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H-6

Decision 83 08 007 AUG 3 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 83-04-05 (Filed April 1, 1983)

James D. Salo, Attorney at Law (Nevada), for Sierra Pacific Power Company, applicant.
Richard D. Rosenberg, Attorney at Law, for Commission staff.

O P I N I O N

Statement of Facts

Sierra Pacific Power Company (Sierra Pacific), a Nevada corporation formerly known as Sierra Nevada Power Company, is the successor in interest to a Maine corporation of the same name. Along with public utility gas, electric, and water operations in Nevada, Sierra Pacific is engaged in public utility electric operations in California, the latter derivatively authorized by this Commission's Decision (D.) 68549 of February 9, 1965 in Application (A.) 47272. Its California electric operations principally are in the Lake Tahoe area where approximately 36,600 customers are served.

The Energy Cost Adjustment Clause (ECAC) is the successor procedure since 1976 to Fuel Cost Adjustment (FCA) tariff provisions first adopted in 1972 for each of the major electric utilities subject to our jurisdiction in response to a requirement for offset procedures which would permit these utilities to recover for rapid changes in their fuel costs during an inflationary period. By Commission Resolution E-1601 dated October 19, 1976, Sierra Pacific was directed to participate, and by various applications since, has implemented ECACs.

On April 1, 1983 Sierra Pacific filed this application. Under the ECAC procedure and schedule established in D.92496 dated December 5, 1980 in Order Instituting Investigation (OII) 56, this application would cover the four-month period June through September 1983.[1] At the time Sierra Pacific filed this application, however, its previous application covering the preceding four-month period to end May 31, 1983, was still pending before the Commission.[2] Therefore, in the present application Sierra Pacific, as its "present" ECACBFs, used those ECACBFs which were authorized by its penultimate ECAC proceeding (See D.82-09-067 dated September 22, 1982 in A.82-08-09). However, some factors have now changed, and the ECACBFs granted by D.82-09-067, when applied to the forthcoming June-September 1983 period, would apparently provide an over recovery of approximately $1,854,000. Accordingly, by this present application Sierra Pacific seeks to reduce its ECACBFs, so that it will decrease its ECAC revenue and amortize its June 1 balance of $2,595,992 from its balancing account over a seven-month period beginning June 1, 1983 and ending December 31, 1983, to coincide with the effective date of its first scheduled filing under the new ECAC schedule established by D.83-02-076.[3]

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[1] D.92496, the most current ECAC procedure applicable to Sierra Pacific at the time of this filing, provided that Sierra Pacific's Energy Cost Adjustment Clause Billing Factors (ECACBF) were to be revised three times a year, February 1, June 1, and October 1, upon authorization from this Commission. Its Annual Energy Rate (AER) was to be revised annually effective February 1. D.92496 has since been modified by D.83-02-076 dated February 16, 1983 in OII 82-09-02, revising Sierra Pacific's ECAC filing schedule to twice a year with revision dates of January 1 and July 1, with the reasonableness review to occur in the January 1 filing. However, these revisions to the schedule are applicable only to applications filed after April 7, 1983.

[2] D.83-04-065 in A.82-12-01 was issued April 20, 1983. It authorized a total ECACBF of 29.54 mills per kilowatt-hours (kWh) for the four-month period.

[3] This $2,596,000 balance was accumulated over an 18-month period and includes approximately $500,000 in supplier refunds.

By the present application Sierra Pacific asks the Commission to authorize the following ECACBFs for the June-September 1983 period:

Energy Cost Adjustment Clause Billing Factors
(in dollars/kWh)

	Residential				
	Lifeline		In Excess of		
Offset	DS-1	D-1 & DM-1	Lifeline	5,000 kWh	Nonresidential
Fuel & Pur. Power	.01826	.01897	.04458	.07685	.03530
Balancing Acct.	(.01185)	(.01185)	(.01185)	(.01185)	(.01185)
Total	.00641	.00712	.03275	.06500	.02345

(Red Figure)

In its application, and in support of its request to decrease its ECACBFs, Sierra Pacific included a four-month projection of operating results using June 1983 budgeted unit energy prices for each of the four months in the forecast period. Economy energy purchases split between "buyback" from Idaho Power Company's portion of Valmy Unit #1 and other hydro/thermal purchases from Northwest Utilties were included in the resource mix. The relatively large economy energy purchases were possible because of good hydro conditions, conditions expected to continue at least through June. Sierra Pacific signified its intentions of continuing to minimize gas/oil fired generation in favor of base loading Valmy Unit #1 whenever possible and purchasing economy energy and Utah Power & Light firm energy up to the maximum system import limits.[4]

[4] However, one gas/oil fired steam unit (generally Ft. Churchill Unit #2) must be operated at minimum load over peak hours to furnish additional operating reserves as needed.

