

ALJ/md

ORIGINALDecision 84 08 037

AUG 1 1984

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation on the Commission's own)
 motion into the transmission system)
 operations of certain California)
 electric corporations regarding)
 transmission constraints on cogenera-)
 tion and small power production)
 development.)

I.84-04-077
 (Filed April 18, 1984)

(Appearances are listed in Appendix A.)

INTERIM OPINION

Summary

We essentially approve an interim solution proposed by the Commission staff, Pacific Gas and Electric (PG&E), and various small power producers for the alleged transmission constraints in the Northern Portion of PG&E's transmission system. An interim solution is needed to allow small power production and cogeneration to proceed in PG&E's northern transmission system while this proceeding is pending.

Procedural Background

On April 18, 1984, the Commission issued Order Instituting Investigation (I.) 84-04-077 and began its investigation of the electric utilities' transmission systems to determine whether transmission limitations may exist which will constrain the development of cogeneration and small power production (QFs). PG&E, Southern California Edison (SCE), San Diego Gas and Electric (SDG&E), Pacific Power and Light (PP&L), and Sierra Pacific Power (Sierra Pacific) companies were named as respondents to I.84-04-077 and were required to file statements assessing the likelihood and the extent of transmission system limitations which may emerge over the next 10 years due to QF development. Each utility duly filed a statement for its service territory.

PG&E stated that it currently expects the capacity of parts of its northern bulk and area transmission systems to be exceeded at times during the next 10 years due to QF development.

SCE stated that it anticipates no limitations on its bulk or subtransmission system over the 10-year period 1984-1993 which will constrain QF development.

SDG&E stated that it foresees possible limitations in two of its area sub-transmission systems over the next 10 years due to QF development.

PP&L stated that it anticipates no limitations on its existing and planned bulk and area transmission system due to QF development in California. Sierra Pacific also stated that it does not anticipate any transmission limitations over the next 10 years due to QF development.

From the utilities' filed statements, it appears that a significant constraint on QF development may exist in PG&E's northern transmission system. Both PG&E and various small power producers have informed the Commission staff that limitations on PG&E's northern transmission system do exist which will restrict QF development.

The Commission staff realized that if limitations do exist in PG&E's northern transmission system, then some QF development could be slowed and even stopped while I.84-04-077 was pending. Accordingly, the Commission staff held a series of publicly noticed workshops attended by the utilities and interested QFs. The purpose of the workshops was to examine the expected limitations in the utilities' transmission systems and to devise an interim solution for any limitations. At these workshops, PG&E presented a number of interim solutions which would accommodate QF development in its northern transmission system while I.84-04-077 was pending. Starting with PG&E's presentation, the participants to these workshops then

began negotiating an acceptable interim solution for the limitations in PG&E's northern transmission system. The Commission staff, PG&E, and designated QF representatives were the key negotiators.

The first Prehearing Conference (PEC) for I.84-04-077 was held on June 22, 1984. At this PEC, the Commission staff, PG&E, and the designated QF representatives announced that a stipulation had been reached on an interim solution for PG&E's northern transmission system. The Administrative Law Judge (ALJ) ruled that the stipulation should be served upon all parties to I.84-04-077 by July 3, 1984. The stipulation was mailed to the parties on July 5, 1984. The ALJ further ruled that written comments on the stipulation would be considered. These comments were to be served on the parties by July 13, 1984.

A second PEC was held on July 17, 1984. At this second PEC, the stipulation and the written comments were reviewed. The parties also were permitted to make oral statements on the stipulation and to respond to the written comments.

We now will turn to the stipulation and the comments received on the stipulation.

The Stipulation

The stipulation has been signed by PG&E, the Commission staff, and Independent Energy Producers (IEP). Several QF representatives participated in the negotiations although only IEP is a signatory to the stipulation. The stipulation has been entered in the formal file for I.84-04-077.

The essential terms of the stipulation are as follows:

1. The stipulation applies only to QFs located in the Northern Portion of PG&E's service area who sign a power purchase agreement with PG&E during the interim period.
2. The stipulation will be in effect until the Commission issues a final decision for I.84-04-077.
3. Affected QFs will be assessed 1.7 mills/kWh for power received by PG&E, payable only on kWh generated at operating levels up to a 60% capacity factor (monthly basis). Of this amount, .5 mills/kWh is nonrefundable. All or some of the remaining 1.2 mills/kWh will be refunded if the Commission determines in its final decision for I.84-04-077 that QFs' cost responsibility for transmission upgrades is less than 1.7 mills/kWh. The affected QFs cost responsibility will not exceed 1.7 mills/kWh for the entire life of their projects.
4. PG&E shall institute all necessary operational changes to accommodate QF power. Such changes may include noneconomic dispatch of its resources.
5. The maximum MW of QF power that may be interconnected under the terms of the stipulation is limited in each northern area as follows:

Shasta Cedar Creek	31 MW
Shasta Battle Creek	54 "
De Sabla Caribou and De Sabla Feather River	140 "
De Sabla Paradise	65 "
Colgate	30 "
North Bay Northern*	100 "
North Bay Southern	480 "
Humboldt	90 "
TOTAL	990 MW

*Depending on location, 30 MW can be added prior to completion of upgrades.

