ALJ/vdl *

Decision 83 04 065 April 20, 1983

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 82-12-01 (Filed December 1, 1982) |

James D. Salo, Attorney at Law, for Sierra Pacific Power Company, applicant.
Freda E. Abbott, Attorney at Law, and Jeffrey O'Donnell, for the Commission staff.

# O P I N I O N

## Summary

Sierra Pacific Power Company (Sierra) is authorized to decrease its Energy Cost Adjustment Clause (ECAC) Billing Factors (ECACBF) from an average 39.41 mills per kilowatt-hour (kWh) to 29.54 mills. The fuel and purchased power offset rate decreases from an average of 45.23 mills to 43.25 mills and balancing account offset rate decreased from (5.82) mills to (13.71) mills (Red Figure). Sierra is authorized to increase its Annual Energy Rate (AER) from 1.19 mills per kWh to 1.34 mills per kWh. For the four months ended May 31, 1983, the effect of the net rate decrease is $1,428,000, .934¢ per kWh, or 12.6% of total revenue.

Oil and gas costs represent only 22% of Sierra's fuel and purchased power cost for the four-month forecast period, and the oil- and gas-produced energy has been priced at natural gas prices, estimated to be less than oil in the forecast period. Purchased energy represents 70% of the fuel and purchased power cost, with economy purchases being 16% of the purchased power cost.

The annual reasonableness report was reviewed extensively and supports the reasonableness of Sierra's fuel and purchased power

cost. However, Sierra is being required to undertake and file a study of the replacement cost criterion for choice of boiler fuel.

Background

Under the ECAC procedures prescribed in Decision (D.) 92426, Sierra may request ECAC Billing Factor changes three times per 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.[1]

In Application (A.) 82-12-01 filed December 1, 1982, Sierra submitted its annual reasonableness report of the cost of fuel and purchased power for the record period October 1, 1981 to September 30, 1982. Sierra proposed a $1,485,000 or 10.09 mills per kWh decrease in its ECACBF over the four months ending May 31, 1983, and a $13,000 or .03 mills per kWh increase in its AER over 12 months ending January 31, 1984. Sierra states that proposed reduction in ECACBF will refund $2,153,000 from its balancing account over the four-month period.

Hearing

A duly noticed public hearing was held before Administrative Law Judge (ALJ) J. J. Doran in San Francisco on February 7, 8, and 9, 1982, and the matter was then submitted. Sierra presented three witnesses who testified to five exhibits. The Commission staff (staff) presented four witnesses and three exhibits. There was no other participation.

Sierra's Wilbur Montgomery, manager of power production, testified on Sierra's application and the annual reasonableness report for the record period. Frank Knutson, superintendent of energy control, testified about the power pool aspects in the annual

---

[1] D.83-02-076 revised the ECAC filing schedule to twice a year with revision dates for Sierra of January 1 and July 1. The next reasonableness review will occur in the January 1 filing.

reasonableness report. Patricia Franklin, rate analyst, testified about the rate change proposals in the application.

The staff's C. B. Brooker, financial examiner, testified about the audit report in connection with the application and the staff-recommended rates. Jeffrey O'Donnell, project manager, testified about the criteria on whether to burn oil or natural gas and the forced burn of oil. David Wong, utilities engineer, testified about the ECAC and AER rate adjustment. Larry Hirsch, utilities engineer, presented prepared testimony on rate spread.

Issues

The proceeding raises the following issues:

1. Annual reasonableness review of record period data.
2. Balancing account level and rate.
3. Fuel and purchased power cost offset rate.
4. AER.
5. Rate spread.

Annual Reasonableness Review

Sierra's witness on the reasonableness of operations during the record period was extensively cross-examined by the staff. Several important changes have taken place in Sierra's system during the past year.

Sierra allows its dispatchers to import energy up to 60% of system load, or 330 MW. This limitation is imposed to prevent "cascading outages" if Sierra were to lose all interconnections to other utilities. The 330 MW is based upon the loss of Idaho's single 345 kilovolt interconnection at Midpoint, Idaho. Sierra's import policy is not unreasonable.