In its application Sierra Pacific projected continued use of natural gas as the economic fuel choice (unless residual oil prices drop below natural gas), and presented data on gas prices it must pay as well as diesel oil and coal prices. It showed comparative price data relative to thermal/hydro energy obtained from Idaho Power Company's portion of Valmy Unit #1, the Bonneville Power Administration's nonfirm energy rate tariff, and Utah Power & Light's and Pacific Gas and Electric Company's (PG&E) rates. The fuel price estimates applied to the June-September forecast period were those taken from Sierra Pacific's February 1, 1983 reasonableness review.

The Fuels and Operations Branch staff conducted an investigation of Sierra Pacific's operations relative to this application, and prepared a report for the Commission. The staff's study differed as to results in some respects from the estimates in Sierra Pacific's application. The system and California jurisdiction sales estimates used by both staff and Sierra Pacific were those forecast in A.82-12-01 and found reasonable in that proceeding. However, the output to lines estimates prepared by staff and Sierra Pacific differed. Considering the stated availability of more hydro energy, staff concluded that it would be reasonable to increase dependence upon hydro in each of the four months of the forecast period, and make a commensurate reduction each month in the oil and gas requirement. Staff also concluded that Sierra Pacific's output to lines forecast for the month of July, compared to the energy sales forecast, was high, and therefore proposed to reduce the purchased power to be obtained that month from PG&E (the most expensive purchased power).

Staff compared the fuel and purchased power costs included in this application with the price estimates included in the February 1, 1983 reasonableness review, and verified that these prices were based upon the most recent information included in Sierra Pacific's records. Any variations will be recaptured in the ECAC balancing account. Accordingly staff adopted applicant's prices.

Staff's estimate of the costs which resulted was lower than that obtained by Sierra Pacific by $503,200. The difference was derived from staff's dependence upon more hydro in each of the four months, and from staff's proposed reduction of power purchases from PG&E in July. Using the differing total fuel and purchased power costs (corrected to reflect the 98% recoverable in ECAC), and applying the system sales for the forecast period as agreed by staff and applicant, we find that staff's and Sierra Pacific's fuel and purchased power rates are 34.70 and 35.11 mills/kWh respectively.

Sierra Pacific estimates that the ECAC balancing account on June 1, 1983 will show an overcollection of $2,595,992. With California jurisdictional sales for the seven months at 219,005 megawatt hours (MWh), the ECAC balancing rate is 11.85 mills/kWh. Staff agrees with Sierra Pacific that a seven-month amortization period is appropriate. When the balancing rate is added to the fuel and purchased power rate, and the result adjusted for the uncollectible factor, we find the respective ECACBF proposed by Sierra Pacific and staff to be 23.45 and 23.04 mills/kWh. Sierra Pacific's forecast and application show a revenue deduction proposal of $1,854,000 or 39.79%, whereas staff proposes a revenue deduction of $1,903,000 or 40.84%. Their difference is $49,000.

A duly noticed public hearing was held in San Francisco on May 31, 1983 before Administrative Law Judge (ALJ) John B. Weiss. Sierra Pacific and staff had exchanged prepared testimony in advance of the hearing. In addition to entering this material into evidence, both parties used witnesses to clarify and expand upon their positions. Sierra Pacific presented two witnesses: W. F. Montgomery, vice-president power supply, and P. Franklin, rate analyst. Staff presented two witnesses: D. Wong, associate utilities engineer, and J. Haley, junior utilities engineer.

At the hearing it developed that the differences between Sierra Pacific and staff were <u>three</u>; first, with staff's proposed

adjustments with regard to hydro; second, a difference over the ratio of energy output to lines to energy sales for July, and third, a difference over rate design. However, the last item, the difference over rate design, arose only because when preparing its application Sierra Pacific did not have available the approprite reductions to make its design consistent with that subsequently set forth in D.83-04-065, the last ECAC proceeding involving Sierra Pacific.

