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Decision 82 05 012 MAY - 4 1982

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of SIERRA PACIFIC POWER COMPANY for authority to implement its Energy Cost Adjustment Clause (ECAC).	Application 61119 (Filed December 8, 1981; amended February 22, 1982)

James D. Salo, for Sierra Pacific Power Company, applicant.
Freda Abbott, Attorney at Law, for the Commission staff.

OPINION

I. Summary

By this decision Sierra Pacific Power Company (Sierra) is authorized to make changes in its Energy Cost Adjustment Clause (ECAC) rate and Annual Energy Rate (AER). The net effect of these changes is to reduce rates by $1.87 million annually.

Additionally, the applicant, Sierra, is encouraged to vigorously pursue alternatives to burning oil if and when less expensive natural gas is available.

The authorized AER gives an economic incentive to Sierra to pursue its least cost fuel procurement strategy since it is based on a forecasted energy mix that includes economy power and the historic natural gas burn.

II. Background

Under the ECAC procedures prescribed in Decision (D.)92426 Sierra may request ECAC billing factor changes three times a year, based on revision dates of February 1, June 1, and October 1. The reasonableness of fuel related expenses, including Sierra's energy mix, is examined in depth once each year. For Sierra the reasonableness review is associated with the February 1 revision date.

On December 8, 1981 Sierra filed Application (A.) 61119 for the annual reasonableness review period of October 1980 through September 1981 and the four-month ECAC forecast period of February-May 1982. The filing did not include Sierra's report on the reasonableness of its fuel and purchased power transactions but noted that the report would be available on or about December 18, 1981.

On January 15, 1982 Sierra submitted its reasonableness report as well as revised exhibits and testimony for A.61119. On February 22, 1982 Sierra amended the application. Although the amendment was not properly filed five days before hearing, as required by Rule 8, staff did not object to the amendment; and the administrative law judge permitted the amendment to be filed.

At hearing, Sierra discovered an error in its calculations and requested permission to further revise its application through a late-filed exhibit. That exhibit as well as a staff exhibit with the corresponding revisions to its tables were mailed on February 26, 1982.

Because of this series of revisions, amendments, and errors, the relief sought by Sierra changed as follows:

	Relief Sought			
		ECAC		AER
Date	Fuel and Purchased Power Rate	Balancing Rate (mills/kWh)	Total	
Existing rates	39.35	1.76	41.11	1.31
12/8/81 (A.61119 filed)	38.27	3.09	41.36	1.31
1/15/82 (Revision)	35.94	1.00	36.94	1.17
2/22/82 (Amendment)	37.92	1.00	38.92	1.25
2/26/82 (Late-filed exhibit)	39.87	1.00	40.87	1.25

Staff recommends adoption of a 38.30 mills/kWh (m/kWh) fuel and purchased power rate, a 1.00 m/kWh balancing rate, and a 1.22 m/kWh AER.

Two days of hearing before Administrative Law Judge R. Wu were held on February 22 and 23, 1982. The matter was submitted subject to the receipt of briefs due March 9, 1982.

III. Issues

This proceeding raises the following issues:

1. Were Sierra's fuel and purchased power transactions for the period October 1980 through September 1981 reasonable and prudent?

2. What is the appropriate energy mix for developing ECAC and AER rates for the forecast period?

IV. Discussion

A. Reasonableness of Fuel and Purchased Power Costs

In Sierra's last annual reasonableness review, A.60246, we directed Sierra and other parties to "clearly and fully set forth the analysis and considerations leading to their conclusions about reasonableness." We also stated that: "We will be particularly interested in an analysis of Sierra's oil purchases and inventories as compared to natural gas purchases and availability." (D.93374, p. 5.) Thus, Sierra was put on notice that we expected a clear and comprehensive showing on the reasonableness of its fuel oil and natural gas procurement strategy at the next annual review.

Instead, Sierra filed its reasonableness report 41 days after the application was filed. The staff auditor testified that the lateness of Sierra's report precluded a thorough review of the utility's records and operations. The staff engineer found that the report lacked detailed information and conflicted with prior utility responses to data requests. Furthermore, Sierra's witness, Wilbur Montgomery, revised significant portions of the report during hearing[1/] and thereby attempted to discredit staff analysis based upon the report. Apparently, even Sierra realized there were substantial gaps and inconsistencies in its presentation and tried to shore up its reasonableness report with lengthy redirect. (See Transcript, pp. 47-95.)

