ORIGINAL

Decision 93771 NOV 13 1981

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of SIERRA PACIFIC POWER COMPANY for General Rate Relief and for Authority to Increase its Electric Rates and Charges for Electric Service and to Impose Certain Tariff Revisions.	Application 59894 (Filed August 21, 1980)
In the Matter of the Application of SIERRA PACIFIC POWER COMPANY for authority to implement its Energy Cost Adjustment Clause (ECAC).	Application 60860 (Filed September 3, 1981)

Appearances in Application 59894

John Madariaga, Attorney at Law (Nevada), and Boris H. Lakusta, Attorney at Law, for Sierra Pacific Power Company, applicant.
Gordon E. Davis and William H. Booth, Attorneys at Law, for Sierra Ski Areas Association; and Sanford N. Nathan, Attorney at Law, for International Brotherhood of Electrical Workers Local 1245; protestants.
Ralph P. Cromer, for Tahoe Tavern Property Owners Association, interested party.
Freda Abbott, Attorney at Law, and Francis S. Ferraro, for the Commission staff.

I N D E X

SECOND INTERIM OPINION

I. INTRODUCTION

Summary

Sierra Pacific Power Company (Sierra Pacific) sought base rate relief in Application (A.) 59894 of $5,642,000 for its electric service in California. In Decision (D.) 92897 dated and effective May 5, 1981, we awarded partial relief of $1,533,800. This decision awards base rate relief of $3,289,000 for the 1981 test year, but this increase is offset by an energy cost adjustment clause (ECAC) reduction of $4,146,000 (test year basis). The net result is a combined system average rate decrease of approximately 3% ($857,000). This, in turn, results in rate decreases for most customers other than residential ratepayers with minimum usage.

Rate design changes include authorization for a late charge on bills 45 days or more overdue. "Second homes" remain ineligible for lifeline.

History of A.59894 (base rates)

D.92897 reviews the history of A.59894 as follows:

> "Sierra Pacific filed this application on August 21, 1980. A prehearing conference was held in San Francisco on August 29, 1980, and hearings were held on seven dates in September, November, and December 1980, including afternoon and evening hearings in Tahoe Vista and South Lake Tahoe on September 29 and 30 (all before Administrative Law Judge Meaney). Because there were certain problems regarding rate design testimony and exhibits, further hearings on this subject were held on February 2 and 3, 1981.
>
> "During the December hearings Sierra Pacific requested that the case could be split into two phases. The first phase decision would include the relief to be awarded without the addition of the Valmy coal-fired plant to the rate base ('without Valmy') and the second phase decision would add the remainder of the relief to be awarded with Valmy on the line ('with Valmy'). Valmy is expected to begin operating on or about October 1 of this year. The staff stated, on brief, that it preferred one decision on all issues but that it would not oppose bifurcation."

Approximately two dozen persons, some representing organizations, testified at Tahoe Vista, and a smaller number appeared at South Lake Tahoe. The testimony almost exclusively concerned rate design issues and will be covered in the section of this opinion dealing with rate design.

D.92987 dealt with rate of return and all items affecting rate relief expense items except for one which is the largest - the addition of the 250 megawatt (MW) capacity first unit of Valmy to the rate base. This bifurcation of rate relief was at the utility's request since Valmy would not be placed into operation until October 1.

Because of the relatively small amount of relief awarded in D.92987, we applied the increase on a uniform cents per kilowatt-hour basis and reserved rate design issues for our final decision.

Issues relating to energy conservation and employee discounts were also reserved.

There is still no final result in the dispute between the U.S. Internal Revenue Service and The Pacific Telephone and Telegraph Company regarding formulas for determining tax treatment of accelerated depreciation and investment tax credit. We will make the same rate calculations that we used in our interim decision, with rates subject to refund (see D.92987, slip opinion p. 3). Summaries of Sierra Pacific's results of operations, before and after the addition of Valmy, follow.

The Economic Recovery Tax Act (Act) became effective on August 13, 1981. To comply with the normalization provisions of the Act, Sierra Pacific made certain recalculations of depreciation and rate base subsequent to the submission of A.59894 and requests us to specify that it shall use the normalization method of accounting specified in Internal Revenue Code Section 168(e)(3)(B) to remain eligible for certain tax benefits under the Act. (This decreases the test year revenue requirement by $6,000, which is too minimal to adjust rates.)

The Commission and the parties to A.59894 were notified of this request in a letter by one of the attorneys for Sierra Pacific dated October 6, 1981. However, we wish to afford all parties ample opportunity to respond to Sierra Pacific's position and address other effects the Act may have on test year income taxes. Therefore, we will set additional hearings for this limited purpose.

Two tables follow. The first shows test year results without Valmy, the "adopted" column reflecting the results found reasonable in D.92897. The second table summarizes test year results with the addition of Valmy.

RESULTS OF OPERATIONS
TEST YEAR 1981 WITHOUT VALMY

Item	Staff	Utility	Adopted
	(Dollars in Thousands)		
Revenues	$11,958.7	$11,980.8	$11,829.9
Expenses			
Production	473.0	473.0	473.0
Transmission	89.0	89.0	89.0
Distribution	797.0	797.0	797.0
Customer Accounts	735.4	735.4	734.9
A & G	1,083.6	1,083.7	1,083.1
Customer Service	64.3	64.3	64.3
Subtotal	3,242.3	3,242.4	3,241.3
Depr. & Amort. Exp.	1,951.0	1,951.0	1,951.0
Taxes other than on Income	613.9	613.9	613.9
State Corp. Franchise Tax	191.3	192.8	181.8
Federal Income Tax	1,357.0	1,366.0	1,302.6
Total Expenses	7,355.5	7,366.1	7,290.6
Net Operating Revenues	4,603.2	4,614.7	4,539.3
Rate Base	40,622.6	40,622.6	40,064.0
Rate of Return	11.33%	11.36%	11.33%

NOTE: This and the following table show utility estimates after Sierra Pacific accepted the staff's showing other than rate of return (see, generally, our interim decision in this application, D.92987). Thus, utility revenues exceed staff's because of difference in rate of return, and federal and state taxes also reflect rate of return difference. The "adopted" column shows lower revenues because of the exclusion from rate base of $558,586 for fuel oil inventory in accordance with D.93374 dated August 4, 1981. (Compare rate base figures, above). This note also applies to the table which follows.

RESULTS OF OPERATIONS
TEST YEAR 1981 WITH VALMY

Item	Staff	Utility	Adopted
	(Dollars in Thousands)		
Revenues	$15,149.2	$15,181.7	$15,020.4
Expenses			
Production	645.0	645.0	645.0
Transmission	89.0	89.0	89.0
Distribution	797.0	797.0	797.0
Customer Accounts	747.7	747.8	747.2
A & G	1,073.2	1,073.2	1,072.7
Customer Service	64.3	64.3	64.3
Subtotal	3,416.2	3,416.5	3,415.2
Depr. & Amort. Exp.	2,349.7	2,349.7	2,349.7
Taxes other than on Income	702.1	702.1	702.1
State Corp. Franchise Tax	364.1	366.4	354.6
Federal Income Tax	2,438.4	2,452.1	2,384.0
Total Expenses	9,270.5	9,286.8	9,205.6
Net Operating Revenues	5,878.7	5,894.9	5,184.8
Rate Base	51,886.9	51,886.9	51,328.3
Rate of Return	11.33%	11.36%	11.33%

See note to previous table.

History of A.60860 and
Other ECAC Adjustments

A.60860, filed September 3, 1981, may be processed ex parte (without hearings) because it involves a decrease in the ECAC portion of the rates. The staff has examined Sierra Pacific's ECAC calculations and finds them to be accurate.

Since the filing of A.59894, Sierra Pacific's ECAC has increased twice (D.92709 in A.59915, dated February 18, 1981 and D.93374 in A.60246, dated August 4, 1981). These increases placed the utility's ECAC factors at the following levels:

Residential lifeline	3.820¢/kWh
Residential nonlifeline	5.319¢/kWh
Nonresidential	5.264¢/kWh

The present ECAC application (A.60860) requests a reduction to be effective concurrently with the installation of the "with Valmy" base rates. ECAC factor reductions are proposed as follows:

Residential lifeline	3.126¢/kWh
Residential nonlifeline	4.352¢/kWh
Nonresidential	4.131¢/kWh

This amounts to a total ECAC revenue reduction of $1,382,000, or a system average of 12%. The estimated four-month effect on classes of customers is as follows, assuming existing base rates:

Class of Service	Revenue Decrease (000's) For 4 Months Commencing October 1, 1981	Percent Decrease
Domestic Service	$ 721	11.29
General Service - Small	311	11.50
General Service - Medium	246	12.98
General Service - Large	100	13.59
Irrigation Service	1	11.37
Streetlighting	2	6.78
Public Authorities	1	12.54
Total	$1,382	

The principal cause of the reduction is the greatly reduced purchased power needs resulting from the installation of Valmy, but also during the previous ECAC period we have been amortizing an undercollection balance of $1,250,000.

The annual effect of the four-month ECAC reduction is $4,146,000.

II. CONSERVATION AND ALTERNATIVE ENERGY DEVELOPMENT

Conservation Issues Generally

The staff analyzed Sierra Pacific's conservation programs in considerable depth (see generally, Exh. 19). The application included only $113,389 for the test year for conservation programs; however, this was an error. Sierra Pacific's work papers showed an amount of $168,341, of which the staff recommended allowing $162,441. The major issues in this area concern not the amounts but whether Sierra Pacific adequately pursued conservation goals or whether, as the staff recommends, the utility should be penalized for failing to do so. We will analyze the individual programs and then discuss the issue of penalty.

Sierra Pacific's Programs

Bob J. Lewis, manager of administrative services for Sierra Pacific, testified that all conservation programs must demonstrate cost-effectiveness and that the value of the energy saved will pay for the cost of installation over a reasonable period. He said that since D.88660[1/] Sierra Pacific has developed a number of programs, under the following general goals:

1. Develop a sound data base on which to form conclusions and determine what types of conservation programs should be developed for residential and commercial needs;
2. Develop promotional material for conservation programs which can be understood and followed by the average consumer;
3. Develop a staff which is knowledgeable and capable;
4. Select media for communicating conservation ideas which are economical and effective;
5. Establish an ongoing research and development program which can expand and improve conservation activities;
6. Develop a conservation hardware program which will directly market conservation devices;
7. Ensure that all programs meet the objectives of cost-effectiveness;

1/ Dated April 4, 1978 in Sierra Pacific's Application (A.) 57076. A previous decision in that application had adjusted Sierra Pacific's rate of return downward by 0.15% because the utility made no affirmative showing on conservation. D.88660 restored the full return after Sierra Pacific made such a showing. The programs comprising Sierra Pacific's conservation efforts at that time consisted of (1) informational programs for the consumer, (2) home energy audit program, (3) retrofit insulation program, (4) conservation hardware program, and (5) total energy conservation home ("TECH") program. Sierra Pacific estimated its total five-year cost at $325,691, or $65,138 per year at an average cost per customer per year of $2.20. The staff reviewed the program, and the staff witness testified that Sierra Pacific had presented a comprehensive energy conservation program which, (according to D.88660, p. 4) "if vigorously and cost-effectively carried out can result in significant energy savings..." The staff recommended that the program be carefully monitored for continued cost-effectiveness and modified as necessary. See, generally, D.88660 and Exh. 15 through 27 in that proceeding.

8. Institute an insulation financing program (loan guaranteed by the company) which is effective and ensures the customer both quality and good price;
9. Retrofit 75-90% of the insulatable dwellings making up the company's electric space-heating customers by the mid-1980's to bring them up to minimum thermal efficiency standards;
10. Work with various governmental agencies to ensure that adequate building standards are developed which are energy efficient;
11. Work with architects and contractors to familiarize them with energy efficient building techniques;
12. Work with building suppliers and home improvement and hardware dealers to ensure adequate supplies of energy efficient building and home improvement products;
13. Establish a reputation as a clearinghouse for information which the customer can depend on for advice and assistance; and
14. Help insulation and building contractors and other suppliers develop effective associations to protect the customer and reputable businessmen.

The witness then outlined the programs designed to achieve these goals. (The following is condensed from Exhibit 1.)

Energy Audit. This program was started in 1978. It has been modified so that electric space-heating customers are contacted systematically by direct mail as well as by bill inserts. The audit is used as a means of selling the company's retrofit attic insulation program. In 1979 Sierra Pacific contracted with Enercom, Inc. to provide customers with in-depth energy audits. Also in 1979, the utility revised its financing plan to make 8% loans available for reinsulating to the level of R-38.

Associated with reinsulation is an incentive program (authorized in D.90308, Case (C.) 10032), consisting of installation of water-heater blankets and low-flow shower heads.

Specialty Hardware. Certain inexpensive conservation devices are merchandized by direct mail (set-back thermostats, fluorescent lamps, etc.).

Building Standards. In 1979 Sierra Pacific published a new set of building standards incorporating innovations in thermally efficient residential construction.

Consumer-awareness Program regarding energy-efficient appliances.

Employee Energy Conservation Program. The company states that since the start of this program in 1971, the majority of its employees' homes have been retrofitted with insulation and conservation devices.

"Do-it-yourself" Insulation Program. This was a special program for Portola and Loyalton, in the northeastern portion of its California service area where the winters are severe. Insulation was provided at cost to as many homes as possible over a two-weekend period. The campaign was entitled "Stop the Great Escape" and was a joint undertaking of Sierra Pacific and the Plumas Sierra Electric Cooperative (Cooperative). Sierra Pacific has approximately 1,600 residential customers in the area and Cooperative has approximately 1,500. Ninety-eight of Sierra Pacific's customers participated, although this included many of those who most needed insulation.