6. Available transmission capacity shall be allocated on a first-come, first-served basis, as defined in D.83-10-093, Ordering Paragraph 12(c).
7. PG&E shall proceed with all necessary area transmission upgrades and shall file an application for the required bulk transmission upgrades.

The purpose of the stipulation is twofold. First, the stipulation gives QFs certainty about their cost responsibility for transmission upgrades while I.84-04-077 is pending. QFs requiring capacity in PG&E's northern transmission system will know that their cost responsibility cannot exceed 1.7 mills/kWh for the life of their projects. Second, PG&E agrees to make the operational changes necessary to accept QF power. Without such changes, QF deliveries would be curtailed when other resource availability exceeds transmission capacity in PG&E's northern transmission system.

Comments on the Stipulation

The following parties submitted written comments on the stipulation: California Energy Company (Cal Energy), Northwest Power Company (Northwest), Trans-Pacific Geothermal (Trans-Pacific), Cogeneration Services, Inc. (Cogen), Aeolus Wind Farms (Aeolus), MCR Geothermal Corporation (MCR), City of Santa Clara (Santa Clara), Pacific Lighting Energy Systems (Pacific Lighting), SCE, SDG&E, GeoProducts Corporation (GeoProducts), and Nevada Geothermal Transmission Study Group (Nevada Group). PG&E also submitted a list of corrections and minor modifications to the stipulation. All of these comments have been entered in the formal file.

The comments submitted by PG&E and Northwest were accepted by the signatories to the stipulation. Accordingly, they are incorporated into the stipulation without further discussion.

Cogen and GeoProducts ask that the stipulation be modified to include all QFs located within and outside PG&E's service territory that are affected by transmission constraints in PG&E's northern transmission system. Independent Power Corporation (Ind Power) made an oral statement at the second PEC requesting the

same modification. The Commission staff and PG&E orally opposed this modification and urged the Commission to restrict the stipulated interim solution to those QFs located within PG&E's northern service territory.

Cal Energy, Trans-Pacific, and Nevada Group, each filed written comments requesting that the stipulated interim solution be expanded to include SCE. Each of these geothermal energy developers assert there are transmission limitations in SCE's Eastern Division which could constrain geothermal energy development.

Aeolus filed a written comment stating that SDG&E has had transmission limitations which affected wind farm developers in SDG&E's service area.

SCE and SDG&E filed similar comments stating that the stipulation applies only to PG&E and does not bind other utilities.

Finally, Santa Clara, MCR, Pacific Lighting, and SDG&E, in their comments supported the stipulation and suggested clarifying language. The Commission staff and PG&E did not accept the suggested clarifications.

Discussion

At the outset, we must commend the Commission staff for its initiative in organizing the workshops and for its perseverance in negotiating the stipulation with PG&E and the QFs. The Commission staff through its efforts has demonstrated that it will carefully

balance the competing interests of QFs, utilities, and ratepayers in this proceeding.

The success of the stipulation is evident. Very few written comments protesting the stipulation were received even though it was served on all appearances to I.84-04-077, A.82-03-26, and A.82-04-44. Of these protests, only one (Cogen, GeoProducts, Ind Power) would require a substantive change in the stipulation.

Cogen, GeoProducts, and Ind Power ask only that the stipulation be modified to include QFs who may not be located in PG&E's service territory but nonetheless are affected by the capacity limitations in the northern transmission system. Such QFs are located in the service territories of utilities or municipal utility districts adjacent to PG&E's service territory. These QFs intend to wheel their power through the adjoining service territories to PG&E.

Cogen argued at the second PHC that it would be discriminatory if the Commission should adopt a stipulated interim solution which is available only to QFs located in PG&E's service territory. Cogen points out that the adopted interim solution will control QF development around PG&E's northern transmission system while I.84-04-077 is pending, and therefore is a very important factor in negotiations between QFs and PG&E. Cogen maintains that there is no legal basis for extending an interim solution to QFs located within PG&E's service territory and for excluding QFs outside the territory.

The Commission staff and PG&E responded that they were unwilling to extend the stipulated interim solution to QFs outside of PG&E's northern transmission system because this particular issue was not addressed in the negotiating sessions. Both the Commission staff and PG&E were concerned that unknown amounts of QF power could displace more economic power if the in-service area restriction is removed. PG&E emphasizes that no studies were made of the financial

impact of QF deliveries from outside the service territory. Therefore, the negotiators of the stipulation could not have considered the financial impact of these QF deliveries on PG&E's transmission system.