Montgomery, while accepting staff's recommendation that hydrogeneration be increased 7,300 MWh over the four months in the forecast period,[5] disagreed with staff's recommendation that the correlative decrease come solely out of gas/oil generation. Instead, he proposed to spread the decrease to economy energy purchases and to gas/oil generation not associated with the maintenance of Sierra Pacific's spinning reserve requirements.[6] The portion of the decrease associated with economy energy purchases would be spread to PG&E purchases, to Valmy buyback, and to Sierra Pacific's own Valmy generation, in the ratio of 5, 11, and 8 hours per day respectively.

Montgomery also took issue with staff's computations forecasting losses on output to lines applicable to July 1983, arguing that these losses would probably be higher as a consequence of larger purchases of power. The lower ratios used by staff had been based upon analysis of 1981 and 1982 data, whereas Sierra

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[5] Sierra Pacific's use of hydro is limited more by the capacity of their old plant to generate than upon the amount of water available. The utility has no storage dams and must take whatever water is flowing in the river and run it through flumes in the hydro plant.

[6] The spinning reserve is maintained by operating applicant's own gas/oil fired unit to a minimum 16 MWh level, below the 35 MWh design level, by manual control to take advantage of low cost energy purchase opportunities elsewhere. The spinning reserve is run as a cover against possible loss of interties or loss of the Valmy unit due to mechanical failure. Staff accepted Montgomery's spinning reserve requirements testimony.

Pacific's higher ratio, with resulting greater losses indicated, was described as having been based upon an estimate of total losses for the year derived from 1981 and 1982 data tempered with considerations of customer and load growth. Assertedly this 12-month estimate total was then allocated month to month in proportion to 1980 recorded results. Montgomery contended that purchased economy power increased in 1982 over 1981 and would be up even more in 1983. He further testified that addition of 2 phase shifters since 1981, while enabling the utility to increse purchases of economy power thereby benefiting the consumers, also served to increase losses.

Franklin testified regarding Sierra Pacific's calculation of the ECACBFs, and sponsored a number of exhibits added at the hearing to her prepared testimony. One exhibit showed how fuel and purchased power costs should be reduced to reflect the increase in hydropower proposed by staff (and accepted by Sierra Pacific). Rather than allocating it to natural gas as proposed by staff, she enlarged upon Montgomery's theme and allocated the 7,300 MWh displaced, 1,520 MWh to PG&E purchases, 3,345 MWh to Valmy buyback, and 2,435 MWh to Valmy company generation. Passing then to estimated losses on output to lines, she analyzed the utility's budget performance year to date in 1983, pointing out that actual losses taken as a whole for the January through April period were very close to their estimate. She also presented an exhibit on June through September 1982 performance. She testified that acquisition of the Elko and Winnemucca service territories from C.P. National (formerly a retail customer) added their distribution losses to the utility's total, although total sales remain the same.[7]

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[7] However, in the resulting cross-examination it developed that Franklin did not have at hand all the underlying data she understood had been used by Sierra Pacific to support the 372,000 MWh projected energy output to lines applicable to July 1983 proposed by the utility. When an impass was reached, ALJ Weiss directed that Sierra Pacific file a late-filed exhibit giving the derivation of the ratios used of output to lines to sales for the months June through September.

Haley sponsored an exhibit on rate design applicable to Sierra Pacific's proposal. The utility accepted the design as being consistent with that approved for it in the Commission's most recent decision.

Wong, in his report, had initially allocated part of the energy displaced by increased hydro to reduced natural gas generation. After hearing Montgomery and Franklin, Wong stated that staff accepted Sierra Pacific's proposal to allocate instead to PG&E purchases, Valmy buyback, and Valmy company generation. The cost of the 7,300 MWh displaced by hydro was estimated to be $162,783 (See Appendix A). Turning to the output to lines estimated by Sierra Pacific, at the hearing Wong could not, lacking the utility's supporting data, accept the higher losses claimed applicable by the utility, but agreed to defer a recommendation until submission of Sierra Pacific's late-filed exhibit. If that exhibit were persuasive, staff agreed that it would stipulate to using the company's ratio to compute the losses.

