary to achieving the RPS goals provide benefit to the transmission network;
2. direct utilities making such investments, if such directive is permissible under federal law, to seek cost recovery of those investments through FERC approved transmission rates;
3. seek FERC designation of the upgrades as network upgrades; and
4. ensure that transmission costs of the upgrade, when approved by the FERC, are fully reflected in retail rates, including retail rate recovery of upgrade costs, if prudently incurred, that FERC did not approve for recovery.

California thus has committed its ratepayers' pocketbooks to the cause of network upgrades, in two respects. First, the drafters of the California statute recognized that under FERC policy, if a facility is a network facility its costs are borne by transmission rates, not by the interconnection generator. By declaring a particular upgrade to be a network upgrade, therefore, and directing the utility to seek network treatment and to seek cost recovery in rates (rather than require generator financing -- see section III below) from FERC, the CPUC is knowingly committing its ratepayers, as transmission customers, to cover the cost. That is the effect of subsections (b)(1) and (b)(2): (b)(1) authorizing a CPUC designation of network benefits, and (b)(2) authorizing a CPUC directive to the utility to have that designation confirmed by FERC.

Second, subsection (b)(4) provides that if FERC should, for some reason (such as an "abandoned plant" rationale), not allow full recovery of reasonable costs in the transmission rate, the CPUC will put the remainder in retail rates.

The California statute thus tries to inject clarity by having the state commission make its own findings on whether an upgrade is a "network" upgrade. The state can do so more speedily, and with more local knowledge, than can a federal agency. With these findings, the CPUC can direct the utility to file them at FERC in the form of a proposed agreement with the generator; and in such a proceeding (even if the utility declines to follow the CPUC's order and instead files a proposed agreement that seeks a non-network designation) the CPUC can intervene and present its findings to FERC directly. More detail on these steps follows.

2. Problems

The CPUC's finding that a facility is "network" cannot, by itself, get the costs moved from the generator to the general transmission customer. Only FERC can make that decision. What the PUC can do, under Section 399.25, is (a) order the utility to propose "network" treatment to FERC; and (b) argue to FERC directly for network treatment. Having the utility make the proposal to FERC is important legally because only utilities can make official filings for rate treatment; and, if FERC finds the utility's proposal to be consistent with the statute, FERC is bound by law to accept it.

A recent decision by the CPUC applying this provision of the statute, Section 399.25(b)(2), was invalidated by a California appeals court, on the ground that the CPUC's decision was preempted by the Federal Power Act. CPUC Decision No. 03-07-033, July 10, 2003; *Southern California Edison v. Public Utilities Commission*, No. B171050 (Calif. Ct. App. Aug. 31, 2004). We think the statute itself is not preempted, only the CPUC's decision applying the statute, for the following reason: the CPUC's 399.25 decision required the utility to fund the upgrades. That is, the CPUC decision presumed to make the funding decision itself. Only FERC can determine the funding responsibility. Section 399.25 authorizes the CPUC to order a utility to file at FERC for approval of the CPUC-specified funding responsibility. The California Court did not address explicitly this distinction between "requiring funding" and "requiring filing." In contrast, the CPUC's Tehachapi decision (D. 04-06-010, June 9, 2004), did not establish financial responsibility (an exclusively FERC-jurisdictional matter); instead the CPUC correctly ordered the utility to seek FERC approval for the CPUC-specified preference on financial responsibility.

Nevertheless, the court's decision has created doubt, within the CPUC, as to its legal ability to direct the utility to take financial responsibility for an upgrade by proposing "network" treatment to FERC. And, in the context of the new Tehachapi facility (discussed below), we are concerned that the CPUC's doubts may cause it to forego taking two important actions required by Section 399.25.

First, the CPUC must make a specific finding that the new facility will have "network" characteristics. This finding, when presented to FERC, will give FERC an objective basis for making a similar "network" finding, so that the costs will be rolled into general transmission rates rather than assigned solely to the interconnecting generators.