Cogen replied that QF development outside the service territory of PG&E is limited and should not result in the inundation of QF deliveries feared by the Commission staff and PG&E. Moreover, Cogen stated it was willing to stipulate to a maximum delivery from QFs outside the service territory if this would alleviate the Commission staff's and PG&E's concerns.

We find that any interim solution should be afforded to all QFs affected by potential transmission constraints in PG&E's northern system. At this time, we do not have sufficient cause to differentiate between QFs located within PG&E's service territory and those located beyond the utility's service boundaries. Both groups of QFs are willing to deliver power to PG&E's system under the same pricing formulas. Their similarity to the utility is confirmed by PG&E's distinction of its planning area from its service territory. Apparently, PG&E already has considered the impact of some QFs outside its service territory that are located in CP National's service territory and in municipal utility districts. These QFs are within what PG&E calls its planning area, which extends beyond its service territory. Therefore, PG&E in its plans for QF deliveries has not distinguished between QFs located within and those located outside its service territory. We believe, as does PG&E in its planning, that there is no meaningful distinction between these QFs and will modify the stipulation as requested.

However, we also find merit in the concern expressed by the Commission staff and PG&E that unlimited amounts of QF deliveries from outside PG&E's service territory could displace large amounts of more economic power. PG&E's ratepayers could suffer large losses if such displacement is permitted. This problem can be solved by

specifying a maximum MW level of QF development that may be interconnected under the interim solution. In this way, the ratepayer's exposure can be limited to the consequences that the negotiating parties were able to evaluate. We will choose as the maximum level the total of the area capacity limitations agreed to by the negotiating parties in the stipulation or 990 MW. With this ceiling, the total MW of QF development that may be interconnected pursuant to the interim solution cannot exceed 990 MW. Once this total level is reached, PG&E shall no longer be obligated to interconnect QFs under the terms of the stipulated interim solution. The MW levels for the individual northern areas specified in the stipulation are still applicable.

Subject to these two modifications, we approve of the stipulation negotiated by the Commission staff, PG&E, and QFs representatives and will adopt it as an interim solution.

Findings of Fact

1. PG&E expects to experience bulk transmission constraints in the Northern Portion of its service area.
2. PG&E expects to experience area transmission constraints in six operating divisions: Humboldt, Shasta, De Sabla, Colgate, North Bay and Drumm.
3. Because of these transmission constraints, PG&E at times may be physically unable to accommodate the delivery of some QF power in addition to the energy and capacity commitments PG&E already has made.
4. PG&E can accommodate this QF power on an interim basis by changing its operating practices.
5. QFs assert that uncertainty about their cost responsibility for transmission upgrades will hinder the development of QF power in Northern California; this uncertainty will persist while I.84-04-077 is pending unless the Commission adopts an interim solution.

6. The Commission staff, PG&E, and QF representatives have stipulated to a proposed interim solution which will remove some of the uncertainty about cost responsibility for transmission upgrades until I.84-04-077 is decided.

7. QFs inside PG&E's service territory and QFs outside of PG&E's service territory may be affected by transmission constraints in PG&E's northern system.

8. Any interim solution should be afforded to all QFs affected by transmission constraints in PG&E's northern system.

9. To protect PG&E's ratepayers from the displacement of more economic power, the maximum level of QF power that may be interconnected under the interim solution should be 990 MW.

Conclusions of Law

1. The stipulated interim solution and this interim order do not predetermine any of the issues to be addressed in I.84-04-077.

2. All parties to I.84-04-077 were given an adequate opportunity to review the stipulation, file written comments, and make oral statements at a public hearing.

INTERIM ORDER

IT IS ORDERED that:

1. The interim solution proposed in the stipulation of the Commission staff, PG&E, and QF representatives is modified as follows:

- a. The interim solution will be applicable to all QFs affected by transmission constraints in the Northern Portion of PG&E's service territory.
- b. No more than 990 MW of QF power may be interconnected by PG&E under the terms of the stipulated interim solution.
- c. The changes in the stipulation prepared by PG&E and Northwest are incorporated into the stipulation.

2. The modified interim solution is approved and shall remain in effect until further order of the Commission.

This order is effective 30 days from today.

Dated AUG 1 1984, at San Francisco, California.

Commissioner Priscilla C. Crew.
being necessarily absent, did
not participate

Commissioner William T. Bagley
being necessarily absent, did
not participate.