It developed, however, when the late-filed exhibit was received from Sierra Pacific, that witness Franklin had been mistaken about what underlying data had been used in preparation of the loss estimates for the current budgeted output to lines. As a consequence of various aberrations in their historical data caused by weather differentials, large economy sales, and/or changes in their system, Sierra Pacific's economists had decided instead to rely upon 1980's data to develop their 1983 output to lines. After study, staff accepted Sierra Pacific's contention in the late-filed exhibit that 1980 was a "normal" year. But then staff asserted that the 1980 data should then also be used to estimate the 1983 spread of losses month by month. Using the 3,645,808 MWh total company energy use (including company sales, company use, and interdepartmental use) forecast in A.82-12-01 for 1983, and applying the 12.55% losses applicable to normal year 1980, staff forecast the 1983 annual losses as 457,549 MWh. Applying the monthly percentages applicable to the

1980 "normal" year to this 457,549 MWh loss forecast for 1983, staff obtained month-by-month line loss forecasts for 1983. These included 29,741 MWh for June, 67,260 MWh for July, 37,061 MWh for August, and 16,014 MWh for September, a four-month forecast period total of 150,076 MWh, which is 7,000 MWh lower than Sierra Pacific's estimate. Wong prepared a month-by-month analysis of the 7,000 MWh of energy displaced by the reduced output to lines for the four-month forecast period, allocated proportionately to the hourly displacement daily attributed to PG&E purchases, Valmy buyback, and Valmy company share generation, and costed it out. The four-month cost is estimated at $156,097 (See Appendix A). Adjusted to California jurisdictional cost, the four-month total is $15,585. These calculations were submitted to Sierra Pacific for their consideration.

On June 27, 1983 Sierra Pacific and the staff signed a stipulation whereby for purposes of this proceeding and in the interest of obtaining the earliest possible implementation of an adjusted ECACBF for the June-September 1983 period, Sierra Pacific accepted the staff-calculated June-September line loss adjustments for 1983, and the resulting cost reductions, adjusted for California jurisdictional operations, total $16,000.

With this resolution of the differences there was no need for further hearing. Accordingly, the matter was submitted effective June 27, 1983.

Discussion

Staff's proposal, accepted at the hearing by Sierra Pacific, to use hydro to the full extent deemed feasible is reasonable and is adopted. Sierra Pacific's proposal, accepted by staff at the hearing, not to take all the correlative decrease occasioned by use of hydro from gas/oil generation as initially proposed by staff in its report, but to take 7,300 MWh from PG&E and economy purchases, was substantitated by sound reasoning in Montgomery's testimony, and is adopted. Sierra Pacific's use of 1980 as a "normal" year relative to losses, and use of its relationships

in computing June-September 1983 output to line losses and ratios, as proposed by staff and stipulated by Sierra Pacific, are reasonable and are also adopted.

An analysis of energy displaced by hydro and the Sierra Pacific-staff stipulated analysis of energy displaced by reduced output to lines, and the costs resulting from these displacements, are shown separately and in consolidated fashion in Appendix A to this opinion. Appendix B sets forth a comparison of projected energy output for June-September 1983, (1) as originally projected by Sierra Pacific, (2) as initially counter-proposed by staff, and (3) as finally adopted. Appendix C translates the projected energy output comparisons of Appendix B into the total costs involved.

The fuel and purchased power offset rate we adopt is 34.85 mills per kWh. It is based, as provided in D.92496 in OII 56, upon 98% of the total of the fuel costs (here $10,089,100 for fuel and 32,506,400 for purchased power), divided by the 1,197,744 MWh system sales forecast for the June-September 1983 period (and found reasonable in the annual reasonableness review in A.82-12-01). The balancing rate is 11.85 mills per kWh (calculated on page 3 of Table 3 of Sierra Pacific's application), accepted by the staff and this Commission as reasonable. The average ECACBF adopted is 23.19 mills per kWh, and represents the total of the fuel and purchased power offset rate (34.85 mills per kWh), the balancing rate (a negative 11.85 mills per kWh), and a .0083 franchise and uncollectible factor (.19 mills per kWh). The 23.19 mills per kWh average ECACBF is reasonable. The chart below compares the ECACBFs proposed by Sierra Pacific and the staff, with that finally adopted:

The ECAC Billing Factor

	Sierra Pacific	Staff	Adopted
Total Fuel & Purchased Power Costs ($000)	42,914	42,411	42,596
98% Portion Recoverable in ECAC ($000)	42,056	41,563	41,744
System Sales for Forecast Period (MWh)	1,197,744	1,197,744	1,197,744
Fuel and Purchased Power Rate (mills/kWh)	35.11	34.70	34.85
Balancing Rate (mills/kWh)	(11.85)	(11.85)	(11.85)
Adjustment Rate (mills/kWh)	23.26	22.85	23.00
.0083 Franchise & Uncollectibles Factor	.19	.19	.19
The Average ECAC Billing Factor (mills/kWh.)	23.45	23.04	23.19

(Red Figures)

The average ECACBF presently in effect for Sierra Pacific is $.02954 per kWh. Adoption of this $.02319 per kWh average ECACBF represents a 21.5% reduction in the billing factor. The net decrease in rates for the four months ending September 30, 1983 is $760,000, .635¢ per kWh, or 8.21% of total revenue.

In its application Sierra Pacific recommended spreading this ECAC decrease on an equal cents per kWh basis to all classes. But that was before it was aware of the rate design subsequently adopted by the Commission for Sierra Pacific in D.83-04-066 signed April 20, 1983. D.83-04-066 specified level base rates for time of use schedules with all rate differentials to be accounted for in the ECAC change. Because the rates were referenced to marginal costs, and to be consistent with recent policy, staff recommended, and we agree, that the percentage differentials in effective rates as established by D.83-04-066 be maintained.

As to the residential rates, staff recommended that lifeline rates be maintained at 75% of the system average rate and that Tier 2 and 3 effective rates be decreased by an equal percent so

that the average ECACBF for the residential class will equal the system average ECACBF. We adopt staff's recommendation. Appendix D to this decision shows the ECACBF for each class of service.

Findings of Fact

1. Sierra Pacific, by its application, originally requested authorization to decrease its ECACBF to 23.45 mills per kWh.

2. Staff originally recommended that Sierra Pacific's ECACBF be reduced to 23.04 mills per kWh.

3. During the hearing Sierra Pacific accepted staff's proposal, contained in its report, to estimate more hydrogeneration, but counter-proposed, with staff's subsequent concurrence, to reduce the energy requirements from both economy purchases and from oil/gas generation, thereby meeting its spinning reserve requirements, rather than taking all the reduction from oil/gas generation.

4. Selection of 1980 as a "normal year" for purposes of calculating Sierra Pacific's loss to line ratios is reasonable.

5. Staff's month-to-month estimates of line losses for the June-September 1983 period, totaling 150,076 MWh, are reasonable.

6. Staff's analysis and allocation of the energy displaced by reduced output to lines for the June-September 1983 period, with a total cost of $156,097, or $16,000 when adjusted to California jurisdiction, is reasonable.

7. The fuel and purchased power offset rate of 34.85 mills per kWh, based upon fuel and purchased power costs of $41,744,000, is reasonable.

8. The total average ECAC Billing Factor of 23.19 mills per kWh, which is the sum of the above fuel and purchased power offset rate, the balancing rate of a negative 11.85 mills per kWh, and the Franchise and Uncollectibles Factor of .19 mills per kWh, is reasonable.

9. Rate spread as depicted in Appendix D is consistent with that set forth in D.83-04-066 in A.82-08-43, our most recent rate decision relative to Sierra Pacific, and is reasonable.

10. Since it is past the ECAC tariff revision date of June 1, 1983 established for Sierra Pacific, this order should become effective the day signed.

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 Pacific should be required to file revised tariff schedules reflecting the changes.

O R D E R

IT IS ORDERED that on or after the effective date of this order, Sierra Pacific Power Company is authorized to file with this

Commission, in conformance with General Order 96-A, revised tariff schedules reflecting the following changes:

Decreasing its average Energy Cost Adjustment Clause Billing Factors to:

Offset Rate	$.03485
Balancing Rate	(.01185)
.0083 Franchise & Uncollectible Factor	.00019
Average ECACBF	$.02319

(Red Figure)

This order is effective today.

Dated AUG 3 1983, at San Francisco, California.