Second, the CPUC must direct the utility to make an official filing at FERC proposing that the facility be designated "network." This step is important because once a utility makes a filing at FERC, the FERC is required by law to accept it if the filing is "just and reasonable." The utility's filing thus carries special legal weight. It is this aspect of Section 399.25 -- empowering the CPUC to direct the utility to make a CPUC-specified filing at FERC, which is not free from legal doubt.

But in the context of the Tehachapi upgrades, some action (the first) is better than no action. If the CPUC takes no action, there is the risk that the utility will fashion its proposal to FERC in a manner which fails to win FERC approval. We will address this problem below.

C. The existing boundaries distinguishing ISO-controlled (network) facilities from utility-controlled (non-network) facilities were drawn eight years ago using criteria that differ from FERC's integration criteria

Under Order 2003, the entity obligated to provide interconnection service is the transmission provider. In California, the transmission provider is the CAISO. The CAISO, therefore, is the entity obligated to reach agreements with generators on interconnection, when the interconnection is to facilities under the CAISO's control. If the facility is not under CAISO control, then the entity responsible for interconnection is the utility.

The present dividing line between utility control and CAISO control was worked out in 1996-97. That process applied FERC's 7-factor test (created in Order No. 888 to determine which facilities were state-jurisdictional and which were FERC-jurisdictional); rather than the more recent *Mansfield* test (created by FERC to determine which facilities are "integrated" with the transmission network). The process also did not involve many of the generators seeking interconnection today. Also the CAISO has, by contract, delegated to the transmission-owning utilities the responsibility for preparing, initially, studies on the electrical impacts that interconnection will have on the transmission grid.

This unclear, and unstable, process for assigning responsibility produces an interconnection process that is neither expeditious nor economical:

1. Decisions made by the CAISO and the transmission owners as to which facilities should be under CAISO control and which under utility control are not made pursuant to a process which is aimed at fulfilling the Legislature's renewable energy mandates.
2. Generators view the CAISO as more objective than the transmission-owning utilities. The CAISO is a nonprofit company which does not own generation and therefore has no business reason to discriminate against new generators. So when the CAISO-utility agreements determine that certain facilities should be controlled by the utility rather than the ISO, it means that the generators interconnecting to those facilities will have to deal with less neutral transmission owners.
3. The CAISO's authority covers only network facilities. Thus the CAISO determinations of which facilities to control affect cost allocation decisions. Although these CAISO decisions are reviewable by FERC, the large number of

them means that not all will get high scrutiny; and FERC has no mandate to consider the state's renewable goals.

D. The utilities are able to use FERC-granted discretion to discriminate against interconnecting generators in upgrade financing decisions

The utility is the first point of contact for an interconnecting generator. The utility conducts three types of studies:

1. feasibility studies (which assess whether an interconnection at the generator's chosen location is feasible);
2. system impact studies (which the effect on the utility's distribution and transmission system of the power newly injected by the interconnecting generator)
3. facilities studies (which determine what upgrades will be necessary to relieve overloading, and how much those upgrades will cost).

The utility then proposes an "interconnection facilities agreement." That agreement identifies the costs necessary to accommodate the interconnection, and determines which costs will be borne by the generator and which by the utility's transmission customers. If the parties cannot agree on the terms of the IFA, the utility files an "unexecuted" contract at FERC with its proposed terms, the generator intervenes, protests and proposes its preferred terms, and after a 1-2 year hearing process the FERC decides.

Under this approach, there are many possible ways for the utility and the generator to disagree. Among the possible disagreements:

1. whether interconnection at the generator's location is feasible
2. whether the generator's injection will cause overloads
3. whether the upgrades proposed by the utility represent most economical solution to any overloads
4. whether the price tag for the proposed upgrades is reasonable
5. which costs are non-network (to be borne by the generator), and which costs are network (to be borne by the utility's transmission customers);
6. which party should finance the network costs initially (see Part III below); and

5. whether the schedule for completion of the work is reasonable.