Sierra Pacific considered whether such a program would work in the Tahoe Basin, and finally decided that it would not because of the high percentage of second homes and rentals. Witness Lewis also testified that of about 5,000 space-heating customers in the Tahoe Basin, about half own dwellings which cannot be insulated, at least without major reconstruction.

Central Weatherization Center. Sierra Pacific, Southwest Gas Company, and CP National Corporation have jointly established this center to determine which company is providing space heating for a particular dwelling. The energy audit is then referred to the correct company.

Sierra Pacific selected seven years as its period for determining cost-effectiveness of the program, because as witness Lewis stated:

> "Seven years is a national statistic. The average homeowner moves or relocates on an average of every seven years. The new owner may or may not continue to employ the same conservation techniques as the previous owner. Therefore, seven years was determined to be a reasonable duration for the life cycle calculation." (Exh. 1, p. 18.)

Staff's Analysis

The staff's exhibit (Exh. 19) comprehensively analyzes not only Sierra Pacific's proposed test year conservation programs, but also the utility's "capitalized conservation activity", meaning voltage regulation, small power production, and certain other capital expenditures.

The following table from Exhibit 19 shows the development of Sierra Pacific's customer service and information programs:

A.59894, 60860 /ALJ/bw

Sierra Pacific Power Company

Customer Service and Information (CS&I) Expenses
Recorded 1978 and 1979, Estimated 1980.
and Test Year 1981

Line (a)	Program (b)	1978 Recorded (c)	1979 Recorded (d)	1980 Estimated (e)	Increase Over 1979 (f)	1981 Test Year (g)	Increase Over 1980 (h)	Increase Over 1979 (i)	Fraction 1981 Total (j)
1	Information Program	$15,624	$21,873	$ 25,998	19%	$ 45,800	76%	109%	31%
2	Home Energy Analysis	7,585	19,936	45,119	126%	49,600	10%	149%	34%
3	Retrofit Insulation	2,022	6,489	8,999	39%	13,400	49%	107%	9%
4	Hardware	5,435	6,508	13,978	115%	15,400	10%	137%	10%
5	TECH Home	535	574	713	24%	-	-	-	0%
6	EER Appliance	710	-	1,000	-	2,461	146%	-	2%
7	Home Service	6,100	4,198	8,371	99%	10,900	30%	160%	7%
8	Commercial	4,027	4,416	10,067	128%	11,000	9%	149%	7%
9	Program Totals	$42,038	$63,994	$114,245	79%	$148,561	30%	132%	100%
10	Other CS&I	29,190	31,711	-	-	19,780	-	-	-
11	CS&I Total	$71,225	$95,705	-	-	$168,341	-	-	-

Staff witness Brian Schumacher commended the utility for some of its customer service and information programs, but pointed out:

1. None of the low-cost devices (such as shower heads and heater blankets) are used as incentives to have a home energy analysis completed.

2. The number of home energy audits appears to be dropping each month while the cost per audit is increasing. Restoring the volume of completed audits could lower the cost per audit. (Assuming productivity could be restored to the average of the three years prior to 1981, 456 audits could be completed in California for the test year.)

3. Sierra Pacific should reduce costs of the audits, which for 1981 are 149% higher than 1979.

4. Sierra Pacific's attic insulation (retrofit) program is promising but reported results are lacking. Sierra Pacific was the only utility that, for 1980, reported writing no 8% loans for insulation (see Exh. 19, Table 4-3). In October 1979, Sierra Pacific changed the program by offering to include incentive bonuses of low-flow shower heads and heater blankets, but only one installation of each item was reported 12 months later.

5. The low-interest insulation loans, specifically ordered by the Commission, have not been promoted. A review of Sierra Pacific's advertising shows that none of the materials contain the words "low interest" or other appropriate language. Nor was there information about the incentive terms.2/

6. While the utility estimated a total of 120 retrofitted insulation jobs through June 1980, all were owner-financed. Other than the special program in Loyalton and Portola (the "do-it-yourself" promotion mentioned earlier) the company's activity seems restricted to recommending more insulation after a home energy audit.

2/ The staff also originally criticized the company for not applying for a zero-interest finance program. This was remedied by the filing of A.60587 on May 20, 1981.

7. The TECH program (see footnote 1) has been discontinued.

8. The energy-efficient appliance program (informing customers of savings resulting from purchasing newly designed appliances) has not been pursued actively.

9. Sierra Pacific is increasing the scope of its commercial and industrial energy audits (the staff's exhibit determines that a large budgetary increase is reasonable) but there is little quantitative information about energy or cost savings.

10. The staff expresses considerable concern over the utility's cost-effectiveness evaluation of the various programs. The staff believes that Sierra Pacific should be tracking each program, not the aggregate. In D.88660, supra, the Commission specifically ordered Sierra Pacific to monitor each segment for effectiveness and to file quarterly reports. The filed reports have included only one or two programs and have reported savings for the others as not measurable. (This is developed in detail in Exh. 19, Chapter 4, Section G.)

The above items concern consumer-related programs which are expensed. In Chapter 5 of Exhibit 19, various capitalized items are analyzed. A summary of the analysis follows.

Conservation Voltage Regulation. The staff exhibit commends Sierra Pacific for this program, which lowers and stabilizes voltages and improves system reliability. The staff estimates that between 1980 and 1985, the MWs saved will increase from 4,600 to 36,000.

Streetlight Conversion. This consists of encouraging customers using outdoor lighting (there are about 1,400 such customers) to switch from incandescent to fluorescent or sodium vapor lighting. The company reported that all new installations are sodium vapor, but there seems to be little evidence of conversion activity.

Cogeneration. Sierra Pacific believes that, after investigation, cogeneration is not cost-effective in its California service areas because, as mentioned in the staff exhibit, there are only four industrial customers, none large. The staff exhibit makes no particular recommendation although it notes that one well driller near Sierra Pacific's territory had contacted the utility about cogeneration and no interest was shown.

Similarly, the exhibit notes that Sierra Pacific had not yet responded to a rancher who proposed a 50 kW hydroelectric generator on the Truckee River in Alpine County.

Geothermal and Solar. Lastly, the staff favorably reported on Sierra Pacific's solar and geothermal energy programs. The value of solar is limited by trees which frequently shade residential rooftops, and by snowfall which covers the reflectors. However, Sierra Pacific is studying, together with McDonnell Douglas Astronautics, the possibility of replacing one existing fossil-fueled boiler at its Fort Churchill plant with a "solar power tower".

Geothermal investigations are being conducted jointly by Sierra Pacific, Pacific Power & Light Company, Sacramento Municipal Utility District, and certain other participants with no California service territories. An assessment phase is in progress to determine how cost-effective production of geothermal power would be in this area. The efficiency of geothermal sources is determined by the temperature and purity of the steam, and this can only be known by tapping the unexplored heat sources. Thus, there is a financial risk.

The staff exhibit indicates that negotiations with steam producers should result in about 10 MW on line in 1982 and 50 MW two years later. Sierra Pacific's 20% share of costs should total about $150,000 in 1980 and 1981. If the first 10 MW generator is ordered, progress payments would be about $1,000,000.

In conclusion, the staff exhibit states that Sierra Pacific's conservation programs which do not concern direct customer contact are "more than adequate" (Exh. 19, p. 5-8) and terms Sierra Pacific's energy-savings efforts with such programs as "vigorous" (id.).

Sierra Pacific's Response

In summary, Sierra Pacific answers the staff's criticism of some of its programs as follows:

1. The company did promote the 8% financing plan through various mailers, and the energy auditors discussed the program with customers. However, the Tahoe service territory is made up of many houses which are either second homes or used as rentals. Rentals are in high demand so that there is no pressure from tenants on landlords to insulate.

2. The same problems have slowed the reinsulation program, but some progress was made. The utility's goal was to reinsulate 75-90% of the dwellings capable of being reinsulated (about 2,900). Notwithstanding the difficulties, about 940 reinsulated.

3. The TECH program was pursued by way of distribution of literature and information to customers and contractors. 250 to 300 informational responses were made, but the company received little feedback on them. To the knowledge of the company, a few homes made use of the information (such as orienting the home to make proper use of the sun) but "economics" rather than energy conservation seems to dictate construction methods. Also, construction has declined.

4. Sierra Pacific also pursued a program of low-cost reinsulation for its employees. About 100 employees live in California; approximately 65 have been retrofitted with insulation.

Additionally, witness Lewis stated in supplementary prepared testimony that the utility had taken the following action since our D.88660:

"1. The staff of the Conservation Department has been upgraded and increased by 75%.

"2. Eight specific conservation programs have been defined, which are responsive to customer needs. These programs are continually monitored to insure they are cost effective and satisfy customer needs.

"3. We have been able to identify specific energy conservation markets through a series of surveys. This has enabled us to develop an effective communications program on various conservation subjects.

"4. We have taken advantage of the opportunity to work directly with this Commission's staff and have made significant progress in quantifying the cost effectiveness of our conservation programs.

"5. During the past two years, we have developed an accounting system that allows us to readily identify conservation expenditures by jurisdiction as well as by specific program.

"6. Through our survey techniques we have identified that 944 space heating customers have reinsulated their homes over the past 2½ years, which represents approximately 42% of that customer group. Considering that our billing records indicate 54%, or nearly 3000, of our electric residential space heating customers live outside our service area, the number of re-insulation jobs just mentioned is indicative of how effective our conservation programs have been.

"7. During this time period 6 direct mail pieces were sent to our space heating customers soliciting energy audits, announcing our special financing program, including the special 8% interest rate allowed by this Commission. All of these direct mail pieces were supplemented by bill enclosures and a variety of media advertising.

"8. 562 home energy audits have been conducted during this period, which represents about 11% of all electric heating customers in our California service territory.

> "9. Also, we have successfully merchandized a total of 3400 conservation hardware items such as setback thermostats, water heater insulation jackets, low flow shower heads, fluorescent lamps, etc."

Lewis emphasized that after making weather adjustments, the average use per customer continues to show a downward trend of 22% since the full implementation of the customer service and information programs. (Savings from items such as voltage regulation must be added to this percentage.)

Discussion

The staff actually proposed two methods of revenue adjustment, the first alternative being a 0.18% penalty against rate of return, and the second being the allowance of $64,300 for conservation expenses while at the same time enforcing a stipulation on the company's part (Tr. 845) to expend sums on a monthly basis so that the annual expenditure would actually amount to $162,441.

A rate of return adjustment is not appropriate. This record demonstrates a considerable turnaround in Sierra Pacific performance regarding consumer-oriented conservation programs. The staff's showing establishes that certain individual programs have not been initially successful. Most particularly, retrofitting of insulation has proceeded slowly and the 8% loan program was a failure. At least some of the problems with these programs are traceable to the nature of the area (many rentals and second homes, and many buildings which cannot be retrofitted economically).

The utility measured the total conservation result of its effort at 22%, but it has not yet developed adequate techniques to determine which of its customer programs are cost-effective. (The staff also questions the 22% total but introduced no evidence to rebut it.)

This record does not show that Sierra Pacific has failed to pursue conservation goals. A rate of return reduction is strong medicine, which we do not hesitate to prescribe when necessary, but there should be some showing amounting to consistent mismanagement or general disinterest before earnings are reduced. And while certain programs are not yet successful, it should be remembered that we have asked for many new and innovative programs over the last few years. Under the circumstances, it is not fair of us to view the total effort with 20/20 hindsight vision and to reduce earnings because three or four individual approaches "fail" (i.e. are not cost-effective) when the overall effort is successful.

Furthermore, the staff's approach separates the consumer-directed conservation effort from programs in other categories which have pronounced long-term energy-savings effects. This may have resulted from certain recent decisions (cited elsewhere) emphasizing our concern over the direct-to-consumer programs. But these decisions do not mean that we should ignore a utility's overall performance.

The very next chapter of the staff's report (Exh. 9, Ch. 5) lauds the company for its "vigorous pursuit of energy savings" through diversifying power sources, and a well-conceived voltage reduction and regulation program. The enlightened and progressive attitude of the utility in this area should be considered.

But while this record does not demonstrate either that Sierra Pacific generally lacks interest in pursuing conservation goals, or that there is general mismanagement of the programs, we are swayed by the staff's plea that conservation program expenses must be properly tracked by adequate survey techniques, for the utility's benefit more than our own. This will assure that if a program fails, it is revised or discontinued within a reasonable time.

Because of the need to improve in this area, we will recognize the proposal mentioned above reducing the amount to be recovered by $98,104. We will also adopt a specific staff disallowance of $5,900 for the Home Service Program because it has changed to fulfill several goals, some of which are unrelated to conservation.

However, it is not reasonable to require Sierra Pacific to carry out its conservation programs as proposed while not allowing adequate compensation in rates. Therefore, we will allow Sierra Pacific to recover the $98,104 by a showing that the conservation programs contained in Sierra Pacific's application are cost-effective. This will require an advice letter filing that adequate tracking techniques exist to assess the costs and energy savings of each program. If we are satisfied with Sierra Pacific's showing, we will allow Sierra Pacific to increase its base rates by $98,104, through a supplemental decision. We emphasize that the point of this action on our part is not that every program must always succeed to be allowed, but that reasonably efficient monitoring of the programs should be established.

We will require that sums found reasonable for consumer-oriented conservation programs be accounted for separately to assure that funds allocated for that purpose are expended for it.

III. EMPLOYEE DISCOUNTS

We specifically directed the staff to analyze the effect of eliminating employee discounts.

The staff's energy conservation exhibit devotes a chapter to this subject (Exh. 19, Ch. 6). Sierra Pacific has eliminated discounts for management employees. A 50% discount remains for employees covered by the collective bargaining agreement with International Brotherhood of Electrical Workers Local 1245 (IBEW 1245).