LEONARD M. GRIMES, JR.
President
VICTOR CALVO
PRISCILLA C. CREW
DONALD VIAL
WILLIAM T. BAGLEY
Commissioners

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

Joseph E. Bodovitz, Executive Director

APPENDIX A

SIERRA PACIFIC POWER COMPANY

Adopted Energy Displacements & Adjustments for the System

	June	July	August	Sept.	Total
Displaced by Hydro					
Energy (MWh)					
PG&E	458	458	375	229	1,520
Valmy Buyback	1,008	1,008	825	504	3,345
Valmy	734	734	600	367	2,435
Total	2,200	2,200	1,800	1,100	7,300
Cost ($)					
PG&E	11,450	11,450	9,375	5,725	38,000
Valmy Buyback	23,184	23,184	18,975	11,592	76,935
Valmy	14,423	14,423	11,790	7,212	47,848
Total	49,057	49,057	40,140	24,529	162,783
Adjustments for Reduced Losses					
Energy (MWh)					
PG&E	333	646	354	125	1,458
Valmy Buyback	733	1,421	779	275	3,208
Valmy	534	1,033	567	200	2,334
Total	1,600	3,100	1,700	600	7,000
Cost ($)					
PG&E	8,325	16,150	8,850	3,125	36,450
Valmy Buyback	16,859	32,683	17,917	6,325	73,784
Valmy	10,493	20,298	11,142	3,930	45,863
Total	35,677	69,131	37,909	13,380	156,097
Adopted Energy Adjustments					
Energy (MWh)					
PG&E	791	1,104	729	354	2,978
Valmy Buyback	1,741	2,429	1,604	779	6,553
Valmy	1,268	1,767	1,167	567	4,769
Total	3,800	5,300	3,500	1,700	14,300
Cost ($)					
PG&E	19,775	27,600	18,225	8,850	74,450
Valmy Buyback	40,043	55,867	36,892	17,917	150,719
Valmy	24,916	34,721	22,932	11,142	93,711
Total	84,734	118,188	78,049	37,909	318,880
Total Rounded To:	84,700	118,200	78,100	37,900	318,900

(END OF APPENDIX A)

APPENDIX B
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SIERRA PACIFIC POWER COMPANY

Applicant's Estimated Energy Output (MWh)
For June-September 1983

	June	July	August	Sept.	4-Mos. Total
Energy Output					
Coal/Diesel	82,500	85,600	85,600	72,600	326,300
Oil/Gas	18,200	13,300	12,400	11,500	55,400
Total Steam	100,700	98,900	98,000	84,100	381,700
Hydro	4,300	4,400	4,400	4,300	17,400
Diesel	-	-	-	-	-
Gas Turbine	-	-	-	-	-
Total Generation	105,000	103,300	102,400	88,400	399,100
IPC Firm (Elko)	7,900	8,200	8,200	7,900	32,200
PG&E Firm	11,000	27,400	46,800	19,400	104,600
UP&L Firm	101,700	111,500	111,500	107,900	432,600
Economy (Valmy)	24,000	45,700	50,500	51,200	171,400
Economy (Other)	73,400	75,900	42,600	45,200	237,100
Total Purchased	218,000	268,700	259,600	231,600	977,900
Output to Lines (MWh)	323,000	372,000	362,000	320,000	1,377,000

SIERRA PACIFIC POWER COMPANY

Staff's Estimated Energy Output (MWh)
For June-September 1983

	June	July	August	Sept.	4-Mos. Total
Energy Output					
Coal/Diesel	82,500	85,600	85,600	72,600	326,300
Oil/Gas	16,000	11,100	10,600	10,400	48,100
Total Steam	98,500	96,700	96,200	83,000	374,400
Hydro	6,500	6,600	6,200	5,400	24,700
Diesel	-	-	-	-	-
Gas Turbine	-	-	-	-	-
Total Generation	105,000	103,300	102,400	88,400	399,100
IPC Firm (Elko)	7,900	8,200	8,200	7,900	32,200
PG&E Firm	11,000	20,400	46,800	19,400	97,600
UP&L Firm	101,700	111,500	111,500	107,900	432,600
Economy (Valmy)	24,000	45,700	50,500	51,200	171,400
Economy (Other)	73,400	75,900	42,600	45,200	237,100
Total Purchased	218,000	261,700	259,600	231,600	970,900
Output to Lines (MWh)	323,000	365,000	362,000	320,000	1,370,000