Any of these disputes, no matter how small, if not resolved by negotiations, requires resolution by an entire federal agency and the five Presidential appointees appointed to run it. The process is time-consuming and expensive. There is a marked differential in ability to finance this delay. The utility's negotiation and litigation costs are fully recoverable from its ratepayers through customary ratemaking practices. The generator must bear its own costs. Many of these costs are incurred before the generator has earned anything from its project.

E. Possible Solutions

A determination of "network" status is necessary to assure that upgrade costs that benefit all transmission ratepayers are allocated to all transmission ratepayers rather than to the interconnecting generator alone. Because the determination of "network" is exclusively FERC jurisdictional, California cannot produce a result unilaterally. California can take certain actions, however, to assist the process. The following approach, while labor-intensive initially, will result in more certainty and less case-by-case litigation.

1. Engineering-oriented meetings: The CPUC should convene meetings of the CAISO, the transmission-owning utilities, and interested parties to (a) identify those facilities, existing and future, that are likely locations for generator interconnection which require immediate commencement of the construction process in order to achieve RPS goals, and (b) determine which facilities should be deemed to be "network" and "non-network."

These meetings should: take place within a fixed period of time, and be run by the CPUC to assure neutrality. The primary participants should be engineers, to assure that results are driven by engineering analysis rather than other factors.

In this process, the CPUC should recognize that because the FERC's *Mansfield* criteria are general, there is room for discretion in determining whether an upgrade is network or non-network. There are few pre-determined results. The CPUC therefore should guide the participants toward producing designations that simultaneously satisfy FERC's standards while also furthering California's renewables goals. The CPUC also should know, and inform the participants, that a "network" designation for a facility is legally sustainable even though the facility has both network and non-network characteristics. *See Pacific Gas and Electric Company*, 106 FERC para. 61,144 at para. 20 (Feb. 17, 2004) ("That [specified facilities that make a network contribution] may also be used to transmit power from local area generation stations does not invalidate their status as part of the integrated grid....[T]he Commission's rolled-in pricing policy should apply."); *id.* at para. 24 (treating dual function facilities as transmission facilities for purposes of rolling-in costs).

2. Consensus document: From these meetings, the CPUC should produce a "consensus document" identifying areas of agreement and disagreement. The utility then would file the document at FERC for resolution, pursuant to the utility's authority to file agreements under Section 205 of the Federal Power Act. FERC would have to give independent review of the areas of agreement, but would likely adopt the area of agreement. For the disagreement facilities, the group can present a unified request that FERC resolve all the disagreements in a single hearing. It is likely that a skilled administrative law judge at FERC can place the disagreement facilities in subgroups by geographic area, voltage level or other common characteristics, so as to phase the hearing accordingly. In this way, those generator owners who care more about particular phases can participate in those phases only. It will be wise for such generators to have a common attorney so as to reduce litigation cost.

3. Alternative: If the affected utilities are unwilling to make the filings, then two avenues are available.

- a. The CPUC could order the transmission-owning utilities to file the consensus document. Such an order might be resisted by the utilities as preempted by the Federal Power Act.
- b. Another entity, such as the CPUC or a group of generators, could file a complaint at FERC, arguing that the failure of the transmission owners to provide sufficient network transmission facilities necessary to accommodate the state's needs constitutes a denial of the nondiscriminatory transmission access which the owners are required to provide. Alternatively, this complaining group could intervene in a proceeding brought by the transmission owner, in which the owner is proposing a line which has network characteristics but for which the owner is seeking non-network designation.

III. Even where an upgrade is "integrated," the utility can discriminate against the generator by requiring the generator to finance the upgrade initially

a) Background

If an upgrade is "integrated" with the transmission grid, the cost responsibility lies with all transmission customers, not with the interconnecting generator. See section II.A above. But in this instance, FERC allows the transmission owner to require the generator to finance the upgrade initially. In this instance, where the initial financing comes from the generator, the transmission owner will begin reimbursing the generator (with interest) once the upgrade enters commercial operation. The length of the reimbursement period is negotiated between the utility and generator, except that the utility can insist on taking up to 20 years.

