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Decision 91-07-075 July 31, 1991

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric Company (U 39 E) for a certificate of public convenience and necessity authorizing participation in California-Oregon Transmission Project.

**ORIGINAL**

Application 90-08-066  
(Filed August 31, 1990)

In the Matter of the Application of southern California Edison Company (U 338 E) for a certificate that the present and future convenience and necessity require or will require Edison to invest and participate in the construction and operation of applicant's share of a 500 kV AC transmission lines starting at the California-Oregon border and going through Alameda, Colusa, Contra Costa, Glenn, Merced, Modoc, Sacramento, San Joaquin, Shasta, Siskiyou, Solano, Tehama, and Yolo Counties in California, known as the California-Oregon Transmission Project.

Application 90-08-067  
(Filed August 31, 1990)

In the Matter of the Application of San Diego Gas & Electric Company (U 902 E) for a certificate that present and future public convenience and necessity require or will require SDG&E to participate in the construction and operation of a 500 kV transmission line from Southern Oregon along the existing Malin-Meridian 500 kV transmission line to central California near the Tesla Substation, known as the California-Oregon Transmission Project.

Application 90-09-001  
(Filed September 4, 1990)

ORDER MODIFYING DECISION AND DENYING REHEARING

Southern California Edison Company (SCE) and Pacific Gas and Electric Company (PG&E) have filed a joint application for rehearing of Decision (D.) 91-04-071. PG&E has also filed a separate application for rehearing of D.91-04-071. SCE has also filed a separate application for rehearing of D.91-04-071. The California Energy Resources Conservation and Development Commission (CEC) has filed an application for rehearing of D.91-04-071. San Diego Gas & Electric Company (SDG&E) has filed a petition for modification of D.91-04-071. The Bonneville Power Administration (BPA) has filed a petition for modification of D.91-04-071.

The Commission has reviewed each and every allegation of the applications for rehearing and is of the opinion that no ground for rehearing is set forth. However, we do believe modification of D.91-04-071 is needed in the following respects: in view of SDG&E's petition for modification; BPA's petition for modification and certain errors in the calculation of the cost/benefit analysis for PG&E at page 30 of D.91-04-071, and CEC's petition with respect to the available capacity analysis at page 19 of the decision.

I. SDG&E Petition

SDG&E petitions to modify D.91-04-071 to clarify whether SDG&E must submit, in meeting its burden of proof under the cost-effectiveness test of Public utilities Code § 1102, executed long-term capacity and energy agreements, or, whether, in the alternative that burden may be met by the submission of proofs sufficient to establish a reasonable probability that capacity and energy contracts could be executed bearing reasonable charges for the services provided thereunder.

Section 1102 provides:

- “(a) Notwithstanding any other provision of this article, and in addition to the requirements of Article 1 (commencing with Section 1001), an electrical corporation proposing to construct an electrical transmission line to the Northwestern United States shall

provide the Commission with sufficient reliable information to enable the Commission to determine that the proposed line, at the electric rates expected to prevail over the useful life of the line, will be cost effective. The Commission, in its analysis of the forecast cost of electricity, shall take into consideration the recent increases in the charges for purchasing surplus electricity from the Northwestern United States, the possibility of future increases in those charges, the feasibility of negotiating long-term contracts under reasonable charges, and the feasibility of purchasing electricity directly from Canada rather than through the Bonneville Power Administration." (Emphasis added.)

SDG&E asserts that it cannot file a new application for a COTP certificate of public convenience and necessity unless and until standards governing application of § 1102 are clarified.

D.91-04-071 concluded that SDG&E had not met its burden of proving the feasibility of negotiating long-term capacity contracts under reasonable charges in accordance with § 1102. (See Conclusion of Law 6.) SDG&E says that it is uncertain if the Commission intends that § 1102 requires SDG&E to demonstrate only by executed firm capacity contracts that the forecasted savings resulting from COTP reasonably can be achieved.

SDG&E's uncertainty flows from the nature of utilization SDG&E contemplated in its application for COTP. SDG&E's showing was predicated on benefits resulting from savings the Joint Study forecasted would be achieved by purchasing on a short-term basis primarily Pacific Northwest (PNW) economy energy and infrequently PNW spot capacity available during summer months. SDG&E did not contemplate using its project share for long-term, committed firm capacity. SDG&E may not be able to arrange long-term contracts to supply economy energy and short-term or spot capacity because these are commodities that normally

do not lend themselves to long-term price and availability commitments.