The exhibit shows that the value of the employee discount increased faster than the consumer price index since 1975 due to increases in cost of energy to the consumer. Staff witness Monson attempted to estimate cost-effectiveness of eliminating employee discounts by determining price elasticity of energy, using various studies from professional journals. The conclusions varied widely. The average of these studies produces an elasticity factor of minus 0.58 (meaning that elimination of employee discounts would cost an estimated 5.86¢/kWh saved (Exh. 19, p. 6-3)). Sierra Pacific's estimate of the marginal cost of developing additional kilowatt-hours from existing plant is 4.46¢/kWh, although the staff believes that marginal cost of generating energy from coal-fired plants can be as high as 12¢/kWh.

Staff witness Mefford presented a separate analysis in the rate design exhibit (Exh. 17, pp. 4-5 and 4-6). Mefford notes that Sierra Pacific's discount is generous; Pacific Gas and Electric Company's, for example, is 25% rather than 50%. He requested a bill analysis and received the following for 1979:

Bill Analysis - Employees v Nonemployees

Lifeline Category	No. of Employees	Average Consumption kWh/Month: Employees	Permanent Residents	Employees Exceed Average: Amount	Percent
D-1(A) Basic Only	29	584	483	101	21
D-1(B) Basic with Electric Space Heating	None	-	935	-	-
D-1(C) Basic with Electric Water Heating	20	893	853	40	5
D-1(D) Basic with Electric Space and Water Heating	15	1,608	1,426	182	13
Total	64				

At least for 1979 the table demonstrates that employees used from 5% to 25% more electricity than nonemployees. This section of the rate design exhibit originally contained a recommendation that the employee discount be terminated, but it was deleted at the request of the staff on the basis that the energy savings as a result of eliminating the discount are not quantified.

Both Sierra Pacific and IBEW 1245 criticize the formula development by staff witness Monson in Exhibit 19 as based on too many theoretical considerations which are untested by applying them to any actual study of usage patterns. IBEW 1245 also points out that the analysis concerns all Sierra Pacific employees who live in California, although there is no longer a discount for management employees. (See, generally, IBEW 1245's opening brief, pp. 35-40 and its closing brief.)

IBEW 1245 also extensively argues that we may not simply eliminate employee discounts by our direct order, citing the U.S. Constitution's Supremacy Clause (Art. VI, § 2); Gibbons v Ogden (1824) 9 Wheat. 1; and various U.S. Supreme Court cases on the conflict between state law and the National Labor Relations Act, notably San Diego Bldg. Trades Council v Garmon (1959) 359 US 236, which states (pp. 244-245):

> "[T]o allow the States to control conduct which is the subject of national regulation would create potential frustration of national purposes... When an activity is arguably subject to section 7 or section 8 of the Act, the States as well as the federal courts must defer to the exclusive competence of the National Labor Relations Board if the danger of state interference with national policy is to be averted."

Certain cases concerning interstate versus intrastate rates are also cited.

There is apparently no case concerning a state regulatory commission's (or a state legislature's) power to regulate energy conservation by terminating employee discount rates, and the staff regards the cases cited in IBEW 1245's brief as not in point (see staff's closing brief, particularly Amalgamated Transit Union v Byrne 568 F 2d 1025 (3d Circ. 1977) in which the court found that the governor of New Jersey's announcement that the state would quit subsidizing private transit companies if the unions insisted on retaining an "uncapped" cost-of-living clause was not an unlawful interference with collective bargaining.)

Concerning California law, IBEW 1245 cites Pacific Tel. & Tel. Co. v PUC (1950) 34 Cal 2d 822 for the proposition that this Commission cannot "meddle in labor relations" (IBEW 1245 opening brief, p. 29). The case did not concern labor relations but an attempt by the Commission to prescribe the terms of a contract between a utility and its parent company. The staff notes that later cases have narrowed the rule, notably Credit Ins. General Agents Assn. v Payne (1976) 16 Cal 3d 651, in which the California Supreme

Court held that the insurance commissioner has implicit power to regulate the amount of commissions paid to insurance agents. The court commented that its role was limited to determining whether a regulation is "reasonably designed to aid a statutory objective." (16 Cal 3d 657.)

In our opinion, it is not an interference with federal (or state) collective bargaining rights for this Commission to decide that tariffed employee discounts must be discontinued at the conclusion of an outstanding collective bargaining agreement,[3/] when competent evidence shows that their elimination will work in the best interest of energy conservation. At the end of the agreement, there are other alternatives to avoid undercompensating employees, such as an offsetting wage increase.

As the staff points out, we have never taken such action. (Cf. Pacific Gas & Electric Co., A.58631, D.92490, December 2, 1980, slip opinion pp. 13, 18.) In one instance we did find that generous employee discounts were beginning to affect the rates of others, but we did not terminate or modify them. Instead, we placed a ceiling of $10 million on the amount of such discounts which would be considered for ratesetting purposes, announcing that for any amount in excess, we would make an adjustment which would assume that revenues are collected at nondiscount levels (Pacific Tel. & Tel. Co., 83 CPUC 149, 218-221; D.88232 dated December 13, 1977). We stated:

> "We emphasize that it is not our objective to order Pacific to modify its discounts regardless of its commitments to its employees, but merely to decide whether there is a maximum total amount of such discounts reasonably chargeable to the ratepayers. For the present, we will simply state that

---

3/ No party argues in favor of any immediate cessation of employee discounts, which would have the effect of terminating a provision of an existing contract. The question of whether a state regulatory commission can take such action is raised (with certain associated issues) in IBEW 1245 v Nevada Pub. Serv. Comm. (9th Circ. 1980) 614 F 2d 606. The Federal Court has not issued a final opinion and proceedings are stayed pending resolution of certain state issues in a case originating in a Nevada court and now on appeal to the Nevada Supreme Court. Argument before the Nevada Supreme Court is expected to be calendared for December.

> unless good cause is shown, we believe that $10 million is the maximum that should be allowed in future rate proceedings for total discounts. We have a strong and justifiable interest in regulating usage in order to prevent peak-load problems, which in turn lead to the necessity to install extra plant." (83 CPUC 220.)

The value of a ratemaking adjustment to test year revenues as an alternative to outright termination of employee discounts was not developed.

This record convinces us that the issue of employee discounts offered by energy utilities should be explored in a generic proceeding, rather than on a company-by-company basis. We will then be able to develop the issue in more detail and evolve some overall policy. Here, there are too many unanswered questions and unexplored issues. A complete analysis of alternatives produces the following outline:

1. Take no action:
    a. Because the offsetting wage increase for employees overbalances conservation gains;
    b. Because there is an insignificant energy saving.
2. Eliminate discounts (if conservation gains are shown):
    a. Immediately;
    b. When collective bargaining contracts expire;
    c. At a fixed date in the future (possibly a uniform date for all energy utilities).
3. Reduce discounts to a specified maximum (includes the same problem of time frame):
    a. Uniformly for all energy utilities;
    b. With some variation permitted from one utility to the other, depending on the evidence.

4. Adopt a ratemaking adjustment (see discussion of Pacific Tel. & Tel. Co., 83 CPUC 149, supra):

   a. Of 100% of the discount's revenue effect;

   b. Of some lesser percentage.

This record contains insufficient information for us to take the precedent-setting step of eliminating or reducing employee discounts. As for a ratemaking adjustment, we need more information on its energy-saving effect (if any).

IV. MARGINAL COSTS AND REVENUE ALLOCATION

Marginal Cost Studies

Sierra Pacific's marginal cost study follows the methodology of the National Economic Research Association and the guidelines of OII 67.[4/] The staff's final marginal cost development and allocation was not the subject of any objection by Sierra Pacific. While the utility and the staff made slightly different assumptions, resulting differences were minor enough that the staff witness (Ida Goalwin) used the utility study to allocate revenue by customer class.

On a "without Valmy" basis, there was some disagreement on how to measure loss-of-load probability. With Valmy, however, there is a good reserve. There is no need to order Sierra Pacific to develop a detailed computerized model for loss-of-load probability; it would be unduly expensive because Sierra Pacific's generation mix is highly flexible and variable. The staff and the company should continue to study this problem on a simplified basis without undue expense.

In the staff's opinion, Sierra Pacific should perform additional studies on peak seasonal time-of-day estimates. For this proceeding the staff accepted Sierra Pacific's time periods, which are based on an analysis of daily utility load curves and the probability of exceeding available capacity during different methods. (See Exh. 17, pp. 2-14, 2-15, and 2-16.) We agree that such studies should be undertaken in time for the next general rate increase, since peaking characteristics for this company appear to be changing.

4/ The decision in that OII (D.92749 dated March 3, 1981) post-dates the submission of the marginal cost studies in this application, but the studies follow the staff's recommended methodology in the OII, which was eventually adopted by the Commission.

Application of Marginal Costs

After the total marginal cost is determined, a method of adjusting that total cost to the total revenue requirement must be selected. In this proceeding the total marginal cost revenues are approximately $20,600,000 while both the utility and the staff estimate revenue requirements of about $15,000,000.

After identifying three possible methods, the staff recommends the "equal percentage of the difference" calculation since it avoids abrupt, radical changes to any one customer class. (Exh. 17, table 3-C, col. D.)

In Exhibit 12, Sierra Pacific's Senior Rate Analyst George Smith based the utility's proposal on a fully embedded cost study. Apparently, Sierra Pacific still prefers this method, although its briefs do not include a specific argument in its favor.

We will apply the staff's equal percentage of the difference method, but with some modification to retain proper relationships between customer classes and because the final rates in this proceeding include not only the increase in base rates due to Valmy, but an offsetting ECAC reduction.

Table 3-C in Exhibit 17 illustrates base revenue allocation following the staff's methodology and contrasting it with the utility's embedded cost distribution. The table shows these allocations to existing rates without considering ECAC revenues. This table follows.

SIERRA PACIFIC POWER COMPANY

1981 DOLLARS

(Add 000's)

Class	(A) Current Base Revenue	(B) Marginal Cost Base Revenue (-ECAC)	(C) Equal % Reduction From MC Revenue	(D) Equal % of Difference Between Current Revenue And MC Revenue	(E) Utility Proposed
			76.5% of Col. B	Col. B - Col. A x .5269 plus Col. A	
Residential	5,968	11,038	8,444	8,639	8,359
A1	2,673	4,310	3,297	3,530	4,898
A2	.880	3,045	2,329	2,021	1,686
A3	452	2,102	1,608	1,321	602
SL	92	63.3	48.4	92	65
OL-1	84	NA	NA	84	70
OL-2	67	38.3	29.2	67	57
Total	10,216	20,547	15,776	15,754	15,737
Revenue Req.		15,716	15,716	15,716	15,716
Adj.		4,831	39.6	38	21

The two additional tables which follow further explain the resulting base rate structure.

The first table shows the results of the modified marginal cost calculations. An assumption was made that no class should receive a base rate increase of more than double the 25.1% system average base rate increase. This assumption is based on the fact that it has been Commission policy to avoid shifting from the embedded to marginal costs so abruptly that radical rate changes result. Unmodified application of the adopted marginal cost methodology to the base rates would result in a 91% increase to the large general service classification while the increase to small general service would be 14%.

The second table summarizes the base revenue changes since this application was filed.

Sierra Pacific Power Company

PHASE II REVENUE ALLOCATION TO BASE RATES

Class	Current Base + Interim Revenue (5/5/81)	Marginal Cost Base Revenue	Difference	Increase 1/ Amount	Increase 1/ %	Base + Interim + Phase II Revenue
Residential	$ 6,726,500	$11,038,000	$4,311,500	$ 1,410,313	21.0%	$ 8,136,813
Small General	3,016,700	4,310,000	1,293,300	653,479	21.7	3,670,179
Medium General	1,181,200	3,045,000	1,863,800	609,658	51.6	1,790,858
Large General	552,700	2,102,000	1,549,300	276,350	50.0	829,050
Outdoor Lighting	159,100	159,100	-	-	-	159,100
Street Lighting	95,400	95,400	-	-	-	95,400
Totals	$11,731,600	$20,749,500	$9,017,900	$ 2,949,800	25.1%	$14,681,400

1/ Spread by equal percentage of the difference method and adjusted to retain proper relationships between customer classes.

Sierra Pacific Power Company

SUMMARY OF BASE REVENUE CHANGES SINCE A.59894 WAS FILED

Class	A.59894 Present Base Revenue 1/	Base + Interim Revenue 2/	Base + Interim + Phase II Revenue	Base + Interim + Phase II + AER 3/ Revenue	Base + Interim + Phase II + AER 3/ ¢/kWh
Residential	$ 5,968,000	$ 6,726,500	$ 8,136,813	$ 8,453,690	3.495¢
Small General	2,660,000	3,002,100	3,670,179	3,808,364	3.610
Irrigation	13,000	14,600	-	-	-
Medium General	880,000	1,181,200	1,790,858	1,884,964	2.624
Large General	452,000	552,700	829,050	872,691	2.620
Outdoor Lighting	151,000	159,100	159,100	162,281	N/A
Street Lighting	92,000	95,400	95,400	96,752	N/A
Totals	10,216,000	11,731,600	14,681,400	15,278,742	3.351

1/ Rates in effect August 21, 1980.

2/ Rate increase of $0.003322/kWh authorized by D.92987.

3/ Annual Energy Rate (AER) of $0.00131/kWh adopted August 4, 1981 in D.93374.

Combining the ECAC Reduction
With Base Rate Relief

To set final revenue allocations, the adopted base rate relief must be combined with the ECAC decreases.