Regardless of who bears the initial financing cost, the transmission owner's customers pay eventually, because the transmission owner will recover from its transmission customers the cost of reimbursing the generator (where the generator finances upfront), or the transmission owner's direct cost (where the transmission owner finances upfront).

b) The Problem

Under this FERC policy, the utility can make or break the generator's financial condition. Because such an upgrade, by definition, will help the entire network, its cost can be very high, relative to the revenue stream associated with a single project. If the reimbursement payment period stretches over 20 years, and if the bank financing the upgrade requires repayment over a shorter period, the resulting negative net cash flow will kill projects -- even if the underlying economics are sound.³

Particularly troubling is that the decision whether to require generator financing lies not with a neutral party, but with the utility. This discretion, in the hands of a utility with a historic hesitance about independent generators, renewable generators and wind generators, can become a mechanism for discrimination. For example, when the utility builds its own generation, it self-finances; its multibillion dollar balance sheet and its secure revenue stream from its captive customer keep financing costs low. The interconnecting generator may be a professionally competent, well-managed company, but it does not have a large balance sheet or captive customers. So its financing costs will be higher. Thus in the competition between utility-owned generation and independently-owned generation, the utility's ability to withhold its own financing from the generator creates a competitive disadvantage.

c) Possible Solutions

The obvious solution is for the CPUC to require the utility, for network upgrades necessitated by an interconnecting generator, to propose at FERC to finance the upgrades, just as the utility finances the upgrades necessitated by its own generation. As discussed above in section II.B.2, the state's legal ability to direct the utility to make such a filing has been called into question, but we believe that the CPUC should proceed in making that direction in the case of Tehachapi and other facilities that meet the necessary criteria.

The utility will argue that the state directive is preempted by FERC; i.e., that the FERC allows the utility to choose between generator and utility financing, and that the state cannot take away that choice. The case law on this matter is not clear.

To avoid litigation, FERC should revise its Order 2003 approach, which allows the utility to impose upfront financing on the generator, at least in circumstances where a state has shown its willingness to have its ratepayers bear the risk of unused capacity.

³ As discussed above, regardless of who bears the initial financing cost, the transmission owner's customers pay eventually.

IV. SCE's Tehachapi "trunkline" proposal must be modified to be consistent with the Federal Power Act

SCE has proposed, in comments before the FERC, a concept of "trunk line," whose costs would be recovered from all transmission customers rather than from interconnecting generators alone.⁴ SCE suggested that, absent the special treatment it proposes, the "trunk lines" would be classified as "gentie," ineligible for "network" treatment. SCE has proposed criteria by which such "trunk lines" would receive "rolled in" treatment. These criteria deviate from the Commission's requirement of "integration."

SCE's proposed criteria are that the line provide access to a renewable resource area that is necessary to meet a state's renewable energy requirements, that the state approve the line as an appropriate means to interconnect renewables generation to the transmission grid, that the line be high voltage (at least 66kV) and not extend to every "spoke" of the system that is required to interconnect each individual project.

SCE also recommends that FERC revise its abandoned plant policy (under which, where plant is prudent but abandoned, the cost is recovered but no return is recovered) to provide that transmission owners be permitted to recover 100% of prudently incurred abandoned plant costs associated with a transmission facility that has been approved by an independent entity. If, for example, a "trunk line" were built to accommodate renewable resources to meet a state's renewables portfolio standard, there would be full transmission cost recovery even if renewable projects do not develop at projected levels; under these circumstances, the fact that transmission capacity was unneeded would not be the transmission owner's fault.

CalWEA seeks the same end: transmission investment in Tehachapi and other regions necessary to assist the development of renewables, and allocation of the investment costs to general transmission ratepayers when those ratepayers benefit from the investment. But SCE's proposed approach requires modification to make it consistent with the Federal Power Act.

⁴ Comments Of Southern California Edison Company Before the FERC, Docket No. AD04-13-000, January 28, 2005.