SDG&E is uncertain whether long-term contracts or probability analysis (or both) apply to satisfy § 1102. SDG&E contends that the Commission should recognize that on this record SDG&E's forecasted COTP utilization involves economy energy and spot capacity. In light of this information, SDG&E believes that a clarifying modification to D.91-04-071 would avoid an unnecessary commitment of SDG&E resources and funds as well as potentially another rejection of a project application on grounds involving § 1102. A clarifying interpretation of § 1102 would guide SDG&E's evaluation whether COTP is an opportunity that should be seized or an unwise project yielding unwelcome customer costs at a time SDG&E is concerned about maintaining its competitive position in bulk power markets.

Only the Division of Ratepayer Advocates (DRA) filed a response to SDG&E's petition. DRA agreed that SDG&E's proposal to provide proofs sufficient to establish a reasonable probability that capacity and energy contracts would be executed bearing reasonable charges was appropriate, given SDG&E's proposed use of COTP. DRA suggested that SDG&E's proofs demonstrate:

- o In what percentage of years are water flows in the PNW sufficiently high that additional short-term firm capacity is available for export to California during SDG&E's summer peak period above and beyond what can be transferred on SDG&E's existing entitlements on the A/C and D/C interties, after taking into consideration other utilities' purchases from the PNW?
- o During those water conditions when the capacity identified above is not available (i.e. when COTP provides no additional firm capacity) what would SDG&E propose to do to obtain this capacity? This may consist of a probability analysis of the risk that SDG&E would not be able to meet its reserve margin because capacity would simultaneously not be available for sale

from both the Northwest and the Southwest during periods of low PNW flows. Alternatively, SDG&E could perform a quantitative analysis of the amount of expected unserved energy that would result from this same risk.

- o What energy return obligations could be required during less than average water year conditions?

In our opinion SDG&E has a dilemma in deciding how to comply with § 1102 given the fact that COTP is to provide essentially economy energy and spot capacity to SDG&E, with only limited access to firm capacity. We believe that proposed (or signed) long-term contracts for economy energy and spot capacity would be either so loosely written as to provide no current assurance of capacity or price, or would be nothing more than a gamble that the contracted for capacity, energy, and price would be reasonable at the time the power was needed. Under the circumstances a probability analysis as proposed by SDG&E augmented by the proofs recommended by DRA meet the requirements of the statute.

## II. BPA's Petition

BPA requests that we modify D.91-04-071 to correct certain errors in the calculation of the amount of Pacific Northwest (PNW) surplus capacity available for applicants. In Finding of Fact 4, we found that the amount of PNW capacity available to California is insufficient to support applicants' participation in the COTP. BPA, in its petition, asserts that our calculation of PNW surplus capacity was technically incorrect.

BPA states that the Commission was wrong in assuming that BPA would not interrupt Direct Service Industry (DSI) loads to meet California capacity obligations. BPA says it would. BPA says the Commission adjusted the surplus capacity estimate by reducing it to account for Nonexportable Additions and Maintenance Reserves. BPA says its original surplus capacity estimate had already made this adjustment and therefore the

Commission's adjustment doubled it. BPA contends that the Commission did not consider the availability of BPA's spot, or short-term, capacity surplus, especially that capacity available in BPA's off-peak seasons (spring and summer).

BPA believes that our capacity determination was unnecessarily restrictive and did not provide a complete basis for drawing conclusions regarding the availability of PNW surplus capacity to the applicants.

In our opinion, BPA's petition is not a request to correct technical errors but to reweigh the evidence. As such it is not a petition for modification. Treating the petition as an application for rehearing, we note that BPA was not a party to the proceeding. It did not introduce testimony, participate through counsel, file briefs or submit comments on the proposed decision. Therefore, it has no standing to apply for a rehearing. (P.U. Code § 1731 "...any party to the...proceeding may apply for a rehearing...") BPA's technical arguments are not cross-referenced to any exhibits on the record. Given the highly complex nature of the tables and reports being discussed, this lack of reference to the CPUC record makes it very difficult to evaluate BPA's claims in the context of the CPUC record. Several of BPA's arguments were supported only by press releases issued by both BPA and Edison attached to BPA's pleading. These press releases refer to events which occurred after the record was closed in this proceeding. This information was not and is not now, part of the CPUC record.

Nevertheless, because of the intense public interest in these applications, and the importance we place on the issues presented, we have not dismissed BPA's petition out-of-hand. We will treat it as an amicus curiae brief in support of the applicants. As such, we have reviewed the evidence on the issue of surplus power in the Pacific Northwest and after modification of the available capacity analysis at page 19 of the decision, as discussed below, we conclude that our original findings on the lack of sufficient capacity were correct.

### III. CEC's Application

CEC's application contends that the Commission's determination regarding Section 701.1 is unlawful, and disagrees with our conclusions regarding cost-effectiveness and PNW surplus capacity. We have considered these contentions seriously, but we are not persuaded to reverse our decision.