The only revenue allocation question concerning the ECAC reduction rather than base rate issues is whether we should use Sierra Pacific's suggested method of adjusting ECAC factors by a uniform percentage method. (See Exhibit B to A.60860, p. 2.)

This method causes subsidization of the residential rates by the nonresidential classifications. In Sierra Pacific Power Co., D.93374 dated August 4, 1981 (A.60246 and 60369), we found this to be an undesirable result and made a system average adjustment to all rate classes. This method should be applied here. The resulting ECAC factor to be applied to all rate classes is 4.111¢.

The final table in this section of the opinion shows the changes from current effective rates (including ECAC) to the rate levels found reasonable in this decision.

All classifications receive some reduction because of the pronounced annual effect of the ECAC change associated with the installation of Valmy. Bill comparison tables for some of the classes appear in the rate design section of this opinion.

Further discussion regarding the adoption of particular base rate factors is contained in the following section of this opinion (rate design).

Sierra Pacific Power Company

PHASE II COMPARISON TO
CURRENT EFFECTIVE RATES (AS OF 8-22-81)
(¢/KWh)

Class	Current Rates (8-22-81)			Phase II Rates with Valmy & ECAC Reduction			Difference	
	Base	ECAC	Total	Base	ECAC	Total	Amount	%
Residential	2.883	4.824	7.707	3.495	4.111 1/	7.606	(0.101)	(1.3)%
Small Gen.	2.960	5.264	8.224	3.610	4.111	7.721	(.503)	(6.1)
Medium Gen.	1.746	5.264	7.010	2.624	4.111	6.735	(.275)	(3.9)
Large Gen.	1.761	5.264	7.025	2.620	4.111	6.731	(.294)	(4.2)
Total	2.637	5.029	7.666	3.351	4.111	7.462	(.204)	(2.7)

(Red Figure)

1/ This is the average rate. Residential rates have different ECAC factors for lifeline and nonlifeline blocks. See discussion in rate design section of this opinion.

V. RATE DESIGN

Introduction

Most of the public hearing time concerned rate design issues, particularly regarding the proposed increases for small business and whether lifeline rates should apply to "second homes" (dwellings which are rentals or which the owner does not use as a primary residence). Also in controversy are certain rate design features as they apply to ski areas. A large volume of evidence was submitted. We have considered all of it although our discussion of it here is abbreviated.

Lifeline Rates and Second Homes

Sierra Pacific's tariffs provide that lifeline rates are inapplicable to nonpermanent or secondary homes. The utility proposes to change this. Company witness Smith stated (Exh. 12, p. 8):

> "This [tariff feature] has proven to be very difficult, if not impossible, to administer fairly while at the same time being extremely unpopular and difficult for our customers to understand. It is noted by the company and our customers that Sierra Pacific is one of very few utilities in California which makes such a distinction between permanent and non-permanent residents. Income levels or ability to pay have never been used as a measure of qualification for lifeline entitlement. Merely because an individual is fortunate enough to be able to afford a second home does not mean that he should not be given an appropriate lifeline allowance while living there. For these reasons Sierra Pacific proposes to eliminate the distinction, offering lifeline entitlement to all residential customers."

The staff acknowledges the difficulty of administration, but believes that elimination of the distinction between primary and secondary homes is antithetical to lifeline policy, pointing out that about half the dwellings in the Tahoe area are not primary homes. Staff witness Mefford's position is explained as follows (Exh. 17, pp. 4-3 and 4-4):

> "The lifeline program was established in order to provide minimum levels of usage at rates everyone could afford and to encourage conservation by charging higher rates for nonessential usage. In 1976, when the rates for the lifeline usage block were frozen, Sierra Pacific's lifeline usage was priced higher than the subsequent usage blocks. However, in the last general rate case decision, Decision No. 88337, the residential tariff schedule was inverted; lifeline usage became less expensive than nonlifeline usage. With this change, the residential tariff schedule became consistent with the intent of the lifeline program.
>
> "Vacation homes were excluded from lifeline in Decision No. 88337 from the last general rate case, Application No. 57076, at Sierra Pacific's request. This was done in accordance with Finding of Fact No. 13 in the second lifeline decision, Decision No. 88651, dated April 4, 1978. The decision included Sierra Pacific as a utility which should not provide lifeline to second homeowners, because utility revenues would be adversely affected by the conservation effect.
>
> "There are two arguments against granting lifeline allowances to second homeowners; one is policy oriented and the other is pragmatic. From a policy perspective, providing lifeline to second homeowners does not seem fair or consistent with the lifeline goal of encouraging conservation. From a practical perspective, providing lifeline to second homeowners will drive up the rates of all other customers.
>
> "Providing lifeline to vacation homes effectively grants second homeowners twice as much low-cost electricity as people who own only one home. A second homeowner can live in one home during

> the mid-week and another on weekends. The second homeowner may stay within the lifeline allowance for electricity usage at each residence. However, the second homeowner may be consuming twice as much electricity as single homeowners who exceed lifeline. The single homeowners would be billed at the non-lifeline rate while the second homeowner would be billed at only lifeline rates. Clearly, second homeowners would not receive the same incentive to conserve that single homeowners would receive."

Several property owners testified in favor of Sierra Pacific's proposed change. They explained that many of the owners of second homes were hardly wealthy and for the most part had acquired small simple structures years ago when property was relatively cheap.

We agree with the staff that the distinction between primary and secondary dwellings should remain. This is not an academic issue. About half of the 5,000 homes in the Tahoe area are not primary residences. It is unfair to those who actually use their dwellings for primary residential purposes to subsidize those who do not. The record indicates that secondary homes, when not rented, are mostly used on weekends or for other short periods so that the owner is able to take undue advantage of the lifeline rate block, which is set assuming normal monthly usage for a particular service area. The same problem occurs with the short-term renter (for vacation or weekend purposes).5/ The situation is,

5/ A person or family renting a dwelling on a long-term basis for primary residential purposes is eligible for lifeline.

in turn, (as Sierra Pacific's own evidence demonstrates) a major deterrent to the reinsulation of dwelling units in the Tahoe area.

We acknowledge that not all second homeowners are affluent, but the same may be said of the permanent residents of the Tahoe area who use their houses as their homes. In any event, the primary issue is not wealth or its absence. Lifeline rates are part of a rate structure which has been devised to encourage energy conservation, while holding down costs as much as possible for the permanent resident who is a moderate user.[6/]

We also recognize the problem of policing a tariff which is unpopular with the second homeowner. No doubt some second homeowners will devise ways to wrongfully qualify for lifeline rates. Almost any law or regulation is unpopular with those affected adversely by it, even if its purpose is the public good. The company simply must do the best job possible in enforcing the tariff.

The staff suggests that Sierra Pacific be allowed to file an amended tariff which would permit the utility to investigate the status of a homeowner in disputed cases. At present, the tariff allows the utility to differentiate between permanent and other residential customers "on the basis of a service and mailing analysis." The proposed amendment would permit Sierra Pacific to rely additionally on the homeowners' declaration of property tax exemption filed with the county for a primary residence, "and any other relevant information." (Exh. 17, p. 4-4.)

We will order the tariff to be amended to allow reliance on the declaration of property tax exemption, since it is a public record, but not "other relevant information", since this phrase is too broad and might lead to disputes over what records or information it covers.

6/ We reject Tahoe Tavern Property Owners Association's contention that the usage of secondary homeowners should be considered in this connection. Legislative history of lifeline shows that its purpose is to hold down costs for persons having low usage and who use their dwellings as permanent residences.

Charges for Delinquent Bills

Sierra Pacific's proposal for a service charge on delinquent accounts affects all schedules but is of chief interest to residential ratepayers.

The utility currently experiences average monthly delinquency balances of approximately 43% of revenues. Witness Smith pointed out that if the 15.56% cost of short-term debt (prevalent at the time of the hearings) is used, this represents an annual cost to California ratepayers of $159,980 (with Valmy). Sierra Pacific believes it to be unfair for all ratepayers to bear the cost, and proposes a late charge of 1% monthly which will partially compensate for it.

The staff opposes the charge because no other electric utility in the State currently includes one in its tariffs because it would "cause a large number of complaints and project a bad image for the company" (Exh. 17, p. 4-1) and because since it takes a week from the time the meter is read to receipt of the bill, there would really be only three weeks to pay. Those on vacation, or secondary residents, might not return in time to avoid a penalty.

Considering the high volume of late payments, we believe a late charge is fair. We agree with Sierra Pacific that 100% of the cost of carrying overdue bills should not be spread to all the ratepayers. Late charges are now standard for overdue bills in almost every field of commerce.

Since Tahoe has many vacation homes, we will set a longer grace period than suggested - 45 rather than 30 days. This will, in effect, cause carrying charges to show up on the second overdue bill. Such a period also recognizes the meter-reading-to-billing time lapse. If carrying charges continue to run high, we may take a stricter approach in the future.

Sierra Pacific may augment this system by printing on the bill for charges 30 days overdue (or by enclosing with it) a warning that carrying charges begin in 15 days. It may also undertake a program to encourage absentees to have their billings sent to their permanent addresses.

Residential Rate Structure

On a "with Valmy" basis, there is a substantial ($2,671,000) increase in the residential base rate requirement. The utility's embedded cost methodology would actually result in decreased bills for owners of second homes using 3,400 kWh or less, while bills of primary residential customers would increase.

The staff points out that such a structure fails to send a proper conservation signal to the owner of a second home. By use of the staff's marginal cost application, there would be some base rate increase to the second-home customer using 3,400 kWh or less. Base rate bills for owners of primary residences would also increase, but not as sharply. (Part of the difference is also due to the adoption of a rate design under which second homes remain ineligible for lifeline.)

Sierra Pacific proposed setting the lifeline base rate at 60% of the system average base rate. The spread in total rates would be smaller (35%) with no modification of ECAC factors.

Both the staff and company rate designs retain a customer charge. The service area is such that substantial costs per capita are incurred in servicing the basic system due to weather and the fact that there are many small towns scattered throughout the California service territory. We agree that retention of customer charges at proper levels is essential because of the many parttime residents in the Tahoe area, who, when absent, would contribute inadequately to the costs of maintaining the system if the charges are unreasonably low.

The staff's original proposal (that is, before A.60860 was filed and the strong downward effect of the ECAC was known) was a $3.50 customer charge and an energy charge of 0.030323¢, applicable to both lifeline and nonlifeline service. This rate design thus produces a level base rate and accounts for lifeline versus nonlifeline differences in the ECAC rate. The staff's exhibit (Exh. 17, Ch. 4, p. 12) explains:

> "The rationale for going to a flat base rate is twofold. First, the company is likely to have more real commitment to its energy conservation program if conservation goals are not at cross purposes with profits. Under the company's proposal, the lifeline base rate is set at 60% of the non-lifeline base rate. Conservation affects mainly non-lifeline sales, resulting in a disproportionate loss of base revenue when conservation occurs. The staff's proposed flat base rate for lifeline and non-lifeline sales would result in less loss of base revenue due to conservation.
>
> "Secondly, the Commission's rate design policy is aimed at total rates (base + ECAC). The base rates can be changed only every two years per the Regulatory Lag Plan. The ECAC rates are changed every six months to adjust for energy costs. These energy costs are greater than the base revenue requirement at the present time and are expected to remain so. Therefore, the ECAC billing factors must be adjusted in each proceeding to maintain the desired rate design.
>
> "The ECAC procedure can automatically adjust revenue effects due to conservation. A balancing account is maintained which has the effect of correcting any overcollections or undercollections which occur due to changing fuel prices, conservation, and other factors."

The basic concept of a flat energy charge for the base rate portion of the bill and different ECAC charges for residential rate blocks was adopted in Pacific Gas & Electric Co., D.92572 dated January 6, 1981 (OII 77) and Southern California Edison Co., D.92549 dated December 30, 1981 (A.59351), and we find this methodology preferable here.

In view of the pronounced downward ECAC effect, we will not increase the customer charge to $3.50. It will remain at $1.65 for primary residents and $2.30 for secondary residents. Retaining such a differential in monthly customer charges at least to a minor extent prevents the secondary user from benefiting unduly from the greater consumption of the primary resident.

We will also retain the 50% differential between lifeline and nonlifeline. However, we believe the residential rate structure should be restudied in the next general rate increase, to determine whether any decrease in this differential would cause the low-use secondary homeowner (especially one who wrongfully obtains a lifeline allowance), and to make a more appropriate contribution to revenue without unduly impacting the rates of the low-use permanent resident.

Also, there is the problem of the third residential rate block. Various suggestions were advanced on how to adjust the residential third tier, which is set at 5,000 kWh per month and accounts for less than 1% of residential sales. Sierra Pacific proposed its elimination; the staff recommended lowering the block to 750 kWh plus 25% of a customer's applicable lifeline allowance.

In our opinion the utility's suggestion would have an insignificant effect, while the result of the staff's proposal is uncertain because the record contains no study of usage patterns which establish that 750 kWh is the proper crossover point. We will, for the present, retain the third tier at 5,000 kWh but price consumption in that tier at full marginal cost (9.7¢/kWh). This produces the following design as compared with present rates:

	Present Rates			Adopted Rates		
Tier	Base	ECAC	Effective	Base	ECAC	Effective
1	1.573	3.820	5.393	3.200	1.935	5.135
2	3.049	5.319	8.368	3.200	5.142	8.342
3	5.357	5.319	10.676	3.200	6.500	9.700

Two tables containing bill comparisons follow. The first shows comparisons for a primary residence and the second for a secondary residence, based on the adopted rate design and comparing them with current rates.

In the next general rate proceeding, a more thorough study should be made on where the crossover to the third rate block should be located. While the present level is probably too high, there is simply no usage information in this record to assist us in determining its correct placement. Alternate rate designs based on usage information, such as a two-tier structure, may be presented.