SIERRA PACIFIC POWER COMPANY

Adopted Estimate of Energy Output (MWh)
For June-September 1983

	June	July	August	Sept.	4-Mos. Total
Energy Output					
Coal/Diesel	81,232	83,833	84,433	72,033	321,531
Oil/Gas	18,200	13,300	12,400	11,500	55,400
Total Steam	99,432	97,133	96,833	83,533	376,931
Hydro	6,500	6,600	6,200	5,400	24,700
Diesel	-	-	-	-	-
Gas Turbine	-	-	-	-	-
Total Generation	105,932	103,733	103,033	88,933	401,631
IPC Firm (Elko)	7,900	8,200	8,200	7,900	32,200
PG&E Firm	10,209	26,296	46,071	19,046	101,622
UP&L Firm	101,700	111,500	111,500	107,900	432,600
Economy (Valmy)	22,259	43,271	48,896	50,421	164,847
Economy (Other)	73,400	75,900	42,600	45,200	237,100
Total Purchased	215,468	265,167	257,267	230,467	968,369
Output to Lines (MWh)	321,400	368,900	360,300	319,400	1,370,000

(END OF APPENDIX B)

APPENDIX C
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SIERRA PACIFIC POWER COMPANY

Applicant's Estimate of Fuel & Purchased Power Costs (M$) for June-September 1983

Fuel & Purchased Power Costs	June	July	August	Sept.	4-Mos. Total
Coal/Diesel	1,800.3	1,806.3	1,806.3	1,589.3	7,002.2
Oil/Gas	883.0	627.0	584.0	543.0	2,637.0
Gas Standby Charge	135.9	135.9	135.9	135.9	543.6
Diesel	-	-	-	-	-
Total Fuel	2,819.2	2,569.2	2,526.2	2,268.2	10,182.8
IPC Demand (Elko)	78.9	78.9	78.9	78.9	315.6
IPC Energy (Elko)	81.0	84.0	84.0	81.0	330.0
PG&E Demand	992.6	992.6	992.6	992.6	3,970.4
PG&E Spinning Reserve	123.8	78.9	25.8	100.8	329.3
PG&E Fuel Adjustment	275.0	685.0	1,170.0	485.0	2,615.0
UP&L Demand	2,688.0	2,688.0	2,688.0	2,688.0	10,752.0
UP&L Energy	1,524.0	1,670.0	1,670.0	1,616.0	6,480.0
Economy (Valmy)	552.0	1,051.0	981.0	1,040.0	3,624.0
Economy (Other)	1,335.9	1,381.4	775.3	822.7	4,315.3
Total Purchased	7,651.2	8,709.8	8,465.6	7,905.0	32,731.6
Total Costs (M$)	10,470.4	11,279.0	10,991.8	10,173.2	42,914.4

APPENDIX C
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SIERRA PACIFIC POWER COMPANY

Staff's Estimate of Fuel & Purchased Power Costs (M$) for June-September 1983

	June	July	August	Sept.	4-Mos. Total
Fuel & Purchased Power Costs					
Coal/Diesel	1,800.3	1,806.3	1,806.3	1,589.3	7,002.2
Oil/Gas	761.6	528.4	504.6	495.0	2,289.6
Gas Standby Charge	135.9	135.9	135.9	135.9	543.6
Diesel	-	-	-	-	-
Total Fuel	2,697.8	2,470.6	2,446.8	2,220.2	9,835.4
IPC Demand (Elko)	78.9	78.9	78.9	78.9	315.6
IPC Energy (Elko)	81.0	84.0	84.0	81.0	330.0
PG&E Demand	992.6	992.6	992.6	992.6	3,970.4
PG&E Spinning Reserve	123.8	98.1	25.8	100.8	348.5
PG&E Fuel Adjustment	275.0	510.0	1,170.0	485.0	2,440.0
UP&L Demand	2,688.0	2,688.0	2,688.0	2,688.0	10,752.0
UP&L Energy	1,524.0	1,670.0	1,670.0	1,616.0	6,480.0
Economy (Valmy)	552.0	1,051.0	981.0	1,040.0	3,624.0
Economy (Other)	1,335.9	1,381.4	775.3	822.7	4,315.3
Total Purchased	7,651.2	8,554.0	8,465.6	7,905.0	32,575.8
Total Costs (M$)	10,349.0	11,024.6	10,912.4	10,125.2	42,411.2