As the applicant in this proceeding, Sierra bears the burden of proof and must submit a complete and persuasive showing to the Commission. Undeniably, Sierra's prepared showing and testimony at hearing were lacking. Its spotty presentation hampered staff review of the application, delayed the processing of the application beyond the revision date, and leaves the Commission without the clear and full analysis asked for in D.93374.

As a result of the incomplete record developed by Sierra some issues are divided against it simply because it has not met its burden of proof.

The main controversy between Sierra and the staff concerned Sierra's take-or-pay contract with the Western Refining Co. (Wesreco) to purchase 60,000 barrels of low-sulfur fuel oil (lsfo) each month.[2/]

1/ Witness Montgomery revised the report's totals of energy output generated by oil and natural gas in the review period, changed the report's record of requests to Wesreco to sell oil, and adjusted the boiler efficiency differential between natural gas and oil. (Transcript, pp. 4-5, 36-39, 99-100.)

2/ Sierra has a five-year take-or-pay contract with Wesreco which terminates in May 1984. Sierra has an option under the contract to request Wesreco to seek other purchasers of the lsfo which otherwise would be delivered to Sierra.

The issue focuses on whether Sierra could have burned less oil during the record period when average gas prices were lower than average oil prices. Under the Wesreco contract Sierra had contracted for 720,000 barrels of lsfo during the record period. Of this amount, Sierra requested that 570,000 barrels be sold to others because its storage capacity was already full. Wesreco was able to sell 413,812 barrels, and delivered the rest to Sierra pursuant to the contract. Staff questions why Sierra did not request that the entire contracted-for amount be sold to others when cheaper natural gas was available.

Sierra asserts that the Wesreco contract provided a reliable source of lsfo during the record period which was necessary because of Sierra's limited oil storage capacity. The staff contends that Sierra should have renegotiated the Wesreco contract since cheaper natural gas was available to Sierra throughout the record period. The cost of using gas during the record period was less than the cost of the residual oil mix Sierra burns even though natural gas does not have the same turbine combustion efficiency that Sierra obtains from burning oil. Nonetheless, Sierra continued to burn oil because Wesreco occasionally was unable to sell the oil to third parties, and Sierra lacked sufficient storage capacity to hold the oil. Sierra never attempted to renegotiate the Wesreco contract or to sell or exchange oil by itself.

The staff maintains that Sierra should have renegotiated the Wesreco contract to reduce the monthly take or to include an underlift provision. Alternatively, the staff contends Sierra could have tried to sell or exchange the lsfo itself rather than relying solely upon Wesreco to sell the oil.

However, the staff also determined that if Sierra had burned natural gas rather than oil during the record period, the potential savings would have been offset by the cost of disposing of the excess oil. (The staff assumed a disposal cost to Sierra of $3.14 a barrel.) Thus, while the staff criticizes Sierra's procurement strategy, it does not recommend any dollar adjustment to the balancing account.

We agree with our staff that Sierra has not undertaken what appear to be reasonable steps to reduce its oil obligations when cheaper fuels are available. While Sierra may not succeed in renegotiating its Wesreco contract or in selling lsfo to third parties, we expect Sierra to vigorously explore these alternatives to burning lsfo if natural gas remains less expensive than Sierra's residual oil mix. At the next annual reasonableness review, Sierra should demonstrate its efforts in this area.

Apart from the Wesreco contract, staff questioned Sierra's policy of limiting purchased power to 60% of its system load. The staff again asserted that Sierra failed to provide a detailed analysis showing why the 60% limit is appropriate. In response, Sierra provided as a late-filed exhibit an analysis by its consultant, Stone & Webster, justifying the 60% limit. In essence, the 60% limit is based on the vulnerability of Sierra's system to transmission line loss. Since the staff did not comment on the merits of this exhibit in its brief, we assume that the Stone & Webster analysis adequately addressed the staff's concerns. We would like a more thorough analysis on this point in Sierra's next annual review proceeding.

B. AER - Forecast of Energy Mix

The AER is based upon Sierra's fuel and purchased power costs plus the carrying costs of fuel oil in inventory for the forecast period February 1982 through January 1983. The AER is derived by adding 2% of the fuel and purchased power costs to the carrying costs of fuel oil in inventory and then dividing the sum by forecasted sales. Sierra and the staff agree on the carrying costs of fuel oil in inventory for the forecast period but disagree on the availability of economy energy purchases, the appropriate capacity factor for Sierra's Valmy coal plant, and the natural gas burn in the forecast period.