The applicability of Section 701.1 is discussed at some length in D.91-04-071 (pages 7-12). For the reasons set forth therein, we are not convinced that we have erred in the interpretation of this statute.

We do agree, however, with CEC and the applicants that the PNW capacity analysis on page 19 of D.91-04-071 should be corrected in that it fails to reflect 938 MW of PNW exports to California being delivered on the existing Intertie. With this correction the analysis with respect to the 50 hour and 30 hour-per-week PNW generation capacity (reorganized to separately show generating and transmission capacity) on page 19 of the Decision is revised to read as follows:

#### PNW Generating Capacity and PNW-CA Transmission Capacity

##### **Pacific Northwest Generating Capacity (50 hours/30 hours per week)**

1. September 2009 Surplus Per Applicants:	7,469-8,248 MW
2. Adjustments (subtractions from available capacity)	
3. No Interruption of DSI Before CA	-1,279 MW
4. Nonexportable Additions	- 400 MW
5. Maintenance Reserves	- 500 MW
6. Transmission Losses	- 420 MW
7. <u>Total Adjustments</u>	<u>2,599 MW</u>
8. Capacity Remaining After Adjustments	4,870-5,649 MW

##### **PNW-CA Transmission Capacity**

9. Firm Capacity of Existing Lines	5,680 MW
10. Less Unused Portion of LADWP	716 MW
11. Existing line Used for Capacity (line 9-10)	4,964 MW
12. Less Existing Northwest Imports	938 MW
13. Existing Line Available for Capacity (11-12)	4,026 MW

**Net PNW Generating Capacity that Cannot Be Carried over the Existing Transmission Lines**

14. Surplus Capacity Available for COTP (line 8 - line 13)	844-1,623 MW
15. Less PNW generating capacity contracted by munis on their share <u>of COTP firm transmission capacity</u>	<u>748 MW</u>
16. Remaining PNW Generating Capacity Available to the IOUs (line 14 - line 15)	96-875 MW

As a result of the adjustment made above, the net PNW capacity that might be available to California IOUs is greater than the 0 MW described in D.91-04-071. However, the 50 hour-per-week capacity figure (96 MW in place of 0) is enough to fill only a small percentage of the IOUs' proposed entitlements (652 MW) on COTP. We are not convinced that it justifies a change in D.91-04-071.

Relying entirely on the 30 hour-per-week basis, CEC urges that we find there is sufficient PNW capacity. However, the 50 hour per week capacity basis is the one that BPA and the California utilities have relied on historically. As pointed out by IEP in its Response To The Applications For Rehearing in order to guarantee "that adequate capacity will be available to the IOU participants, all of the utilities with COTP entitlements must agree to take all their Northwest capacity over COTP on a 30 hour-per-week basis". It then points out, citing Exh. 155 (ER-90), that most of the utilities are planning purchases on a 50 hour-per-week basis. We conclude that this 50 hour-per-week basis is the one deserving the most weight in our judgment and is the most reasonable. (See also Response of G.H. Bowers to Pets. for Rehearing, p. 4-6)

CEC's contentions are essentially disagreements with our conclusions on the evidence in the record. Even with our revision to the analysis of generating capacity of the PNW, we find this project, on the facts presented in this record, is not



likely to be cost-effective for SCE and PG&E. In reaching decisions, the Commission has the obligation to balance the interests of applicants' shareholders and ratepayers under the constraints of the evidence presented in the proceeding and the time constraints permitted for its completion. We are keenly aware of the significant role many hope this project will play in the proposals for an interstate market for electricity sales transactions throughout the Western U.S. But we cannot overlook or ignore the testimony of TANC's Executive Director that the project is actually under construction and is expected to be in service in 1993. Nor does the decision in this proceeding deny or bar applicants' participation in the project forever.

#### IV. Cost Effectiveness

The responses of the Division of Ratepayer Advocates and the Independent Energy Producers Association to PG&E's application for rehearing acknowledge certain calculation errors in Table 2 on page 30 of D.91-04-071. The following modifications to the analysis underlying Table 2 on page 30 of D.91-04-071 should be made: (1) adjusting the combined cycle O&M benefits to reflect DRA's smaller assumed capacity additions, (2) deleting that portion of the capacity benefit adjustment for O&M which is attributable to reduced QF payment benefits which had been eliminated in a separate adjustment, and (3) adjusting the combined cycle O&M per MW cost to fully reflect those costs.