A. SCE's proposal is inconsistent with Federal Power Act precedent

SCE describes the "trunk line" as a "generation tie line" (gentie, for short). Implicit in this characterization is an SCE view that these lines would not satisfy the Commission's definition of "network" facility. In industry parlance, "gentie" is often synonymous with "non-network." That dichotomous view -- gentie vs. network -- misses the complexity of types of facilities that will carry large amounts of power from renewable resource areas to loads. In the case of the Tehachapi line, its gentie function is not its exclusive function. Its high voltage and its ability to provide redundancy to other lines allows it to contribute to the network. Therefore its gentie function does not disqualify it from attaining network status.

SCE further contends that this "gentie," despite its failure (in SCE's view) to satisfy FERC "network" requirements, should receive "rolled in" cost treatment because it assists achievement of California's renewable energy goals. While the achievement of the state's renewables goals is definitely a motivation for, and effect of, this facility, the state's renewables goals are not within FERC's authority to consider. FERC precedent allows "roll in" if the facility benefits the network; that is the sole basis under the Federal Power Act for requiring general transmission customers to pay for a facility that is caused by interconnecting generators. It may be true that individual FERC commissioners are sympathetic to California's renewable energy goals. More generally, it may be true that some FERC commissioners want to "defer" to state desires generally and California's specifically. But these truths do not alter the legal fact that "renewable energy" and "deference to states" are not legally sustainable reasons for approving this proposal. If these reasons are offered to FERC, and if FERC bases its decision on them, the FERC decision and the Tehachapi upgrade will be vulnerable to legal challenge. The uncertainty arising from a legal challenge, especially one involving recoverability of cost, could cause the transmission utility to slow or stop construction, thereby placing at risk the achievement of statutory RPS goals.

The FERC may allocate a transmission facility's costs to transmission customers if that facility benefits those customers. The facility benefits the customers if it contributes to the network's reliability or power carrying capability. Neither comity with states, nor encouragement of renewables, qualifies as benefiting the larger universe of transmission customers, in their capacity as transmission customers. (That these individual citizens might benefit from renewable energy does not qualify as a benefit under the Federal Power Act.)

Even the term "trunk line" appears to have been created to signal a new category. Creation of new categories is dangerous, because for 30 years the precedent under the Federal Power Act has spoken of only two categories: network or non-network. The more accurate legal analysis is to discuss the attributes of the line that place it within one category or the other; rather than to create a third category on the incorrect premise that the line cannot fit comfortably into the network category.

A separate problem arises from the potential for discrimination inherent in SCE's proposal. In two respects, SCE gives itself a veto over its own proposal:

1. At p.8 of its January 28 comments, SCE states:

[W]hen requested by utilities, FERC should provide a clear, up-front determination of whether the transmission upgrades will be classified as network or gen-tie before significant investments in the transmission facilities are made.

2. At p.9, SCE includes the following requisite to roll-in treatment:

The state and interconnecting utility determine, via the generator interconnection process or other applicable transmission studies, that the "trunk line" is an appropriate means to interconnect renewable generation to the transmission grid.

The ability to discriminate is patent: no proposal gets to FERC unless SCE says so. But the Federal Power Act says otherwise: If a facility has network characteristics, its costs must be rolled in; otherwise its costs must be directly assigned. This bright line cannot be blurred by utility discretion.

B. Solution

The CPUC should encourage SCE to put its "trunk line" proposal before FERC in a form that assures its lawfulness. The filing utility must show that the facility will be "integrated" with the transmission network; that it will benefit the network in some way. And the utility must drop its insistence on the discretion to block appropriate treatment of a network facility.

Even if a utility proceeds voluntarily with the proposal, the existing legal uncertainties remain over (a) whether the CPUC can order the utility to make such a filing and (b) which types of facilities are "network" and which types are "non-network." There will be future facilities that are controverted; thus success on the "trunk line" concept does not eliminate the need for a global consensus on the treatment of future facilities. The solutions offered in sections II.E and III.C address these needs.