The record shows that Valmy Coal Unit 1 (Valmy) went into commercial operation on December 11, 1981, and that it is Sierra's most economic generation resource except for small hydroelectric plants. Since inaugurating Valmy, Sierra has been able to reduce

operating levels on its oil/natural gas units. On some days Sierra has been able to increase its purchased power above its import limit by purchasing energy from Idaho Power Company's (Idaho) share of the plant output (Idaho and Sierra are co-owners of Valmy). Sierra has also joined the Northwest Power Pool and Intercompany Power Pool, increasing access to economy energy purchases and shared reserves.

Sierra also explained organizational changes which had strengthened its power production department and had improved its production and dispatching efficiency. These changes respond to system changes created by Valmy, and by powerpooling.

Sierra made a management decision to reduce its residual oil to a 10-day level of storage after Valmy came into operation. The staff did not object to this decision. Sierra reduced its oil storage by forced burn during December 1981 through February 1982. During the forced burn period, the replacement cost of residual oil was less than the cost of natural gas at both Ft. Churchill and Tracy steam-electric plants. The average inventory cost of the oil burned at the Ft. Churchill plant was greater than the natural gas cost. Oil inventory cost was less than gas at the Tracy plant and also at both plants combined. Sierra states it considers the cost of oil in inventory and the replacement cost of oil when considering whether to burn residual oil or natural gas. Further, it keeps its oil inventory by each plant (two residual oil and eight diesel) rather than systemwide inventories for residual oil and diesel oil. The issue of inventory method and oil burn are discussed under balancing account.

During the record period, Sierra purchased fuel under contract and on the spot market in order to meet its thermal requirements for electric generation. Natural gas was purchased under the July 1, 1969 contract with Southwest Gas Corporation for use at the Tracy and Ft. Churchill steam-electric plants and the Winnemucca Gas Turbine. Coal was purchased under the May 16, 1978

agreement with Southern Utah Fuel Company for use at the Valmy plant.

The only residual oil purchased during the record period was high sulphur fuel oil from Nevada Refining Company, on a spot basis. For residual oil, written quotations were requested of the three spot market suppliers who could reasonably be expected to deliver oil to Sierra's generating plants at competitive prices: Golden Gate Petroleum Company, Nevada Refining Company, and Pioneer Trading Company.

No oil has been purchased from Western Refining Company (WESRECO) since June 1981 and no penalties were incurred by Sierra. WESRECO had been Sierra's only residual oil contract supplier. Sierra was informed in July 1982 that WESRECO had liquidated and was in receivership. Sierra sent a letter to the receiver for WESRECO which terminated the contract as of July 21, 1982.

Balancing Account Level and Rate

Sierra first submitted recorded balancing account data as of October 31, 1982. After a question by staff at hearing, Sierra updated the recorded data to January 1, 1983 and also carried that data through to a revised estimate as of February 1, 1983.

The staff's financial witness recommended two adjustments to Sierra's balancing account in his audit report exhibit:

1. Used and recommended an average systemwide inventory cost of oil (residual and diesel separately) rather than the historical average inventory cost per plant. The effect of this adjustment increases the balancing account overcollection as of February 1 by $64,930 plus interest on a systemwide basis. The California jurisdictional allocation is $7,792 plus interest.[2]

2. Added $23,926 systemwide plus interest for the forced burn of oil to reduce storage to 10 days during December-February 1982 when natural gas was available. The incremental

[2] Not quantified.

> cost of burning fuel oil in place of gas is $23,926. The California jurisdictional allocation is $2,871 plus interest.[3] Both adjustments would increase the balancing account overcollections.

The above two adjustments are the only methodological differences between Sierra and the staff in calculating the balancing account overcollection, the balancing rate part of the ECACBF, and the fuel oil inventory billing factor part of the AER.

The staff's financial examiner based his recommendation to use a systemwide average inventory cost on his interpretation of D.92496 and D.85731. He relied upon language in D.92496 (dated December 5, 1980 in Order Instituting Investigation 56) which quoted a sentence in D.85731 (dated April 17, 1976 in Case (C.) 9886). The sentence reads:

> "During the last month prior to the time for energy clause application, the cost of fuel oil shall be computed on a weighted average cost basis of the inventory then existing; all other energy sources shall use the latest tariff, contract, or delivered price figure for the cost, for the purposes of the energy clause." (79 CPUC 758, 768.)