SIERRA PACIFIC POWER COMPANY

Adopted Estimate of Fuel & Purchased Power Costs (M$) for June-September 1983

	June	July	August	Sept.	4-Mos. Total
Fuel & Purchased Power Costs					
Coal/Diesel	1,775.4	1,771.6	1,783.3	1,578.2	6,908.5
Oil/Gas	883.0	627.0	584.0	543.0	2,637.0
Gas Standby Charge	135.9	135.9	135.9	135.9	543.6
Diesel	-	-	-	-	-
Total Fuel	2,794.3	2,534.5	2,503.2	2,257.1	10,089.1
IPC Demand (Elko)	78.9	78.9	78.9	78.9	315.6
IPC Energy (Elko)	81.0	84.0	84.0	81.0	330.0
PG&E Demand	992.6	992.6	992.6	992.6	3,970.4
PG&E Spinning Reserve	123.8	78.9	25.8	100.8	329.3
PG&E Fuel Adjustment	255.2	657.4	1,151.8	476.1	2,540.5
UP&L Demand	2,688.0	2,688.0	2,688.0	2,688.0	10,752.0
UP&L Energy	1,524.0	1,670.0	1,670.0	1,616.0	6,480.0
Economy (Valmy)	512.0	995.1	944.1	1,022.1	3,473.3
Economy (Other)	1,335.9	1,381.4	775.3	822.7	4,315.3
Total Purchased	7,591.4	8,626.3	8,410.5	7,878.2	32,506.4
Total Costs (M$)	10,385.7	11,160.8	10,913.7	10,135.3	42,595.5

(END OF APPENDIX C)

APPENDIX D

SIERRA PACIFIC POWER COMPANY

Adopted Energy Cost Adjustment Clause Billing Factors
Effective Four Months Ending September 30, 1983

	Present	Adopted
ECACBF	$.02954	$.02319
Residential		
DS-Lifeline	.00915	.00486
D & DM-Lifeline	.00915	.00439
In Excess of Lifeline	.04074	.03392
In Excess of 5,000 kWh	.05962	.05133
Time of Use (A-3)		
On	.03717	.02987
Mid	.03233	.02563
Off	.01817	.01324

(END OF APPENDIX D)

adjustments with regard to hydro; second, a difference over the ratio of energy output to lines to energy sales for July, and third, a difference over rate design. However, the last item, the difference over rate design, arose only because when preparing its application Sierra Pacific did not have available the approprite reductions to make its design consistent with that subsequently set forth in D.83-04-065, the last ECAC proceeding involving Sierra Pacific.

Montgomery, while accepting staff's recommendation that hydrogeneration be increased 7,300 MWh over the four months in the forecast period,[5] disagreed with staff's recommendation that the correlative decrease come solely out of gas/oil generation. Instead, he proposed to spread the decrease to economy energy purchases and to gas/oil generation associated with the maintenance of Sierra Pacific's spinning reserve requirements.[6] The portion of the decrease associated with economy energy purchases would be spread to PG&E purchases, to Valmy buyback, and to Sierra Pacific's own Valmy generation, in the ratio of 5, 11, and 8 hours per day respectively.

Montgomery also took issue with staff's computations forecasting losses on output to lines applicable to July 1983, arguing that these losses would probably be higher as a consequence of larger purchases of power. The lower ratios used by staff had been based upon analysis of 1981 and 1982 data, whereas Sierra

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[5] Sierra Pacific's use of hydro is limited more by the capacity of their old plant to generate than upon the amount of water available. The utility has no storage dams and must take whatever water is flowing in the river and run it through flumes in the hydro plant.

[6] The spinning reserve is maintained by operating applicant's own gas/oil fired unit to a minimum 16 MWh level, below the 35 MWh design level, by manual control to take advantage of low cost energy purchase opportunities elsewhere. The spinning reserve is run as a cover against possible loss of interties or loss of the Valmy unit due to mechanical failure. Staff accepted Montgomery's spinning reserve requirements testimony.