Sierra Pacific Power Company

RESIDENTIAL BILL COMPARISONS PRIMARY RESIDENCE

A.59894, 60860 ALJ/bw

kWh	Present Rates 1/		Adopted Rates with Valmy 4/				Adopted Rates with Valmy Plus 5/ ECAC Reduction			
	Basic 2/	All Electric 3/	Basic	Increase (%)	All Electric	Increase (%)	Basic	Increase (%)	All Electric	Increase (%)
250	$ 15.43	$ 15.13	$ 19.35	25.41%	$ 19.20	26.90%	$ 14.81	(4.0)%	$ 14.49	(4.2)%
500	36.35	28.62	40.65	11.83	36.74	28.41	35.67	(1.9)	27.33	(4.5)
1,000	78.19	55.58	83.24	6.46	71.85	29.27	77.38	(1.0)	53.00	(4.6)
1,500	120.03	82.54	125.84	4.84	106.95	29.57	119.09	(0.8)	78.68	(4.6)
2,000	161.87	112.19	168.43	4.05	143.40	27.82	160.80	(0.7)	107.24	(4.4)
3,000	245.55	195.87	253.62	3.29	228.59	16.70	244.22	(0.5)	190.66	(2.7)
4,000	329.23	279.55	338.81	2.91	313.78	12.24	327.63	(0.5)	274.08	(1.8)
5,000	412.91	363.23	424.00	2.69	398.97	9.84	411.06	(0.4)	357.50	(1.6)

(Red Figure)

1/ Includes Increases Authorized by D.92987 and D.93374
Rates:
Customer Charge = $1.65
Lifeline = $0.01573 + $0.03820 = $0.05393/kWh
Nonlifeline = $0.03049 + $0.05319 = $0.08368/kWh

2/ Basic Lifeline Allowance of 240 kWh

3/ Lifeline Allowance of 1,910 kWh for an All Electric Home in Winter.

4/ With Present ECAC Rates
Rates:
Customer Charge = $1.65
Lifeline = $0.03200 + $0.03820 = $0.07020
Nonlifeline = $0.03200 + $0.05319 = $0.08519

5/ With ECAC Reduction of A.60860
Filed: September 2, 1981
Rates:
Customer Charge = $1.65
Lifeline = $0.03200 + $0.01935 = $0.05135
Nonlifeline = $0.03200 + $0.05142 = $0.08342

NOTE: The average permanent resident with a basic lifeline allowance uses 513 kWh per month.

The average permanent resident with an all-electric lifeline allowance uses 2,086 kWh per month in winter.

SIERRA PACIFIC POWER COMPANY
RESIDENTIAL BILL COMPARISONS
SECONDARY RESIDENCE

KWH	Present Rates (1)	Adopted Rates With Valmy (2)		Adopted Rates With Valmy Plus ECAC Reduction (3)		Net Changes from Present Rates
		Amount	Percent	Amount	Percent	Percent
250	$ 23.22	$ 23.60	1.64%	$ 23.16	(1.86%)	(.26%)
500	44.14	44.90	1.72%	44.01	(1.98%)	(.29%)
1000	85.98	87.49	1.76%	85.72	(2.02%)	(.30%)
1500	127.82	130.09	1.78%	127.43	(2.04%)	(.31%)
2000	169.66	172.68	1.78%	169.14	(2.05%)	(.31%)
3000	253.34	257.87	1.79%	252.56	(2.06%)	(.31%)
4000	337.02	343.06	1.79%	335.98	(2.06%)	(.31%)
5000	420.70	428.25	1.79%	419.40	(2.07%)	(.31%)

(Red Figure)

(1) Includes Increases Authorized by D. 92987 and D. 93374
Rates:
Customer Charge = $2.30
Energy Charge = $0.08368/KWH

(2) With Present ECAC Rates
Rates:
Customer Charge = $2.30
Energy Charge = $.08519/KWH

(3) ECAC Reduction of A. 60860 filed 9/2/81
Rates:
Customer Charge = $2.30
Energy Charge = .08342

Billing Procedure - Lifeline Entitlement for Electric Space Heating

Finally, concerning residential rates, Sierra Pacific proposes two minor billing changes for clarification. The present tariff requires proration for periods which include the cutoff dates. Sierra Pacific proposes to offer the space-heating allowance to qualifying customers for six full billing periods commencing with the first billing period on or after November 1 of each year. The second change is a requirement that a minimum of 80% of a residence be heated by permanently installed electric heating units for the residence to qualify. These suggestions are reasonable.

General Service

Significant changes in form are proposed to general service (A-1, A-2, A-3, and PA) to which the staff accedes in principle.

Schedule PA is eliminated due to minimal sales (0.1% of California jurisdictional sales) and the fact that the service area has little, if any, potential for agricultural development. All customers would be transferred to the appropriate "A" schedule, based on demand (apparently to A-1 in most cases). This proposal is reasonable.

Regarding the "A" schedules, Sierra Pacific's witness Smith stated (Exh. 12, pp. 3 & 4):

> "We currently have three General Service Schedules -- A-1, A-2 and A-3, which are applicable where transformer size ranges from 0 to 100, 100 to 1200 and over 1200 KVA, respectively. In addition, Schedule No. TOU-3 is mandatory where demand exceeds 500 KW. This results in a situation where Schedule A-3 is currently applicable only where demand is less than 500 KW and transformer size is

> greater than 1200 KVA. We feel that this effectively precludes Sierra from serving customers on Schedule A-3 as it now exists. In conjunction with our proposal to assign all General Service rates based on demand, Sierra Pacific proposes to eliminate the current TOU-3 rate designation by transferring these customers to the A-3 rate category. The revised A-3 designation, titled Large General Service, would be a time of use rate, mandatory where demand exceeds 500 KW.
>
> "The A-1 Schedule has been revised to apply to all general service where demand does not exceed 49 kilowatts (KW). The A-2 would now apply where demands range from 50 to 500 KW. Lastly, the A-3 would apply wherever demand exceeds 500 KW and no other schedule is applicable."

The witness summarized the reason for this change as follows (id. p. 4):

> "The assignment of rate schedules based on demand level is founded on the desire to group similar customers for analysis and rate design purposes. Additionally, the current trend seems to indicate that consideration and implementation of innovative rate design efforts, load research and management programs and even curtailment plans are based on the stratification of customers by demand levels."

He pointed out that this is not a new concept in California and that the Nevada Public Service Commission had recently approved this type of customer assignment. He stressed the desirability of maintaining similar rate schedules to avoid expense, mistakes, and customer confusion.

Except as indicated in our discussion of particular schedules, we approve these changes. The actual base rates of the schedules are the result of our application of the staff's marginal cost methodology, as discussed elsewhere.

<u>Small General Service (A-1)</u>: About a dozen customers appeared at North Lake Tahoe to protest the utility-proposed increase to the Small General Service (A-1) schedule. They testified that for the most part they did not own the buildings and the landlords were not interested in reinsulating. In some cases the buildings are not suited for reinsulation. Many small businesses are seasonal and operate on a low profit margin.

Sierra Pacific's use of embedded cost methodology resulted in bill comparison increases averaging about 50% (original rates versus with-Valmy base rates plus assumed ECAC factors). The staff's opinion is that too much base rate revenue is assigned to this class. The staff's marginal cost methodology substantially reduces the amount of base revenue to be collected from A-1 customers.

The following table develops bill comparisons for this class:

Sierra Pacific Power Company

BILL COMPARISONS

SMALL GENERAL SERVICE

SCHEDULE NO. A-1

kWh	Present Rates1/	Company Proposed Rates2/ Amount	Increase	%	Adopted Rates3/ Amount	Increase	%
250	$ 22.29	$ 29.18	$ 6.89	30.9%	$ 22.34	$ 0.05	0.2%
500	42.28	50.87	8.59	20.3	41.18	(1.10)	(2.6)
1,000	82.25	94.23	11.98	14.6	78.85	(3.40)	(4.1)
1,500	122.23	137.60	15.37	12.6	116.52	(5.71)	(4.7)
2,000	162.20	180.96	18.76	11.6	154.20	(8.00)	(4.9)
3,000	242.15	267.69	25.54	10.5	229.55	(12.60)	(5.2)
4,000	322.10	354.42	32.32	10.0	304.90	(17.20)	(5.3)
5,000	402.05	441.15	39.10	9.7	380.25	(21.80)	(5.4)

(Red Figure)

1/ Includes increases authorized by D.92987 and D.93374.
Customer charge = $2.30.
Energy charge = 0.02731 + 0.05264 = $0.07995/kWh.

2/ Includes annual energy rate authorized by D.93374.
Customer charge = $7.50.
Energy charge = 0.04366 + 0.04307 = $0.08673/kWh.

3/ Includes annual energy rate authorized by D.93374.
Customer charge = $3.50.
Energy charge = 0.03424 + 0.04111 = $0.07535.

The "amount" columns include both the base rate and ECAC amounts. (Sierra Pacific's method of applying ECAC was different than adopted; see discussion in final subsection of "Marginal Costs and Revenue Allocation" section of this opinion.)

Sierra Pacific also proposed a with-Valmy customer charge of $7.50 per month. On the basis of the staff's marginal cost application to the revenue to be derived from the A-1 class, we adopt the staff's reduced figure of $3.50, but a further cost study on the customer charge for this class should be done in the next general rate increase application.

The utility also proposed charges based on transformer capacity, instead of the customer's connected load. This may be a preferred method of collecting some of the revenue from this class but the record does not appear to contain revenue estimates which will enable us to reduce the energy charge to offset the transformer charge. Sierra Pacific may renew its request for this type of charge as part of the A-1 rate structure in its next general rate proceeding, furnishing an estimate on its revenue effect.

The utility's final proposal regarding the A-1 schedule is a "one year contract requirement" to be imposed optionally because of the large number of seasonal customers. Since for the present we are not accepting Sierra Pacific's recommended customer charge increase, we believe imposition of this provision is desirable in this service area to avoid unduly burdening the year-round customers. The revenue effect of this proposal is minimal and no change in demand or customer charges is required to include it in the rate design.

Schedules A-2 and A-3: The staff essentially agrees with the utility's design for medium and large general service (Exh. 12, pp. 6-7) including certain discounts when the customer owns and maintains all transformation equipment and changes to the power factor adjustment designed to encourage power factor improvement and thereby decrease energy losses.

All four customers on the A-3 schedule have peak loads in excess of 500 kW and are subject to time-of-use (TOU) charges. The mid-peak base energy rate is set at half the on-peak rate, with the residual revenue recovered in the off-peak rate. (Exh. 17, Ch. 4, pp. 19-20). The utility's proposal eliminates the separate TOU-3 schedule and revises the A-3 tariff so that it is a TOU schedule above 500 kW. The revised A-3 tariff also contains the voltage discount and power factor provisions discussed under the A-2 schedule.

Sierra Pacific also proposes to eliminate the winter-summer differential found in the present TOU-3 schedule. Company studies showed an insignificant variation in system peak demand from summer to winter. (Exh. 12, pp. 10-11.) The staff expressed no objection to this change.

Further discussion of these rate schedules appears below under "Rate Design for Ski Areas".

Street and Outdoor Lighting

Sierra Pacific proposed a uniform percentage reduction on nonsodium rates and a uniform percentage increase to sodium rates.

The staff believes this approach does not include a sufficient incentive for conversion to energy-efficient high pressure sodium vapor lights and that the utility's rate design fails to do this, at least for smaller-sized lights.

The staff also believes that the utility's recommendation does not maintain the correct relationships between private residential customers, commercial customers, and public (street) lighting. Staff witness Fong recommended consolidation of the outdoor lighting and streetlighting schedules and that the rates for comparably sized lamps be the same. (Exh. 17, Ch. 5, and Exh. 18.)

The staff's rate design is adopted, except for the time limits for elimination of all incandescent lamps (the recommendation was made early in the application before the decision to split the proceeding into phases). We find December 31, 1983 to be a reasonable date for final elimination of incandescent and mercury vapor lamps.

We also agree with the staff that for simplicity, rates for which there are no presently installed lights should be deleted.

Rate Design for Ski Areas

Sierra Ski Areas Association (Ski Association) claims that ski area customers are charged excessive rates by being grouped with other commercial and industrial usage patterns which are markedly different and that either a separate schedule for ski areas should be created or TOU rates should be extended to all customers with more than 50 kW of demand. Ski area customers are served on Schedules A-1, A-2, and A-3.

The controversy concerns the "demand charge" component of the A-2 and A-3 schedules. While residential rates and small general service (A-1) are composed of a customer charge (a flat monthly minimum) and energy charges for actual use, medium and large general service schedules (A-2 and A-3) include these two elements plus a demand charge which is set based on the kilowatt (not kilowatt-hour) level necessary to supply that class of customer during peak usage periods. The demand charge, in other words, recognizes within the rate structure that customers with a power demand exceeding 50 kW should pay a fair share of the capital costs, maintenance, and administrative and general expenses connected with maintaining utility plant necessary to serve these demands.

In Sierra Pacific's tariffs (and in those of some other companies as well) the demand charge includes a provision commonly known as a "ratchet". The tariff language for this in Schedule A-2 reads:

> "Billing Demand: The billing demand hereunder for any billing period shall be the greater of the current period's measured demand; or fifty percent (50%) of the highest billing demand established by the customer during the preceding eleven (11) months; or fifty kilowatts (50 KW)."

The A-3 provision is the same except that the minimum is 500 kW.

For example, if an A-2 customer's highest demand during a preceding 11-month period was 200 kW, and then during an off-season period (for that customer) the power demand dropped to 20 kW, the customer's demand charge (not the energy charge) would still be the rate for 100 kW.