The witness also said his recommendation would reduce the number of inventory averages from 10 (two residual and eight diesel) to two (one residual and one diesel).

Sierra's rate analyst rebutted the staff witness'recommendation of a systemwide inventory method. The witness stated that historically Sierra has kept separate fuel oil inventories for each steam and diesel plant. The witness stated that since 85% of its sales is in the Nevada jurisdiction, Sierra generally follows the Nevada Public Service Commission's recommendations for financial reporting and accounting purposes. The witness stated that in a discussion with the Nevada Commission staff about this inventory

---

[3] Not quantified.

recommendation, the Nevada staff believed that Sierra's present accounting practices for inventory were appropriate, and that it would not recommend any change. If our staff's recommendation were to be adopted, it would require footnotes in Sierra's financial reports, and more calculations in making cogeneration offers. Sierra would still have to keep records on a plant-by-plant basis because of the Nevada Commission requirements; this duplicative reporting requirement would increase costs.

The part of the 1976 decision relied upon by the staff financial examiner concerned development of a standard for assessing energy costs on an end-of-period basis for use in ECAC filings and not for developing an inventory pricing method. The historical plant-by-plant inventory method used by Sierra is reasonable.

The staff financial examiner recommended an adjustment because of Sierra's forced burn to reduce oil supply, based upon the incremental cost of burning 40,921 barrels of oil in place of gas. That quantity of oil was burned to reduce the supply during the three-month period; gas was available and could have been burned instead. The witness stated that since the inventory storage levels before and after the forced burn were greater than at the last setting of the inventory level, the savings in carrying charges only benefited the shareholders, and should not be recouped through the ECAC balancing account. The witness cited D.82-12-109 (dated December 22, 1982) as supporting his adjustment. The part of the decision relied upon dealt with fuel oil being sold at one price and purchased back at another price. The opinion stated that "Since the benefits went to shareholders, the shareholders should also bear the expense." (Mimeo, p. 12.) The witness stated no opinion and deferred to another staff witness the question as to whether the burn was or was not imprudent.

The project manager from the Utilities Division testified that the purpose of the financial examiner's disallowance for the forced burn is to penalize the utility for making the decision to burn oil solely to reduce inventory. The project manager recommended that if reducing inventory was only one of the considerations and the replacement cost was also considered, then the decision was reasonable and no penalty is called for. He stated that the amount of the penalty is not intended to represent the actual effect of the forced burn on the ratepayers. He believes that the actual effect on the ratepayers would be a wash.

He further testified that neither staff witness had any objection to the use of the replacement cost criterion for the choice of oil or gas as a boiler fuel for the record period or the forecast period. When questioned about whether or not the forced burn was imprudent, the staff project manager stated that the financial examiner's impression was that the only criterion used to make the forced burn was that Sierra wanted to reduce inventory. If that impression is correct, the witness continued, then the forced burn was an imprudent decision. He was not able to quantify the effect. He noted, however, that in this particular case Sierra's forced burn decision imposed no net financial impacts on the ratepayers.

Sierra's manager of power production testified that, when Sierra was in the process of reducing its residual oil inventory, the price of oil in inventory was lower than the price of natural gas at the Tracy plant. The witness stated that Sierra did not intend to replace the oil burned at Tracy, but that cost of replacement oil for Tracy would have been higher than the price of gas.

Sierra's witness also testified in a complex, qualified answer that the oil burned at the Ft. Churchill plant to reduce inventory was burned at a lower cost than natural gas. In reaching this conclusion, he explained that the 0.4% sulfur level of fuel oil burned at Sierra's thermal plants is reached by blending high and low

sulfur oil. At the beginning of the record period, Sierra's inventory consisted primarily of low sulfur oil, which is the higher priced of the two components. Sierra's forced burn was accomplished by buying low-cost high sulfur oil, and mixing it with low sulfur oil from inventory for burning. The witness stated that on a mixed basis, the oil burned was at a lower cost than gas. However, he accepted that 40,921 barrels of residual oil was burned to reduce inventory when gas was available.