LEONARD M. GRIMES, JR.
President

VICTOR CALVO

DONALD VIAL

Commissioners

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


Joseph E. Bodovitz, Executive Director

APPENDIX A
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List Of Appearances

Respondents: Peter W. Hanschen, Michael S. Hindus, and Jo Ann Shaffer, Attorneys at Law, for Pacific Gas and Electric Company; Manning W. Puette, Attorney at Law, for San Diego Gas & Electric Company; Margaret A. Glodowski, Attorney at Law (Nevada), for Sierra Pacific Power Company; R. K. Durant, Carol B. Henningson, and Susan L. Steinhauser, Attorneys at Law, for Southern California Edison Company; and Wayne P. Sakarias, Attorney at Law, for San Diego Gas & Electric Company.

Interested Parties: Brian Sway, for Capitol Oil Corporation; Thomas R. Sparks, for Union Oil Company of California; Robert N. Kittle, Attorney at Law (Pennsylvania), for Navy Department; Steve Conn, by David Mundstock, for California Energy Commission; Jane S. Kumin, Attorney at Law, for Natomas Company and Thermal Power Company; Linda Fain, for California Department of Water Resources; Harry K. Winters and John C. Catton, for University of California; John C. Lakeland, for himself; David L. Ludvigson, Attorney at Law, for California Energy Company, Inc.; James Kaiser, for Sierra Energy and Risk Assessment; Kelly Runyon, for City of San Francisco; Peter M. Strauss, for Fayette Manufacturing Corporation; Rufus S. Scott, Attorney at Law (Colorado and Texas), for Phillips Petroleum Company; Shirley S. Nowicki, for Sun Geothermal Company; Fred E. John and Thomas Clarke, by Gay M. Phillips, for Southern California Gas Company; Douglas Porter, for Pacific Lighting Energy Systems; William B. Marcus, for California Hydro Systems, Inc.; Roy Alber, Attorney at Law, for Independent Power Corporation; Robert Torrey, for Pacific Hydro Company; R. Lee Roberts, Attorney at Law, for Hanna & Morton; Norman Ross Burgess, for himself; Jan Hamrin, for Independent Energy Producers; Michel Peter Florio and Jon P. Elliott, Attorneys at Law, and Sylvia M. Siegel, for Toward Utility Rate Normalization (TURN); Mark Lyons for Ultra Systems, Inc.; David Branchcomb, for Henwood Associates, Inc.; Karen Rohier, for Aeolus Wind Farms, Inc.; Jon Castor, for himself; Patrick Moast, for the California Department of Water Resources; Reed V. Schmidt, for himself; Messrs. Pettit & Martin

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by Edward B. Lozowicki, Attorney at Law, for Cogeneration Services, Inc.; W. Randy Baldschun, for City of Palo Alto; Gary L. Fontana, Attorney at Law (Washington, D.C.), for Northwest Power Company; and Elizabeth Henderson and Laura King, for Natural Resources Defense Council.

Commission Staff: Diane Fellman, Attorney at Law, and Julian Aiello.

(END OF APPENDIX A)

began negotiating an acceptable interim solution for the limitations in PG&E's northern transmission system. The Commission staff, PG&E, and designated QF representatives were the key negotiators.

The first Prehearing Conference (PHC) for I.84-04-077 was held on June 22, 1984. At this PHC, the Commission staff, PG&E, and the designated QF representatives announced that a stipulation had been reached on an interim solution for PG&E's northern transmission system. The Administrative Law Judge (ALJ) ruled that the stipulation should be served upon all parties to I.84-04-077 by July 3, 1984. The stipulation was mailed to the parties on July 5, 1984. The ALJ further ruled that written comments on the stipulation would be considered. These comments were to be served on the parties by July 13, 1984.

A second PHC was held on July 17, 1984. At this second PHC, the stipulation and the written comments were reviewed. The parties also were permitted to make oral statements on the stipulation and to respond to the written comments.

On August 1, 1984, the Commission issued its decision on the D.84-03-093 Order to Show Cause. In this decision, the Commission stated, *inter alia*, that QFs currently are not responsible for bulk transmission upgrades. Recognizing that this pronouncement may affect the parties' position on an interim solution to I.84-04-077, the Commission asked for another round of written comments on the stipulation. These additional comments were reviewed at the third PHC for I.84-04-077 held on August 23, 1984. The comments were served on parties by August 17, 1984.

We now will turn to the stipulation and the two sets of comments received on the stipulation.

The Stipulation

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First Comments on the Stipulation

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Finally, Santa Clara, MCR, Pacific Lighting, and SDG&E, in their comments supported the stipulation and suggested clarifying language. The Commission staff and PG&E did not accept the suggested clarifications.

Second Comments on the Stipulation

(To be Inserted)

Discussion

At the outset, we must commend the Commission staff for its initiative in organizing the workshops and for its perseverance in negotiating the stipulation with PG&E and the QFs. The Commission staff through its efforts has demonstrated that it will carefully