Ski Association presented the testimony of the manager of Squaw Valley, the owner of Heavenly Valley, and Clarence Unnevehr, a rate expert. Sierra Pacific replied with rebuttal testimony of George Smith. Evidence on this issue is detailed and complex. (See Unnevehr's prepared testimony (Exh. 34), the accompanying charts (Exh. 35), his additional prepared testimony (Exh. 42) and accompanying exhibit (Exh. 43), and Smith's rebuttal testimony (Exh. 45) not to mention extensive cross-examination.)

Essentially, Ski Association argues that ski area usage patterns are untypical of other commercial uses with which they are grouped, and the result is that they do not contribute to peak demand as is assumed in assessing demand charges, which are primarily assigned based on the assumed customer contribution to peak or coincident demand.

The areas operate from November to May, primarily from 9 a.m. to 4 p.m. Their peak demand is usually between 2 to 3 p.m., while the utility's is later. Class demand is such that ski areas' demand is heaviest during mid-peak or off-peak for the class generally, according to Ski Association. Therefore, the analysis runs, the Commission should either develop a special ski area rate or apply TOU rates.

In favor of a special schedule, Ski Association argues that two of our large general service meters and 41 of 125 medium general service meters are for ski areas and that in a recent 12-month period ski areas generated over $700,000 in revenue of which $338,000 was base revenue. Ski Association proposes an "AS-2" schedule which would allow the utility to recover its medium general service requirement through time-differentiated energy and demand charges. (Unnevehr, Exh. 42, p.3.)

Ski Association also developed a TOU-2 schedule for medium general service customers (Exh. 43, table 10). Presently, only the four large general service customers are subject to TOU rates; Unnevehr's proposal would extend this to 125 additional customers.

Whether or not we adopt the AS-2 proposal, Ski Association argues that the demand ratchet is obsolete and unduly impacts ski areas because the very high seasonal demand causes an unreasonable off-season demand charge (see testimony of Richard Mackey of Squaw Valley, Exh. 33). Ski Association maintains that since the ski areas are off-line in the summer, generation, transmission, and distribution capacity are freed for other uses.

Sierra Pacific disagrees that demand charges are unfair to ski areas or that any special rate should be constructed.

According to the utility's witness Smith, sales to ski areas are insignificant. Total sales to ski area customers equal 2.843% of California's total. Unnevehr's proposed ski area rate would not even apply to all of the sales, covering 2.28% of California jurisdictional sales.

Smith also disagrees that ski area customers are either mid-peak or off-peak. The typical peak is 4 p.m. to 5 p.m., and ski lift operation continues through that hour. Staff counsel's examination of Smith brought out that the afternoon peak originally used by the witnesses was based on a 1979 study but since then it had been broadening so that the 3 to 4 p.m. hour was becoming more of an on-peak period.

Sierra Pacific believes that to analyze ski customers alone without analyzing all customers of a rate classification for their present and future usage patterns may benefit the ski area customers at the expense of others in the class.

There was a great deal of controversy over the accuracy of Unnevehr's calculations. His original exhibit included a rate of return calculation for ski customers (without Valmy) of 55.37% compared with 18.816% for all customers of the class. However, certain major errors were revealed during cross-examination.7/ These were corrected in a revised exhibit, which reduced these rate of return estimates to 21.626% and 14.87%.

7/ Ski Association claimed that this resulted from Sierra Pacific's failure to furnish certain work papers and other matter. Disputes over this eventually made an additional day of hearing on this issue necessary.

Sierra Pacific emphatically argues that the demand ratchet is a good conservation feature because if a customer keeps its peak demand as low as possible, payment under the ratchet is also lowered. Additionally, the total revenue for the rate classification is calculated with demand ratchet revenue considered as part of the calculation; to delete this provision without making some counter-balancing adjustment would cause a revenue shortfall.

In sum, Sierra Pacific maintains that it is not possible simply to adopt Ski Association's proposals without making up loss of revenue from the remaining commercial customers, or from ratepayers generally. Unnevehr's TOU proposals, for example, would cause higher billings to nonski area customers and, in any event, do not analyze costs of TOU meters or their availability.

Discussion: We essentially agree with Sierra Pacific's arguments (which the staff supports), and we will not order a special ski area rate, elimination of the ratchet provision, or TOU rates for the A-2 schedule. Ski Association's witness at least partially conceded that adoption of his AS-2 proposal would require somewhat higher rates from other classes. Nor do we see how the demand ratchet can be eliminated without an entire reworking of the rate design which would simply redistribute the revenue requirement.

It is appropriate to study whether the Commission should eventually adopt any other more refined rate design for the A-2 classification which would include TOU rates. Sierra Pacific has pointed out that other utilities in California do not have TOU rates for medium general service. While this is the case, Sierra Pacific's California service territory is in a class by itself concerning seasonal demand. We will therefore order Sierra Pacific to study and to report to us in its next general rate increase proceeding whether it is cost-effective to impose TOU rates for the A-2 schedule and whether any positive conservation effects (particularly concerning peak demand) would be achieved by so doing. The study should include any recommended modifications to the demand ratchet feature or to the entire rate tariff which should be made to include TOU rates.

The preceding paragraph does not indicate a predisposition on our part to require TOU rates for the A-2 class.

Other Rate Design Changes

In this proceeding Sierra Pacific attempted to modernize some of its tariffs. Numerous additional minor changes were made to various schedules which are not discussed and which were not the subject of controversy. These are reasonable.

VI. CONCLUSION

The addition of Valmy Unit One to the rate base so significantly reduces the utility's purchased power needs that the initial ECAC filing more than compensates for the rate base addition on an annual basis. We cannot guarantee Sierra Pacific's ratepayers that there will be no ECAC increases in the near future; nevertheless the addition of Valmy Unit One will partially shield Sierra Pacific from fluctuating prices of purchased power.

The utility is to be commended on its load management program which has included, among other things, a voltage reduction and regulation program which is producing a significant saving of megawatts (see above, p. 15).

Findings of Fact

1. Sierra Pacific's customer service and information programs relating to conservation should be improved as follows:

   a. Low-cost conservation devices (shower heads, etc.) should be used as incentives to encourage home energy audits.

   b. Efforts should be made to restore the cost-effectiveness of home energy audits.

   c. The TECH program should be reestablished. This may be done jointly with other utilities providing space heating in the Tahoe Basin, or separately.

   d. Sierra Pacific should more actively pursue the energy-efficient appliance program.

   e. Sierra Pacific should continue it's recent more aggressive development of commercial and industrial energy audits.

f. Sierra Pacific should continue to develop techniques for tracking results of the various programs to ascertain which ones are most effective, so that its reports filed with this Commission can be more definitive, and of more use to both the utility and the Commission.

2. Sierra Pacific failed to adequately demonstrate the cost-effectiveness of some of its consumer-oriented conservation programs, and it is reasonable to withhold $98,104 in rate relief until an advice letter filing demonstrates adequate cost accounting of the programs. Separate accounting for these sums should be required.

3. Sierra Pacific's capital expenditures and research projects concerning conservation are commendable (voltage regulation; solar and geothermal development).

4. Sierra Pacific's California service area is not presently suited to development of significant amounts of cogeneration. The utility should, however, maintain a cogeneration development program on a minimum basis in case changes occur in the future.

5. A $5,900 adjustment to the utility's Home Service Program should be adopted because of the change in its goals.

6. Sierra Pacific should maintain its 8% loan program in force until its Zero Interest Program plan is effective.

7. There is insufficient information in this record to support the elimination of employee discounts.

8. The North Valmy generating plant is expected to be on-line sometime in November 1981.

9. Sierra Pacific is in need of additional base revenue of $3,289,000 for test year 1981, and the results of operation for test year 1981 (with Valmy) as shown on the table on page 5 is adopted.

10. An ECAC reduction in A.60860 in the amount of $4,146,000 should be authorized, effective concurrently with the base rate increase found reasonable in Finding 8.

11. The staff's marginal cost methodology and the staff's recommended "equal percentage of the difference" method of applying marginal costs to base rates are reasonable with modifications to

assure that no rate class receives more than double the system average base rate increase. Sierra Pacific should perform additional peak seasonal time-of-day studies for its next general rate increase proceeding. (See "Revenue Allocation to Base Rates" table, p. 31.)

12. The ECAC reduction should be applied to rates on a system average basis.

13. Nonpermanent or secondary residences should remain ineligible for lifeline rates.

14. The establishment of a late charge of 1% for bills overdue for 45 days is reasonable.

15. For residential rates, it is reasonable to adopt a rate structure featuring a flat energy charge for the base rate portion and varying ECAC charges for the different rate blocks.

16. For the present, the third tier should remain in the residential rate structure at the 5,000 kWh level but priced at full marginal cost.

17. In Sierra Pacific's next rate increase application, the utility should furnish us with a study showing what conservation effect can be gained (if any) from modifying or removing the third residential rate block, and the effect of reducing the lifeline-nonlifeline differential.

18. Sierra Pacific's proposed space-heating billing changes are reasonable.

19. Sierra Pacific's recommended changes to general service schedules (A-2 and A-3) and the elimination of the separate PA and TOU-3 schedule are reasonable.

20. The staff's recommended rate design for the A-1 schedule is reasonable. Sierra Pacific should restudy its proposed customer charges and transformer charges for this class.

21. The staff's rate design for outdoor and streetlighting is reasonable, with a December 31, 1983 deadline for phaseout of incandescent and mercury vapor lamps.

22. No special rates for ski areas should be instituted, nor should the Schedule A-2 demand ratchet be modified or terminated.

23. The remaining tariff changes recommended by Sierra Pacific are reasonable.

24. In its next general rate increase application, Sierra Pacific should present us with a study on whether it is desirable from a conservation standpoint and cost-effective to impose TOU rates on the A-2 rate classification.

Conclusions of law

1. Sierra Pacific should be authorized to file the revised electric rates which are set forth in Appendix A, and which, on a combined basis of the base rate increase in A.59894 of $3,289,000 and the annual ECAC decrease in A.60860 of $4,146,000, produce a net rate decrease of $857,000.

2. Sierra Pacific should be ordered to complete the studies on various subjects (Findings 11, 17, 20, and 24) in time to be presented in this utility's next general rate increase application.

3. Sierra Pacific should be ordered to augment its customer service programs (Finding 1), to revise its accounting practices for these programs (Finding 2), and to maintain a cogeneration development program on a minimum basis (Finding 3).

4. No hearings are necessary for A.60860.

5. In order that rates promptly reflect the operation of Valmy Unit One and the associated ECAC decrease, the order in this decision should be effective the date of signature.

6. Further hearings may be necessary to address the test year effects of the Economic Recovery Tax Act, in this proceeding or in OII 24.

7. Sierra Pacific should be authorized to file an advice letter demonstrating the effectiveness of its tracking methods regarding the consumer-oriented conservation programs, and requesting its test year revenues to be increased by $98,104.

SECOND INTERIM ORDER

IT IS ORDERED that:

1. Sierra Pacific Power Company (Sierra Pacific) shall file with this Commission the revised tariff schedules for electric service in its California service territory as set forth in Appendix A.

2. The revised tariff schedules shall conform to General Order 96-A and shall become effective on the date that Unit One of the Valmy coal-fired generating plant is commercially operational. Sierra Pacific shall notify this Commission in writing of the date when the plant is placed on-line for commercial use.

3. In Sierra Pacific's next general rate increase application, the utility shall furnish for the record the studies on the various subjects mentioned in the findings and conclusions.

4. All rates in this proceeding are established subject to refund pending further order on the subject of calculation of taxes for ratemaking purposes.

5. Sierra Pacific shall use the normalization method of accounting specified in Internal Revenue Code Section 168(e)(3)(B), pending any further order in this proceeding.

6. By advice letter, Sierra Pacific may make a supplemental showing on its methods of tracking costs associated with consumer-oriented conservation programs, and may request in such advice letter that its test year revenues be increased by $98,104.

7. On or before July 1, 1982, Sierra Pacific shall develop, in conjunction with the staff, appropriate records to track allocation and expenditure of funds allowed for consumer-oriented conservation programs. Conservation funds not expended shall be carried forward from year to year.

8. This proceeding shall remain open in case additional hearings are necessary concerning the effect of the Economic Recovery Tax Act.

This order is effective today.

Dated November 13, 1981, at San Francisco, California.

JOHN E. BRYSON
President
VICTOR CALVO
PRISCILLA C. GREW
Commissioners

I dissent.

/s/ RICHARD D. GRAVELLE
Commissioner

I dissent.

/s/ LEONARD M. GRIMES, JR.
Commissioner

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

Joseph E. Bodovitz, Executive Director

SIERRA PACIFIC POWER COMPANY
AUTHORIZED TARIFFS

(Base Rates Include Annual Energy Rate of $0.00131/Kwh)

SCHEDULE NO. D-1

DOMESTIC SERVICE

APPLICABILITY

This schedule is applicable to all domestic power service to separately metered single family dwellings and individual living units of multi-unit complexes, where such units are metered by the Utility.

TERRITORY

Entire California Service Area

RATES

Monthly billings shall equal the sum of the following charges:

Customer Charge

Per Meter Per Month	Permanent Residents	$ 1.65
	Non-Permanent Residents	$ 2.30

Energy Charge - Per KWHR	Base	ECAC*	Effective
Lifeline Usage	$ .0320	$ .01935	$.05135/KWH
In Excess of Lifeline	.0320	.05142	.08342/KWH
In Excess of 5,000 KWHR	.0320	.0650	.0970/KWH

Late Charge
1% on any amount 45 days in arrears from previous billings.