The Utilities Division's witness stated that the proper way to decide whether to use oil or gas is through a cost-benefit analysis using the ratepayers' point of view. He requested that Sierra be required to perform a cost-benefit analysis of its replacement cost criterion under various assumptions about oil inventory and replacement costs and gas costs. The assumptions could include increasing oil costs, decreasing oil costs, increasing gas prices, decreasing gas prices, and other plausible occurrences. The staff did not take issue with the reduced level of oil in inventory, and in fact adopted it.

We will not make the proposed adjustment for forced burn to reduce oil inventory when gas was available. There is evidence that the ratepayers suffered no financial hardship as a result of Sierra's forced burn decision. We note in this regard the staff financial examiner's statement that any appearance of additional expenses appears only because of Sierra's plant-specific inventory accounting; use of a systemwide inventory accounting method would produce a price for forced burn oil lower than that of available gas. (RT. 200.)

However, we will require Sierra to file a study of its replacement cost criterion for selection of oil or gas for boiler fuel, as recommended by our staff. The study should test the costs and benefits under plausible combinations of the following:

1. Oil inventory costs greater or less than oil replacement costs.

2. Oil replacement costs increasing, decreasing, or constant.
3. Gas replacement costs increasing, decreasing, or constant.
4. Oil replacement costs greater or less than gas costs.

This study should reduce the problems of retroactive evaluations of the choice of fuel.

In its original exhibit, Sierra estimated its balancing account overcollection to be $2,153,162 as of February 1, 1983. The staff audit report estimate was $2,243,832. The difference is $90,670. The staff's two proposed adjustments total $10,663 plus interest. Under cross-examination, the staff witness testified that the above California jurisdictional figures should be used as the adjustment to the balancing account in place of the systemwide figures he used in his tables of calculation. Otherwise, his balancing account balance would have been the same as Sierra's.

Sierra updated the recorded balancing account from October 31, 1982 to January 1, 1983, in Exhibit 7 on the last day of hearing, producing a revised estimate of $2,095,463. Upon receipt of Exhibit 7, the ALJ stated "...if the staff finds something wrong with it, you will immediately write a letter to both of us, and the applicant will get a chance to reply to it." No staff letter has been received.

Sierra's fuel and purchased power costs in the record period were reasonable. We find the balancing account overcollection to be $2,095,463 as of February 1, 1983. Based upon the Sierra/staff California jurisdictional sales estimate of 152,868 MWh for the four months ended May 31, 1983, the average balancing rate to be included in ECAC is (13.71) mills per kWh. This rate is reasonable, and will refund the balancing account overcollection to California customers over the four-month period.

Fuel and Purchased Power Cost Offset Rate

Sierra, through Exhibit 7, accepted the staff's calculation of the average offset rate to be included in ECAC, of 43.01 mills per kWh before franchise fees and uncollectibles (F&U), and 43.25 mills after F&U, for the four months ending May 31, 1983. This is based upon $15,280,000 total fuel costs, $36,622,000 purchased power costs, an F&U factor of 1.0083, and systemwide sales of 1,184,832 MWh. These rates are reasonable. The average ECACBF, the sum of offset rate and the balancing rate, is 29.54 mills per kWh and is reasonable.

AER

The staff recommended an AER of 1.22 mills per kWh. At the hearing, Sierra revised its requested AER from 1.22 mills to 1.21.[4] The AER is the sum of the energy billing factor and the fuel inventory billing factor. It is based upon estimates for the 12 months ending January 31, 1984. After the staff revised its gas cost for two months to reflect an actual price change, Sierra accepted the staff's estimated fuel and purchased power expense of $158,023,000. Relating the 2% of this expense that is recoverable through base rates to the estimated systemwide sales of 3,593,988 MWh yields an energy billing factor of .89 mills per kWh, including the F&U factor, which is reasonable.