Analysis for PG&E Full Participation  
vs Muni Only  
NPV - Millions of 1993 Dollars

DRA's Estimated Net Benefit Adjustments:	83.9
ER-90 Capacity Need Date	-12.8
ER-90 Gas Price Forecast	-29.0
ER-90 QF Capacity Benefit	-3.8
Cut PG&E Combined Cycle O&M by 25% per CEC/SCE and SDG&E	-1.9
	<u>-36.0</u>
Net Benefits After All Adjustments	0.4

The result of these adjustments does not change our conclusion that participation in COTP is not cost effective for PG&E. The corrected analysis shows a return of about \$0.4 million (net present value) on a project with costs of some \$250 million (net present value). This does not appear to be a prudent investment, particularly where the benefits are speculative and projected well into the future, whereas the costs are certain and immediate.

There is no effect on our analysis and conclusion on cost-effectiveness in D.91-04-071 caused by our adjustment for PNW capacity discussed above. This results because the findings on cost-effectiveness in D.91-04-071 assume that all the PNW capacity the applicants claim will in fact be available. In the cost-effectiveness analysis in the Decision, we started with DRA's exhibit which assumed that there would be substantial PNW capacity available (see Finding of Fact No 12(2), and 14. Adjustments were then made to reflect the value of that capacity to each IOU, but no adjustment was made to reflect the possible capacity unavailability. Given the risk that additional PNW capacity may not be available to the IOU applicants with their participation in COTP, the cost-effectiveness analysis likely errs in overestimating the benefits of IOU participation.

Finally, we note that a reference to Edison's Devers-Palo Verde II application in the first paragraph of D.91-04-071 was to the wrong document. As corrected, this sentence should read:

"Prominent among the recent examples. . . Edison's own use of residual air emission benefits in its Devers-Palo Verde II transmission line testimony (A.85-12-012) and recognition of that benefit in D.88-12-030, 30 CPUC 2d 4 (1988). . ."

**IT IS ORDERED that:**

1. The following findings of fact in D.91-04-071 are modified as follows:

2. The COTP project is currently under construction. It is expected COTP will be built regardless of the participation of the Applicants.

4. We find PNW capacity available, but we do not find enough available with such certainty to support IOU participation.

12. We adopt. . .(4) that if the IOUs do not participate in COTP, the termination of the IOU-SMUD and IOU-CDWR transmission service agreements will occur in 2005 as negotiated. . .

13. IEP raised. . .Applicants'. . .analyses  
. . .

15. Edison's participation in COTP would result in a significant increase in costs (net present value) compared to non-participation (muni-only alternative) even if residual environmental costs are not included in the analysis. Edison's participation in COTP is not cost effective.

17. We adopt IEP's recommended decrease (as corrected) of \$12.8 million in DRA-estimated production cost benefits for PG&E for its combined-cycle fixed O&M associated with the later capacity need data.

19. We adopt IEP's recommendation of reduced combined cycle O&M costs for PG&E (as corrected). This reduces DRA's estimate of PG&E's production cost benefits by an additional \$1.9 million.

21. PG&E's participation in COTP, compared to a muni-only COTP scenario, results in very small net benefits (net present value) most of which are realized after 2005 and are subject to considerable uncertainty. Whereas the benefits of such a large investment are far in the future and speculative, the costs are certain and immediate. Consequently, we find that PG&E's participation in COTP is not cost-effective even if residual air emission costs are not included in the analysis.

22. Based on the cost/benefit analysis performed by DRA in this proceeding, SDG&E's participation in COTP is cost-effective if residual air emission costs are not included in the analysis.

23. SDG&E has not demonstrated that sufficient PNW capacity will be available on the spot market at the unpredicted times when it will be needed. SDG&E has not persuaded us that reliance on the spot market to meet its firm capacity needs is feasible and reasonable.

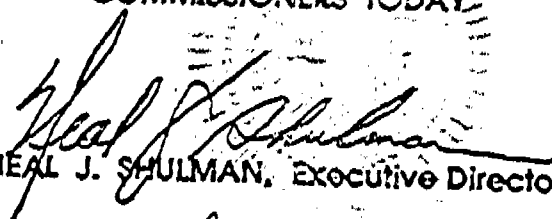
2. Conclusion of law number 6 in D.91-04-071 is modified as follows:

6. SDG&E has not met its burden of proving the feasibility of negotiating long-term contracts under reasonable charges under Public Utilities Code Section 1102, or in the event it does not plan to use the line for long-term contracts, SDG&E has failed to meet its burden of proof in showing the probable availability of the other types of capacity anticipated as a result of its proposed participation in COTP.

3. Rehearing of D.91-04-071, as modified, is denied.  
This order is effective today.  
Dated July 31, 1991, at San Francisco, California.

PATRICIA M. ECKERT  
President  
G. MITCHELL WILK  
JOHN B. OHANIAN  
DANIEL Wm. FESSLER  
NORMAN D. SHUMWAY  
Commissioners

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

  
NEAL J. SHULMAN, Executive Director

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