Energy Resources Surcharge (Energy Commission)
Per KWHR $ .00020

* Amounts billed under the Energy Cost Adjustment Clause, as described in the Preliminary Statement.

MINIMUM CHARGE

The minimum charge for service hereunder shall be the sum of the above charges.

SPECIAL CONDITIONS

1. Service hereunder shall be single-phase service only.

2. Service hereunder shall be supplied to electric motors no larger than 10 horsepower.

(Continued)

SIERRA PACIFIC POWER COMPANY
AUTHORIZED TARIFFS

(Base Rates Include Annual Energy Rate of $0.00131/Kwh)

SCHEDULE No. D-1

DOMESTIC SERVICE
(Continued)

3. Lifeline usage quantities are applicable only to separately metered, permanent residential customers. Recreational or Vacation home customer shall be billed under non-lifeline rates. Utility may require customers to complete and file with it an appropriate Declaration of Eligibility for lifeline rates. Utility may also require proof of permanent residency, such as voter registration or property tax exemption. The penalty for presenting false information in this Declaration shall be any legal action which the Utility might elect to pursue.

4. The following quantities are to be billed at the rate for lifeline usage:

End Use	Rate Code	KWHR Per Month
Permanent Residential Customers		
Basic Use Only	A-1, A-2	240
Basic Use With Electric Space Heating - Summer	A-3, A-4	240
Basic Use With Electric Space Heating - Winter	A-3, A-4	1,660
Basic Use With Electric Water Heating	A-5, A-6	490
Basic Use With Electric Water and Space Heating - Summer	C-1, C-2	490
Basic Use With Electric Water and Space Heating - Winter	C-1, C-2	1,910
Non-Permanent Residential Customers		
All End Uses	N-1, N-3, N-7, N-8, P-1	0

An additional 270 KWHR per month, during the winter months, is available to paraplegic/quadraplegic customers and Multiple Sclerosis patients who qualify for the electric space heating lifeline quantities. A supplemental allowance of 200 KWH per month will be provided to Multiple Sclerosis patients for air conditioning during the six summer months of May through October 31. Customer applications for these allowances must be accompanied by a doctor's certification.

(Continued)

SIERRA PACIFIC POWER COMPANY
AUTHORIZED TARIFFS

(Base Rates Include Annual Energy Rate of $0.00131/Kwh)

SCHEDULE No. D-1

DOMESTIC SERVICE
(Continued)

SPECIAL CONDITIONS (Continued)

Additional quantities are available to customers who qualify for billing at the rate for lifeline usage, who require the use of a life support device (e.g., kidney dialysis machine or iron lung). Upon certification of need by customer, the Utility will estimate monthly KWHR usage for the life support device for inclusion in the total allowable lifeline usage.

5. Winter lifeline quantities will be used for six consecutive billing periods beginning on or after November 1.

6. Space heating quantities shall be available only where a minimum of 80% of available living area is heated by permanently installed electric space heating equipment. Partial quantities will not be offered.

7. It is the responsibility of the customer to advise the Utility within fifteen (15) days of any changes in the type of water heater and space heaters in the residence and of changes in residential status.

8. Consumption for separately metered water heating service shall be billed in combination with other demestic consumption under the rates set forth in this schedule, except that an additional customer charge shall not be made.

9. Service hereunder shall not be provided to multiple dwellings or multiple units of multi-unit complexes, which are served through a common meter, or for demestic water pumping where water is delivered to more than one living unit.

APPENDIX A

SIERRA PACIFIC POWER COMPANY
AUTHORIZED TARIFFS

(Base Rates Include Annual Energy Rate of $0.00131/Kwh)

SCHEDULE NO. DS-1

MULTI-UNIT DOMESTIC SERVICE - SUBMETERED

APPLICABILITY

This schedule is applicable to all domestic power service to multiple living units on a single premises, where customer owned submeters are used to measure the consumption each unit.

TERRITORY

Entire California Service Area

RATES

Monthly billings shall equal the sum of the following charges:

Customer Charge			
Per Meter Per Month		$ 2.07	
Energy Charge - Per KWHR	Base	ECAC*	Effective
Lifeline Usage	$ .0288	$.01742	$ .04622/KWH
In Excess of Lifeline	.0320	.05142	.08342/KWH
In Excess of 5,000 KWHR	.0320	.0650	.0970/KWH

Late Charge
1% on any amount 45 days in arrears from previous billings.

Energy Resources Surcharge (Energy Commission)
Per KWHR $ .00020

* Amounts billed under the Energy Cost Adjustment Clause, as described in the Preliminary Statement.

MINIMUM CHARGE

The minimum charge for service hereunder shall be the sum of the above charges.

(Continued)

SIERRA PACIFIC POWER COMPANY
AUTHORIZED TARIFFS

(Base Rates Include Annual Energy Rate of $0.00131/Kwh)

SCHEDULE NO. DS-1

MULTI-UNIT DOMESTIC SERVICE - SUBMETERED
(Continued)

SPECIAL CONDITIONS

1. Lifeline usage quantities are applicable only to permanently occupied residential units. Non-permanently occupied units shall be billed under non-lifeline rates. Utility may require customer to complete and file with it an appropriate Declaration of Eligibility for lifeline rates. Utility may require proof of permanent residency such as voter registration or property tax exemption. The penalty for presenting false information in this Declaration shall be any legal action which the Utility might elect to pursue.

2. The following quantities are to be billed at the rate for lifeline usage:

End Use	Rate Code	KWHR Per Month Per Unit
Permanently Occuped Units		
Basic Use Only	K-1	240
Basic Use With Electric Space Heating - Summer	K-3	240
Basic Use With Electric Space Heating - Winter	K-3	1,660
Basic Use With Electric Water Heating	K-5	490
Basic Use With Electric Water and Space Heating - Summer	K-7	490
Basic Use With Electric Water and Space Heating - Winter	K-7	1,910
Non-Permanently Occupied Units	-	0

An additional 270 KWHR per month, during the winter months, is available for units occupied by paraplegics/quadraplegics and Multiple Sclerosis patients who qualify for the electric space heating lifeline quantities. A supplemental allowance of 200 KWH per month will be provided for the six months May 1 through May 31 for each unit occupied by a Multiple Sclerosis patient. Customer applications for this allowance must be accompanied by a doctor's certification.

(Continued)

SIERRA PACIFIC POWER COMPANY
AUTHORIZED TARIFFS

(Base Rates Include Annual Energy Rate of $0.00131/Kwh)

SCHEDULE NO. DS-1

MULTI-UNIT DOMESTIC SERVICE - SUBMETERED
(Continued)

SPECIAL CONDITIONS (Continued)

Additional quantities are available to customers who qualify for billing at the rate for lifeline usage, who require the use of a life support device (e.g., kidney dialysis machine or iron lung). Upon certification of need by customer, the Utility will estimate monthly KWHR usage for the life support device for inclusion in the total allowable lifeline usage.

3. Winter lifeline quantities will be used for six consecutive billing periods beginning on or after November 1.

4. Space heating quantities shall be available only where a minimum of 80% of available living area is heated by permanantly installed electric space heating equipment. Partial quantities will not be offered.

5. It is the responsibility of the customer to advise the Utility within fifteen (15) days of any changes in the type of water heater and space heaters in the residence and of changes in the level of occupancy by permanent residents.

6. Consumption for separately metered water heating service shall be billed in combination with other domestic consumption under the rates set forth in this schedule, except that an additional customer charge shall not be made.

SIERRA PACIFIC POWER COMPANY
AUTHORIZED TARIFFS

(Base Rates Include Annual Energy Rate of $0.00131/Kwh)

SCHEDULE NO. DM-1

MULTI-UNIT DOMESTIC SERVICE - NOT SUBMETERED

APPLICABILITY

This schedule is applicable to all domestic power service to multiple living units on a single premises, which are not submetered by the customer. This schedule is closed to new installations effective February 4, 1978.

TERRITORY

Entire California Service Area

RATES

Monthly billings shall equal the sum of the following charges:

Customer Charge
Per Meter Per Month $ 2.30

Energy Charge - Per KWHR	Base	ECAC*	Effective
Lifeline Usage	$ .0320	$.01935	$ .0535/KWH
In Excess of Lifeline	.0320	.05142	.08342/KWH
In Excess of 5,000 KWHR	.0329	.0650	.0970/KWH

Late Charge
1% on any amount 45 days in arrears from previous billings.

Energy Resources Surcharge (Energy Commission)
Per KWHR $ .00020

* Amounts billed under the Energy Cost Adjustment Clause, as described in the Preliminary Statement.

MINIMUM CHARGE

The minimum charge for service hereunder shall be the sum of the above charges.

(Continued)

(Base Rates Include Annual Energy Rate of $0.00131/Kwh)

SCHEDULE NO. DM-1

MULTI-UNIT DOMESTIC SERVICE - NOT SUBMETERED
(Continued)

SPECIAL CONDITIONS

1. Lifeline usage quantities are applicable only to permanently occupied units. Non-permanently occupied units shall be billed under non-lifeline rates. Utility may require customer to complete and file with it an appropriate Declaration of Eligibility for lifeline rates. Utility may require proof of permanent residency such as voter registration or property tax exemption. The penalty for presenting false information in this Declaration shall be any legal action which the Utility might elect to pursue.

2. The following quantities are to be billed at the rate for lifeline usage:

End Use	Rate Code	KWHR Per Month Per Unit
Permanently Occupied Units		
Basic Use Only	G-1	190
Basic Use With Electric Space Heating - Summer	G-3	190
Basic Use With Electric Space Heating - Winter	G-3	1,040
Basic Use With Electric Water Heating	G-5	390
Basic Use With Electric Water and Space Heating - Summer	G-5	390
Basic Use With Electric Water and Space Heating - Winter	G-7	1,240
Non-Permanently Occupied Units	-	0

An additional 270 KWHR per month, during the winter months, is available for units occupied by paraplegics/quadraplegics and Multiple Sclerosis patients who qualify for the electric space heating lifeline quantities. A supplemental allowance of 200 KWH per month will be provided for the six months May 1 through May 31 for each unit occupied by a Multiple Sclerosis patient. Customer applications for this allowance must be accompanied by a doctor's certification.

(Continued)

SIERRA PACIFIC POWER COMPANY
AUTHORIZED TARIFFS

(Base Rates Include Annual Energy Rate of $0.00131/Kwh)

SCHEDULE NO. DM-1

MULTI-UNIT DOMESTIC SERVICE - NOT SUBMETERED
(Continued)

SPECIAL CONDITIONS (Continued)

Additional quantities are available to customers who qualify for billing at the rate for lifeline usage, who require the use of a life support device (e.g., kidney dialysis machine or iron lung). Upon certification of need by customer, the Utility will estimate monthly KWHR usage for the life support device for inclusion in the total allowable lifeline usage.

3. Winter lifeline quantities will be used for six consecutive billing periods beginning on or after November 1.

4. Space heating quantities shall be available only where a minimum of 80% of available living area is heated by permanantly installed electric space heating equipment. Partial quantities will not be offered.

5. It is the responsibility of the customer to advise the Utility within fifteen (15) days of any changes in the type of water heater and space heaters in the residence and of changes in the level of occupancy by permanent residents.

6. Consumption for separately metered water heating service shall be billed in combination with other domestic consumption under the rates set forth in this schedule, except that an additional customer charge shall not be made.

SIERRA PACIFIC POWER COMPANY
AUTHORIZED TARIFFS

(Base Rates Include Annual Energy Rate
of $0.00131/Kwh)

SCHEDULE NO. A-1

SMALL GENERAL SERVICE

APPLICABILITY

This schedule is applicable to all non-domestic service where demand has not exceeded fifty (50) kilowatts for any three months during the preceding twelve months and no other schedule is specifically applicable.

TERRITORY

Entire California Service Area

RATES

Monthly billings shall equal the sum of the following charges:

Customer Charge			
Per Meter Per Month		$ 3.50	
Energy Charge	Base	ECAC*	Effective
All KWHR, per KWHr	$.03424	$.04111	$.07535

Late Charge
1% on any amount 45 days in arrears from previous billings.

Energy Resources Surcharge (Energy Commission)
Per KWHR $ .00020

* Amounts billed under the Energy Cost Adjustment Clause, as described in the Preliminary Statement.

MINIMUM CHARGE

The minimum charge for service hereunder shall be the sum of the above charges.

(Continued)

(Base Rates Include Annual Energy Rate of $0.00131/Kwh)

SCHEDULE NO. A-1

SMALL GENERAL SERVICE
(Continued)

SPECIAL CONDITIONS

1. Except for separately metered water heating, meter readings shall not be combined for billing hereunder.

2. Consumption for separately metered water heating service shall be billed in combination with other consumption under the rates set forth in this schedule, except that an additional customer charge shall not be made.

3. Service hereunder shall be supplied at one standard secondary voltage.

4. Utility may require a contract for service hereunder for a minimum term of not less than one year.

5. Rate schedules shall be assigned by Utility annually, based on a review of demand history. Customers whose estimated and/or metered monthly maximum demand has not exceeded fifty (50) kilowatts for any three months during the twelve month review period, will be billed under Schedule No. A-1 for the subsequent twelve month period. Changes in customer operations, as brought to the attention of Utility, shall be considered as basis for mid-year rate changes. Any change in rate, whether resulting from annual review or change in customer operations, will be prospective only, except that Utility errors in reviewing demands annually shall be grounds for retroactive billing adjustment where such adjustment results in a refund or credit to the customer. See Rule Nos. 3 and 12, applicable to optional rates and changes in customer's equipment or operations.