The only remaining difference between the parties is the calculation of the fuel oil inventory billing factor. Sierra requested 0.32 mills per kWh and the staff recommended 0.33 mills. The difference results from the staff proposed inventory method adjustment and its proposed forced oil burn adjustment. These issues have been discussed above and will not be repeated, except to state how the issues affect the factor. Sierra computed $38.07 per barrel of diesel oil compared to the staff's $38.05, and $25.94 per barrel of residual oil compared to $26.21 for the staff. Data were not placed into the record to quantify each issue separately. Sierra and

[4] We corrected the 1.20 mills record figure to include the F&U factor, inadvertently omitted.

the staff used identical figures for all other items in calculating the factor.

We have already decided not to make the proposed adjustments for forced oil burn to reduce oil in storage and for the historical plant-by-plant inventory method. Therefore, we find Sierra's costs per barrel to be reasonable. The other items in calculating the factor are as follows:

| | |
|---|---|
| Diesel oil in inventory | 10,250 bbls. |
| Residual oil in inventory | 226,000 |
| Inventory value | $6,252,658 |
| Authorized rate of return | 12.57%* |
| Carrying cost of oil | $785,959 |
| Net-to-gross factor | 2.0747* |
| Revenue requirement | $1,630,629 |
| Systemwide sales | 3,593,988 MWh |
| Fuel oil inventory billing factor | .45 mills per kWh |

*We have applied the rate of return and net-to-gross factor adopted in our decision issued in A.82-08-43.

A billing factor of .45 mills per kWh and an AER of 1.34 mills per kWh are reasonable. The effect of this change increases revenues by $23,000 for the four-month forecast, and $63,000 for the 12-month forecast.

Rate Spread

In this proceeding, Sierra proposed a rate design maintaining the same spread between the first and second tiers of the residential rate (the nonlifeline revenues will be equal to 1.5 times the lifeline revenues inclusive of the customer charge), maintaining the same ECACBF for the third residential tier, and applying the change in the average ECACBF to nonresidential rates. The staff agreed with the rate spread.

In A.82-08-43, Sierra's general rate application, Sierra proposed to continue a three-tier rate design, but our staff recommended the adoption of a two-tier residential rate structure. In our decision in A.82-08-43, we are adopting a three-tier residential rate spread.

We will fold the average ECACBF and AER found reasonable in this proceeding into the rates being authorized in A.82-08-43 in order to carry out the adopted rate spread.

The adopted average offset rate is $.04325 per kWh, the balancing rate is $(.01371), and total ECACBF is $.02954 per kWh. The adopted energy billing factor is $.00089 per kWh, oil inventory billing factor is $.00045, and the AER is $.00134.

The effect of the above net decrease in rates for the four months ending May 31, 1983 is $1,428,000, .934¢ per kWh, or 12.6% of total revenue.

Findings of Fact

1. Sierra's annual reasonableness report supports the reasonableness of Sierra's fuel and purchased power cost and is reasonable.

2. Sierra's decision to burn residual oil or natural gas is based on comparing the price of oil, the lower of replacement cost or inventory cost, with the price of natural gas. Additional data on the fuel selection criterion would be useful.

3. Sierra's oil burn during the record period, when natural gas was available, including reducing residual oil in inventory was cheaper than the cost of natural gas and was reasonable.

4. Sierra has used the average inventory cost at each plant under ECAC in financial reporting, and in reporting to the Nevada Commission. Such method is reasonable.

5. Sierra, by its application, originally requested authority to decrease its ECACBF to 29.32 mills per kWh and to increase its AER to 1.22 mills per kWh.

6. The staff originally recommended that Sierra's ECACBF be reduced to 28.57 mills per kWh and its AER increased to 1.22 mills per kWh.

7. During the hearing, Sierra revised its estimated balancing account as of February 1, 1983 to $2,095,463 by updating the recorded balancing account from October 31, 1982 to January 1, 1983. This change is reasonable.

8. During the hearing, Sierra agreed with the staff's adjusted offset rate of 43.25 mills per kWh, based upon fuel and purchased power costs of $52,002,000, which is reasonable.

9. During the hearing, Sierra requested a balancing rate of (13.71) mills versus the (14.68) staff proposal. Sierra's request, based upon an overcollection of $2,095,463 as of February 1, 1983, is reasonable. (Red Figure.)

10. Sierra's requested total ECAC rate at the hearing was 29.54 mills per kWh, versus the staff's 28.57. Sierra's request, the sum of the above offset and balancing rates, is reasonable.