1. Economy Energy

Sierra did not include any economy energy purchases in its forecast because in its opinion such purchases are difficult to predict. The staff agreed that economy purchases are hard to predict but included 75% of the economy power purchased by Sierra in the twelve months ended January 31, 1982 in its forecast. The staff observes that Sierra's ability to purchase economy power is enhanced by the completion of a 345 kV intertie with Idaho Power Company (IPC) in mid-1980. During the twelve-month period ending September 1981, Sierra purchased more than 10% of its total output from Utah Power and Light and IPC.

We are convinced that economy energy purchases should be included in the forecast period. Although the staff lowered its estimate to 75% of Sierra's recorded level of economy purchases, we will include 100% of the recorded level in the forecast period. Recognition of the entire recorded amount is reasonable as Sierra has the same capability to buy economy power as well as a priority on surplus power from IPC's share of the Valmy plant. Our inclusion of economy energy purchases in the AER calculation here is consistent with our treatment of economy energy purchases for Southern California Edison Company and San Diego Gas & Electric Company.

2. Capacity Factor

Sierra predicts an 80% capacity factor at its coal-fired generation facility in Valmy, Nevada. The staff used a 66% capacity factor after reviewing performance standards in a California Energy Commission staff paper on coal power plants in California.

Sierra correctly points out that the study relied upon by the staff analyzes California power plants which operate under more stringent air quality regulations. In addition, Sierra's witness testified that since the Valmy facility is the company's lowest cost firm source, the plant will be base load and will be operated at full capacity as much as possible. A base load plant like Valmy is expected to achieve a higher capacity factor than a peaking coal plant whose output may be intentionally curtailed.

We agree that the staff's reduction of the Valmy plant's capacity factor is based on circumstances not directly applicable to the Valmy plant. Accordingly, we will adopt Sierra's figure to calculate the AER as well as the ECAC rate.

3. Natural Gas Burn

Sierra gets its natural gas from the Southwest Gas Corporation (SWG). SWG has indicated that supplies for the forecast period will be the same as supplies tendered during the record period, or approximately 29 million Mcf. During the record period, Sierra accepted 60% of the available natural gas. However, Sierra predicts that it will burn 30% less than the recorded amount during the forecast period.

The staff assumed a natural gas burn similar to the record period, adjusted to reflect additonal coal generation and economy energy purchases. The staff contends that its forecast yields the "least-cost energy mix consistent with best management of resources" and gives Sierra an incentive to reduce its use of lsfo. We agree with the staff on this matter and will adopt its predicted natural gas burn, adjusted for coal generation using Sierra's capacity factor, as discussed earlier. Sierra has not persuaded us that it cannot alter or lower its lsfo purchases from Wesreco, and we find that an AER incentive to reduce its use of lsfo is warranted.

To summarize, we will calculate an AER using 100% of Sierra's recorded economy energy purchases for the year ended January 31, 1982, Sierra's capacity factor of approximately 80% for its Valmy coal plant, and the staff's natural gas burn, adjusted for Sierra's predicted coal generation and its recorded economy energy purchases. The components of the AER calculation are set forth on Table 1.

Table 1

Annual Energy Rate (AER)

Coal	$ 14,590,115
Residual oil	2,499,441
Natural gas	59,465,397
Diesel oil	38,494
Purchased power	80,937,080
Total fuel and purchased power costs	$ 157,530,527
2% portion recoverable in AER	$ 3,150,610
.0083 franchise & uncollectibles factor	26,150
Fuel oil inventory carrying charges	1,277,183
Total revenue requirement	$ 4,453,943
Total system sales (mWh)	3,745,512
AER in mills per kWh	1.19

C. ECAC Rate

The ECAC rate is based on 98% of Sierra's fuel and purchased power costs forecast for the period February through May 1982. As with the AER the only issue concerned the appropriate energy mix for the forecast period. Our calculation of the ECAC rate will conform to the assumptions used to derive the AER, i.e. economy energy, coal generation, natural gas burn. The derivation of the ECAC average rate is shown on Table 2.

Table 2

Energy Cost Adjustment Clause (ECAC)
For a Forecast Period of February - May 1982

Total fuel and purchased power costs	$ 45,433,602
98% portion recoverable in ECAC	44,524,929
Sales for forecast period (mWh)	1,229,152
Fuel and purchased power rate in mills per kWh	36.22
Balancing rate in mills per kWh	1.00
Total adjustment rate in mills per kWh	37.22
.0083 franchise & uncollectibles factor	.31
ECAC rate in mills per kWh	37.53

Sierra and staff agreed that a balancing rate of 1.00 m/kWh is appropriate to amortize the undercollection of $155,443 over a four-month period. In addition, we will adopt the staff auditor's recommendation that the balance in the Tax Cost Adjustment Clause account shall be transferred to the ECAC account. Although this transfer could alter the balancing rate, we will not adjust the calculated 1.00 m/kWh rate at this time as the amount is de minimis.