SIERRA PACIFIC POWER COMPANY
AUTHORIZED TARIFFS

(Base Rates Include Annual Energy Rate
of $0.00131/Kwh)

SCHEDULE NO. A-2

MEDIUM GENERAL SERVICE

APPLICABILITY

This schedule is applicable to all service where maximum demand is between fifty (50) kilowatts and five hundred (500) kilowatts for any three months during the preceding twelve months and where another schedule is not specifically applicable.

TERRITORY

Entire California Service Area

RATES

Monthly billings shall equal the sum of the following charges:

Customer Charge			
Per Meter Per Month	$25.00		
Demand Charge			
First 50 kilowatts or less	$270.00		
Additional kilowatts, per KW	5.40		
Energy Charge	Base	ECAC*	Effective
All KWHR, per KWHr	$.01280	$.04111	$.05391

Late Charge
1% on any amount 45 days in arrears from previous billings.

Power Factor Adjustment
Increase or decrease demand and energy charges by .15% for each 1% that the average power factor is more or less than 90% lagging, per Special Condition 4.

Voltage and Transformer Adjustment
Where service is delivered either directly from a primary distribution or transmission system, the demand and energy charges shall be decreased as follows:

(Continued)

SIERRA PACIFIC POWER COMPANY
AUTHORIZED TARIFFS

(Base Rates Include Annual Energy Rate
of $0.00131/Kwh)

SCHEDULE NO. A-2

MEDIUM GENERAL SERVICE
(Continued)

RATES (Continued)

	Primary Distribution	Transmission
a. Where service is metered at or compensated to the delivery point	1.25%	3.75%
b. Where customer owns and maintains all equipment required for transformation from the delivery voltage	1.25%	3.75%
c. Where both a) and b) exist	2.50%	5.00%
d. Where neither a) nor b) exist	None	2.50%

Energy Resources Surcharge (Energy Commission)
Per KWHR $ .00020

* Amounts billed under the Energy Cost Adjustment Clause, as described in the Preliminary Statement.

MINIMUM CHARGE

The minimum charge for service hereunder shall be the sum of the above charges but in no case less than the sum of the customer charge and the demand charge applicable to billing demand established pursuant to Special Condition No. 3.

SPECIAL CONDITIONS

1. Except for separately metered water heating, meter readings shall not be combined for billing hereunder.

(Continued)

(Base Rates Include Annual Energy Rate
of $0.00131/Kwh)

SCHEDULE NO. A-2

MEDIUM GENERAL SERVICE
(Continued)

SPECIAL CONDITIONS (Continued)

2. Determination of Demand: The demand for any billing shall be defined as the maximum measured fifteen minute average kilowatt load in the billing period. In instances, however, where the use of energy by a customer is intermittent or subject to violent fluctuations, a shorter time interval may be used and the demand determined from special measurements.

At Utility's option, a thermal type of demand meter which does not reset after a definite time interval may be used for demand measurements.

3. Billing Demand: The billing demand hereunder for any billing period shall be the greater of the current period's measured demand; or fifty percent (50%) of the highest billing demand established by the customer during the preceding eleven (11) months; or fifty kilowatts (50 KW).

4. Utility may, at its option, measure the average power factor of any customer load served hereunder. When such a measurement is made, the demand and energy charges shall be decreased or increased, respectively .15% for each one percent that the average power factor for the billing period is more or less than 90% lagging.

5. Utility retains the right to change its line voltage at any time, after reasonable advance notice to any customer receiving a voltage and transformer adjustment. Such customer then has the option to change his system so as to receive service at the new line voltage or to accept service (without discount) through transformers to be supplied by Utility.

6. Utility may require a contract for service hereunder for a minimum term of not less than one year.

7. Rate schedules shall be assigned by Utility annually, based on a review of demand history. Customers whose estimated and/or metered monthly demand is between 50 and 500 kilowatts for any three months during the twelve month review period, and whose demand has not exceeded 500 KW for any three months will be billed under Schedule No. A-2 for the subsequent twelve month period. Changes in customer operations, as brought to the attention of Utility, shall be considered as basis for mid-year rate changes. Any change in rate, whether resulting from annual review or change in customer operations, will be prospective only, except that Utility errors in reviewing demands annually shall be grounds for retroactive billing adjustment where such adjustment results in a refund or credit to the customer. See Rule Nos. 3 and 12 applicable to optional rates and change in customers equipment or operations.

SIERRA PACIFIC POWER COMPANY
AUTHORIZED TARIFFS

(Base Rates Include Annual Energy Rate
of $0.00131/Kwh)

SCHEDULE NO. A-3

LARGE GENERAL SERVICE

APPLICABILITY

This schedule is applicable to all service where maximum demand exceeds five hundred (500) kilowatts for any three months during the preceding twelve months and where another schedule is not specifically applicable.

TERRITORY

Entire California Service Area

RATES

Monthly billings shall equal the sum of the following charges:

Customer Charge

Per Meter Per Month	$85.00

Demand Charge

All KW of on-peak billing demand, per KW	$4.00
Plus all KW of mid-peak billing demand, per KW	$1.35
Plus all KW of off-peak billing demand, per KW	N/C
Plus all KW of Maximum Billing Demand, per KW	$1.35

Energy Charge	Base	ECAC*	Effective
All on-peak KWH, per KWHR	$ .02131	$.04111	$ .06242
Plus all mid-peak KWH, per KWHR	.01218	.04111	.05329
Plus all off-peak KWH, per KWHR	.00131	.04111	.04242

Late Charge
1% on any amount 45 days in arrears from previous billings.

Power Factor Adjustment
Increase or decrease demand and energy charges by .15% for each 1% that the average power factor is more or less than 90% lagging, per Special Condition 4.

Voltage and Transformer Adjustment
Where service is delivered either directly from a primary distribution or transmission system, the demand and energy charges shall be decreased as follows:

(Continued)

(Base Rates Include Annual Energy Rate
of $0.00131/Kwh)

SCHEDULE NO. A-3

LARGE GENERAL SERVICE
(Continued)

RATES (Continued)
Voltage and Transformer Adjustment (Continued)

	Primary Distribution	Transmission
a. Where service is metered at or compensated to the delivery point	1.25%	3.75%
b. Where customer owns and maintains all equipment required for transformation from the delivery voltage	1.25%	3.75%
c. Where both a) and b) exist	2.50%	5.00%
d. Where neither a) nor b) exist	None	2.50%

Energy Resources Surcharge (Energy Commission)
Per KWHR $ .00020

* Amounts billed under the Energy Cost Adjustment Clause, as described in the Preliminary Statement.

MINIMUM CHARGE

The minimum charge for service hereunder shall be the sum of the above charges but in no case less than the sum of the customer charge and the demand charge applicable to billing demand established pursuant to Special Condition No. 3.

SPECIAL CONDITIONS

1. Except for separately metered water heating, meter readings shall not be combined for billing hereunder.

2. Determination of Demand: The demand for any billing shall be defined as the maximum measured fifteen minute average kilowatt load in the billing period. In instances, however, where the use of energy by a customer is intermittent or subject to violent fluctuations, a shorter time interval may be used and the demand determined from special measurements.

(Continued)

SIERRA PACIFIC POWER COMPANY
AUTHORIZED TARIFFS

(Base Rates Include Annual Energy Rate
of $0.00131/Kwh)

SCHEDULE NO. A-3

LARGE GENERAL SERVICE
(Continued)

SPECIAL CONDITIONS (Continued)

At Utility's option, a thermal type of demand meter which does not reset after a definite time interval may be used for demand measurements.

3. Billing Demand: The billing demand hereunder for any billing period shall be the greater of the current period's measured demand; or fifty percent (50%) of the highest billing demand established by the customer during the preceding eleven (11) months; or five hundred kilowatts (500 KW).

4. Utility may, at its option, measure the average power factor of any customer load served hereunder. When such a measurement is made, the demand and energy charges shall be decreased or increased, respectively .15% for each one percent that the average power factor for the billing period is more or less than 90% lagging.

5. Utility retains the right to change its line voltage at any time, after reasonable advance notice to any customer receiving a voltage and transformer adjustment. Such customer then has the option to change his system so as to receive service at the new line voltage or to accept service (without discount) through transformers to be supplied by Utility.

6. Utility may require a contract for service hereunder for a minimum term of not less than one year.

7. Rate schedules shall be assigned by Utility annually, based on a review of demand history. Customers whose estimated and/or metered monthly demand exceeds 500 kilowatts for any three months during the twelve month review period will be billed under Schedule No. A-3 for the subsequent twelve month period. Changes in customer operations, as brought to the attention of Utility, shall be considered as basis for mid-year rate changes. Any change in rate, whether resulting from annual review or change in customer operations, will be prospective only, except that Utility errors in reviewing demands annually shall be grounds for retroactive billing adjustment where such adjustment results in a refund or credit to the customer. See Rule Nos. 3 and 12 applicable to optional rates and change in customers equipment or operations.

(Continued)

(Base Rates Include Annual Energy Rate of $0.00131/Kwh)

SCHEDULE NO. A-3

LARGE GENERAL SERVICE
(Continued)

SPECIAL CONDITIONS (Continued)

8. Daily time periods will be based on Pacific Standard Time and are defined as follows:

Winter Period:	On-Peak	5:00 P.M. to 9:00 P.M. daily
	Mid-Peak	7:00 A.M. to 5:00 P.M. and 9:00 P.M. to 11:00 P.M. daily
	Off-Peak	All Other Hours
Summer Period:	On-Peak	10:00 A.M. to 10:00 P.M. daily
	Mid-Peak	8:00 A.M. to 10:00 A.M. and 10:00 P.M. to 11:00 P.M. daily
	Off-Peak	All Other Hours

Winter shall consist of the billing periods for the six regularly scheduled monthly billings beginning with December 1978. Thereafter, regularly scheduled monthly billings shall include six (6) summer periods followed by six (6) winter billing periods.

SIERRA PACIFIC POWER COMPANY
AUTHORIZED TARIFFS

(Base Rates Include Annual Energy Rate of $0.00131/Kwh)

SCHEDULE NO. LS/OL

STREET AND OUTDOOR LIGHTING

APPLICABILITY

This rate is applicable to all classes of customers for lighting outdoor areas, streets, alleys, roads and highways.

TERRITORY

Entire California Service Area

RATES

Monthly billings shall equal the sum of the following charges:

Basic Charges - Per Lamp Per Month

The following charges are applicable to all installations:

Lamp Type/Nominal Rating	KWHR/ Month	Base	ECAC*	Effective
Incandescent - Closed to new installations				
1400 Lumen	35	$5.40	$1.44	$ 6.84
2500 Lumen	67	6.81	2.75	9.56
3200 Lumen	81	7.69	3.33	11.02
Mercury Vapor - Closed to new installations				
7,000 Lumen	67	$4.66	$2.75	$ 7.41
20,000 Lumen	160	9.03	6.58	15.61
High Pressure Sodium - All new installations				
5,800	28	$5.78	$1.15	$ 6.93
9,500	40	6.15	1.64	7.79
16,000	58	6.81	2.38	9.19
22,000	77	7.41	3.17	10.58

(Continued)

SIERRA PACIFIC POWER COMPANY
AUTHORIZED TARIFFS

(Base Rates Include Annual Energy Rate of $0.00131/Kwh)

SCHEDULE No. LS/OL

STREET AND OUTDOOR LIGHTING
(Continued)

RATES (Continued)

Special Charges - Per Month As Indicated

In addition to the above basic charges the following special charges are applicable:

New Wood Pole	$1.55 Per Pole
New Metal Pole	4.70 Per Pole
Underground Service	6.35 Per Lamp
Customer Owned Electrolier	2.72 Credit Per Lamp

Late Charge

1% on any amount 45 days in arrears from previous billings.

Energy Resources Surcharge (Energy Commission)

Per KWHR	$ .00020

* Amounts billed under the Energy Cost Adjustment Clause as described in the preliminary statement. Amounts shown are the product of KWHR per month times $.04111 per KWHR.

SPECIAL CONDITIONS

1. Service hereunder is for dusk-to-dawn burning hours of approximately four thousand one hundred (4100) hours per year.

2. Utility shall not be required to make investments in new installations in excess of the following:

Lamp Size	(a) Existing Pole	(b) New Wood Pole	(c) New Metal Pole
5,800 Lumen	$325	$400	$ 625
9,500 Lumen	350	450	650
22,000 Lumen	400	500	1,015

(Continued)

SIERRA PACIFIC POWER COMPANY
AUTHORIZED TARIFFS

(Base Rates Include Annual Energy Rate of $0.00131/Kwh)

SCHEDULE No. LS/OL

STREET AND OUTDOOR LIGHTING
(Continued)

SPECIAL CONDITIONS (Continued)

Costs in excess of the above amounts shall be paid by the customer on a non-refundable basis.

3. Relocation of existing lights will be done by the Utility upon Customer's request provided the Customer reimburses the utility for net expenses incurred.

4. Utility, before December 31, 1983 shall replace all incandescent and mercury vapor lamps served hereunder with high pressure sodium lamps of a lumen rating agreed to by the customer. Billing subsequent to the replacement shall be in accordance with the appropriate rate for the size and type of high pressure sodium lamp installed.

(END OF APPENDIX A)

A.59894
D.93771

RICHARD D. GRAVELLE, Commissioner
LEONARD M. GRIMES, JR., Commissioner

We dissent.

The treatment of the issue dealing with employee discounts is totally unacceptable to us. The record in this proceeding fully supports the discontinuance of ratepayers bearing this expense. We would simply put the utility on notice that while we do not implement that disallowance at this time we will do so in the next general rate case thus providing the utility with a two year planning period to adjust as it sees fit to the proposed action.

RICHARD D. GRAVELLE, Commissioner

LEONARD M. GRIMES, JR., Commissioner

San Francisco, California
November 13, 1981