11. During the hearing, Sierra requested an AER of 1.21 mills per kWh versus the staff's 1.22. Sierra's request, adjusted to 1.34 mills to reflect the new rate of return and net-to-gross factor authorized in our decision in A.82-08-43, is reasonable.

12. An oil inventory billing factor of .45 mills per kWH, based upon the estimated oil in inventory and adjusted to reflect the rate of return adopted in our decision in A.82-08-43, and an energy billing factor of .89 mills per kWh, based upon $158,023,000 estimated fuel and purchased power expenses, added to yield the AER are reasonable.

13. Rate spread is deferred to our decision in A.82-08-43, Sierra's general rate proceeding.

14. Since it is past the ECAC tariff revision date of February 1, 1983 this order should become effective today.

Conclusions of Law

1. The changes in rates and charges authorized by this decision are just and reasonable; the present rates and charges insofar as they differ from those in this decision, are for the future, unjust and unreasonable.

2. Sierra should be required to file by August 1, 1983 a study of its replacement cost criterion for selection of oil or natural gas as boiler fuel, substantially as specified in our opinion.

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 General Order 96-A, revised tariff schedules reflecting the following changes:

a. Decreasing its average Energy Cost Adjustment Clause Billing Factors (ECACBF) to:

| Average Rate | Dollars per kWh |
|---|---|
| Offset Rate | $.04325 |
| Balancing Rate | (.01371) |
| Total ECACBF | .02954 |

(Red Figure)

b. Increasing its Annual Energy Rate (AER) to $.00134 per kWh.

2. The revised tariff schedules authorized to be filed are those attached to our decision in Application 82-08-43, Sierra's general rate application.

3. Sierra shall file with the Commission's Docket Office by August 1, 1983, an original and 12 copies of a study of its replacement cost criterion for selection of oil or natural gas as boiler fuel, substantially as specified in our opinion.

This order is effective today.

Dated APR 20 1983, at San Francisco, California.

LEONARD M. GRIMES, JR.
President
VICTOR CALVO
DONALD VIAL
Commissioners

Commissioner Priscilla C. Grew, being necessarily absent, did not participate in the disposition of this proceeding.

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

Joseph E. Bodovitz, Executive Director

Decision 83 04 065 APR 20 1983

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 82-12-01 (Filed December 1, 1982) |

James D. Salo, Attorney at Law, for Sierra Pacific Power Company, applicant.
Freda E. Abbott, Attorney at Law, and Jeffrey O'Donnell, for the Commission staff.

# O P I N I O N

## Summary

Sierra Pacific Power Company (Sierra) is authorized to decrease its Energy Cost Adjustment Clause (ECAC) Billing Factors (ECACBF) from an average 39.41 mills per kilowatt-hour (kWh) to 29.54 mills. The fuel and purchased power offset rate decreases from an average of 45.23 mills to 43.25 mills and balancing account offset rate decreased from (5.82) mills to (13.71) mills (Red Figure). Sierra is authorized to increase its Annual Energy Rate (AER) from 1.19 mills per kWh to 1.3 mills per kWh. For the four months ended May 31, 1983, the effect of the net rate decrease is $1,427,000, .93¢ per kWh, or 12.55% of total revenue.

Oil and gas costs represent only 22% of Sierra's fuel and purchased power cost for the four-month forecast period, and the oil- and gas-produced energy has been priced at natural gas prices, estimated to be less than oil in the forecast period. Purchased energy represents 70% of the fuel and purchased power cost, with economy purchases being 16% of the purchased power cost.

The annual reasonableness report was reviewed extensively and supports the reasonableness of Sierra's fuel and purchased power

recommendation, the Nevada staff believed that Sierra's present accounting practices for inventory were appropriate, and that it would not recommend any change. If our staff's recommendation were to be adopted, it would require footnotes in Sierra's financial reports, and more calculations in making cogeneration offers. Sierra would still have to keep records on a plant-by-plant basis because of the Nevada Commission requirements; this duplicative reporting requirement would increase costs.