Findings of Fact

1. By A.61119 Sierra requests authority to decrease its ECAC billing factor to 40.87 m/kWh and its AER to 1.25 m/kWh.

2. Sierra's annual reasonableness report was not timely filed and the late-filed report lacked sufficient information for thorough staff review.

3. Sierra changed significant portions of its reasonableness report during hearing.

4. During the record period average gas costs were lower than average oil costs.

5. Sierra has not adequately explored alternatives to burning lsfo purchased from Wesreco under a take-or-pay contract.

6. Sierra has been able to purchase significant quantities of economy energy in the past and may continue to do so in the forecast period.

7. Inclusion of economy energy in the forecast period at Sierra's recorded level is reasonable since Sierra has the same capability and opportunity to purchase surplus power that it had in the record period.

8. Sierra's coal plant at Valmy, Nevada, is a base load plant and should achieve the capacity factor predicted by Sierra.

9. SWG, Sierra's primary natural gas supplier, expects to offer similar quantities of natural gas to Sierra during the forecast period that it has supplied in the recent past; therefore, use of Sierra's recorded natural gas burn is reasonable for the forecast period.

10. The ECAC and AER calculations shown on Tables 1 and 2 incorporate our above-mentioned findings and should be adopted.

11. Since it is well past the ECAC tariff revision date of February 1, this order should become effective today.

Conclusions of Law

1. The decreases in rates and charges authorized by this order are justified and reasonable.

2. Sierra should be authorized to change its rates as set forth in the following order.

O R D E R

IT IS ORDERED that:

1. On or after the effective date of this order Sierra Pacific Power Company (Sierra) is authorized to file with this Commission, in conformance with the provisions of General Order 96-A, revised tariff schedules reflecting the following charges:

a. Energy Cost Adjustment Clause (ECAC) fuel and purchased power rate of $.03653/kWh and balancing rate of $.001/kWh.

b. Annual Energy Rate of $.00119/kWh.

c. Transfer of the balance in the Tax Cost Adjustment Clause to the ECAC account.

The revenue decreases shall be spread among the customer classes as set forth in Appendix A. The revised tariff schedules shall be effective not less than 5 days after filing.

2. At the next annual reasonableness review, Sierra shall demonstrate its efforts to reduce its oil burn when less expensive natural gas is available to it.

This order is effective today.

Dated MAY 4 1982, at San Francisco, California.

JOHN E. BRYSON
President
RICHARD D. GRAVELLE
LEONARD M. GRIMES, JR.
VICTOR CALVO
PRISCILLA C. GREW
Commissioners

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

Joseph E. Bodovitz, Executive Director

APPENDIX A[1]/

	ECAC Rates (m/kWh)	
Residential	DS Lifeline	15.55
	D1 & Dm-1 Lifeline	17.28
	In excess of Lifeline	47.71
	In excess of 5,000 kWh	65.00
Nonresidential		37.53

1/ The rate design adopted in this decision conforms with the guidelines specified in Sierra's last general rate case, D.93371, issued November 13, 1981.

(END OF APPENDIX A)

witness, Wilbur Montgomery, revised significant portions of the report during hearing[1/] and thereby attempted to discredit staff analysis based upon the report. Apparently, even Sierra realized there were substantial gaps and inconsistencies in its presentation and tried to shore up its reasonableness report with lengthy redirect. (See Transcript, pp. 47-95.)

As the applicant in this proceeding, Sierra bears the burden of proof and must submit a complete and persuasive showing to the Commission. ~~Needless to say,~~ Unavoidably Sierra's prepared showing and testimony at hearing were lacking. Its spotty presentation hampered staff review of the application, delayed the processing of the application beyond the revision date, and leaves the Commission without the clear and full analysis asked for in D.93374.

SS

As a result, we are inclined to interpret the evidence and testimony offered in this proceeding in a manner least favorable to Sierra.

SS

The main controversy between Sierra and the staff concerned Sierra's take-or-pay contract with the Western Refining Co. (Wesreco) to purchase 60,000 barrels of low-sulfur fuel oil (lsfo) each month.[2/]

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We agree with our staff that Sierra has not undertaken what appear to be reasonable steps to reduce its oil obligations when cheaper fuels are available. While Sierra may not succeed in renegotiating its Wesreco contract or in selling lsfo to third parties, we expect Sierra to vigorously explore these alternatives to burning lsfo if natural gas remains less expensive than Sierra's residual oil mix. At the next annual reasonableness review, Sierra should demonstrate its efforts in this area.

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