The decision that the staff cited to support its recommendation was issued in 1976, seven years ago. However, all oil has flowed on the basis of the historical inventory method in our issued ECAC decisions. The part of the 1976 decision relied upon concerned developing a standard for energy costs on an end-of-period basis for use in the energy clause in ECAC filings and not for developing an inventory pricing method. The historical plant-by-plant inventory method used by Sierra is reasonable.

The staff financial examiner recommended an adjustment because of Sierra's forced burn to reduce oil supply, based upon the incremental cost of burning 40,921 barrels of oil in place of gas. That quantity of oil was burned to reduce the supply during the three-month period; gas was available and could have been burned instead. The witness stated that since the inventory storage levels before and after the forced burn were greater than at the last setting of the inventory level, the savings in carrying charges only benefited the shareholders, and should not be recouped through the ECAC balancing account. The witness cited D.82-12-109 (dated December 22, 1982) as supporting his adjustment. The part of the decision relied upon dealt with fuel oil being sold at one price and purchased back at another price. The opinion stated that "Since the benefits went to shareholders, the shareholders should also bear the expense." (Mimeo, p. 12.) The witness stated no opinion and deferred to another staff witness the question as to whether the burn was or was not imprudent.

2. Oil replacement costs increasing, decreasing, or constant.
3. Gas replacement costs increasing, decreasing, or constant.
4. Oil replacement costs greater or less than gas costs.

This study should ~~remove the apparent hindsight complexities and questions about~~ reduce the problems of retroactive evaluations of the choice of fuel ~~in the future~~.

In its original exhibit, Sierra estimated its balancing account overcollection to be $2,153,162 as of February 1, 1983. The staff audit report estimate was $2,243,832. The difference is $90,670. The staff's two proposed adjustments total $10,663 plus interest. Under cross-examination, the staff witness testified that the above California jurisdictional figures should be used as the adjustment to the balancing account in place of the systemwide figures he used in his tables of calculation. Otherwise, his balancing account balance would have been the same as Sierra's.

Sierra updated the recorded balancing account from October 31, 1982 to January 1, 1983, in Exhibit 7 on the last day of hearing, producing a revised estimate of $2,095,463. Upon receipt of Exhibit 7, the ALJ stated "...if the staff finds something wrong with it, you will immediately write a letter to both of us, and the applicant will get a chance to reply to it." No staff letter has been received.

Sierra's fuel and purchased power costs in the record period were reasonable. We find the balancing account overcollection to be $2,095,463 as of February 1, 1983. Based upon the Sierra/staff California jurisdictional sales estimate of 152,868 MWh for the four months ended May 31, 1983, the average balancing rate to be included in ECAC is (13.71) mills per kWh. This rate is reasonable, and will refund the balancing account overcollection to California customers over the four-month period.

the staff used identical figures for all other items in calculating the factor.

We have already decided not to make the proposed adjustments for forced oil burn to reduce oil in storage and for the historical plant-by-plant inventory method. Therefore, we find Sierra's costs per barrel to be reasonable. The other items in calculating the factor are as follows:

| | |
|---|---|
| Diesel oil in inventory | 10,250 bbls. |
| Residual oil in inventory | 226,000 |
| Inventory value | $6,252,658 |
| Authorized rate of return | ~~12.76%*~~ 12.57 |
| Carrying cost of oil | ~~$797,83~~ 785,959 |
| Net-to-gross factor | 2.0747* |
| Revenue requirement | ~~$1,655,277~~ $1,630,629 |
| Systemwide sales | 3,593,988 MWh |
| Fuel oil inventory billing factor | .45 mills per kWh |

*We have applied the rate of return and net-to-gross factor adopted in our decision issued in A.82-08-43.

A billing factor of .45 mills per kWh and an AER of 1.36 mills per kWh are reasonable. The effect of this change increases revenues by $2?,000 for the four-month forecast, and ~~$63,000~~ $163,000 for the ~~two~~ twelve-month forecast.

Rate Spread

In this proceeding, Sierra proposed a rate design maintaining the same spread between the first and second tiers of the residential rate (the nonlifeline revenues will be equal to 1.5 times the lifeline revenues inclusive of the customer charge), maintaining the same ECACBF for the third residential tier, and applying the change in the average ECACBF to nonresidential rates. The staff agreed with the rate spread.

~~However~~, In A.82-08-43, Sierra's general rate application, our staff recommended the adoption of a two-tier residential rate structure, ~~and Sierra concurred in the recommendation.~~ In our decision in A.82-08-43, we are adopting a ~~two~~-tier residential rate spread.

We will fold the average ECACBF and AER found reasonable in this proceeding into the rates being authorized in A.82-08-43 in order to carry out the adopted rate spread.

The adopted average offset rate is $.04325 per kWh, the balancing rate is $(.01371), and total ECACBF is $.02954 per kWh. The adopted energy billing factor is $.00089 per kWh, oil inventory billing factor is $.00042, and the AER is $.00134.

The effect of the above net decrease in rates for the four months ending May 31, 1983 is $1,427,000, .93¢ per kWh, or 12.5% of revenue.

Findings of Fact

1. Sierra's annual reasonableness report supports the reasonableness of Sierra's fuel and purchased power cost and is reasonable.

2. Sierra's decision to burn residual oil or natural gas is based on comparing the price of oil, the lower of replacement cost or inventory cost, with the price of natural gas. Additional data on the fuel selection criterion would be useful.

3. Sierra's oil burn during the record period, when natural gas was available, including reducing residual oil in inventory was cheaper than the cost of natural gas and was reasonable.

4. Sierra has used the average inventory cost at each plant under ECAC in financial reporting, and in reporting to the Nevada Commission. Such method is reasonable.

5. Sierra, by its application, originally requested authority to decrease its ECACBF to 29.32 mills per kWh and to increase its AER to 1.22 mills per kWh.

6. The staff originally recommended that Sierra's ECACBF be reduced to 28.57 mills per kWh and its AER increased to 1.22 mills per kWh.

7. During the hearing, Sierra revised its estimated balancing account as of February 1, 1983 to $2,095,463 by updating the recorded balancing account from October 31, 1982 to January 1, 1983. This change is reasonable.

8. During the hearing, Sierra agreed with the staff's adjusted offset rate of 43.25 mills per kWh, based upon fuel and purchased power costs of $52,002,000, which is reasonable.

9. During the hearing, Sierra requested a balancing rate of (13.71) mills versus the (14.68) staff proposal. Sierra's request, based upon an overcollection of $2,095,463 as of February 1, 1983, is reasonable. (Red Figure.)

10. Sierra's requested total ECAC rate at the hearing was 29.54 mills per kWh, versus the staff's 28.57. Sierra's request, the sum of the above offset and balancing rates, is reasonable.

11. During the hearing, Sierra requested an AER of 1.21 mills per kWh versus the staff's 1.22. Sierra's request, adjusted to 1.35 mills to reflect the new rate of return and net-to-gross factor authorized in our decision in A.82-08-43, is reasonable.

12. An oil inventory billing factor of .46 mills per kWH, based upon the estimated oil in inventory and adjusted to reflect the rate of return adopted in our decision in A.82-08-43, and an energy billing factor of .89 mills per kWh, based upon $158,023,000 estimated fuel and purchased power expenses, added to yield the AER are reasonable.

13. Rate spread is deferred to our decision in A.82-08-43, Sierra's general rate proceeding.

14. Since it is past the ECAC tariff revision date of February 1, 1983 this order should become effective today.

Conclusions of Law

1. The changes in rates and charges authorized by this decision are just and reasonable; the present rates and charges insofar as they differ from those in this decision, are for the future, unjust and unreasonable.

2. Sierra should be required to file by August 1, 1983 a study of its replacement cost criterion for selection of oil or natural gas as boiler fuel, substantially as specified in our opinion.

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 General Order 96-A, revised tariff schedules reflecting the following changes:

a. Decreasing its average Energy Cost Adjustment Clause Billing Factors (ECACBF) to:

| Average Rate | Dollars per kWh |
|---|---|
| Offset Rate | $.04325 |
| Balancing Rate | (.01371) |
| Total ECACBF | .02954 |

(Red Figure)

b. Increasing its Annual Energy Rate (AER) to $.00134 per kWh.

2. The revised tariff schedules authorized to be filed are those attached to our decision in Application 82-08-43, Sierra's general rate application.