

Mailed

JUN 18 1992

Decision 92-06-059 June 17, 1992

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of)
 the SOUTHERN CALIFORNIA EDISON)
 COMPANY (U 338-E) for: Authority)
 to Revise Its Energy-Cost Adjustment)
 Billing Factors, Its Major-Additions)
 Adjustment Billing Factor, Its)
 Electric-Revenue Adjustment Billing)
 Factor, Its Low-Income Surcharge,)
 and Its Base-Rate Levels Effective)
 January 1, 1992; (2) Authority to)
 Revise the Incremental Energy Rate,)
 the Energy Reliability Index, and)
 Avoided Capacity-Cost Pricing; and)
 (3) Review of the Reasonableness of)
 Edison's Operations During the)
 Period from April 1, 1990, through)
 March 31, 1991.)

ORIGINAL

Application 91-05-050
(Filed May 24, 1991)

Application 90-06-001
(Filed June 22, 1990)

Application 89-05-064
(Filed May 30, 1989)

(See Decision 92-01-018 for appearances.)

I N D E X

<u>Subject</u>	<u>Page</u>
OPINION	2
Discussion	3
A.89-05-064	3
A.90-06-001	3
A.91-05-050	4
Disputed Issues	4
Edison's Resale Loss-Factor Calculation Used in Developing the CPUC Jurisdictional Factor	5
Edison's Recovery of Fuel-Handling Expenses Associated with Leased Off-Loading Facilities	8
Edison's Preliminary Statement Change Concerning Legal Fees Associated with the Department of Energy Crude Oil Overcharge Refunds	10
DRA's Recommendation that the Dow Contract Be Modified to Incorporate A 0.25 Outage Factor	12
DRA's Recommendation that a 0.25 Outage Factor Be Incorporated Into All Future Special Contracts	16
The Joint Recommendation	17
In Light of the ALJ's Ruling to Consolidate Portions of these Proceedings with Investigation 89-12-025, Edison Seeks a Finding that the Palo Verde Generation and Expenses Not Removed to the OII are Reasonable	19
Depending on the Commission's Findings In I.89-12-025, the NUIP Penalties for PVNGS Units 1 and 2 May Need to Be Adjusted	20

I N D E X

<u>Subject</u>	<u>Page</u>
Language Differences in Uncontested Findings and Conclusions	21
A. <u>A.89-05-064</u>	21
B. <u>A.90-06-001</u>	22
C. <u>A.91-05-050</u>	24
D. <u>Conclusions of Law</u>	26
E. <u>Discussion</u>	27
F. <u>Comments on Proposed Decision</u>	27
Findings of Fact	29
A. ECAC A.89-05-064 Findings of Fact <u>Uncontested Issues</u>	29
B. ECAC A.90-06-001 Findings of Fact <u>Uncontested Issues</u>	31
C. ECAC A.91-05-050 Findings of Fact <u>Uncontested Issues</u>	35
D. Findings of Fact <u>Contested Issues</u>	40
Conclusions of Law	41
ORDER	42

O P I N I O N

This opinion concerns the reasonableness review of the practices of the Southern California Edison Company (Edison) for the period December 1, 1987 through March 31, 1991, in regard to its non-qualifying facilities (QFs) reasonableness issues. The Division of Ratepayer Advocates (DRA) was the only party, other than Edison, which participated in this phase of the three applications. Public hearing was held before Administrative Law Judge (ALJ) Robert Barnett.

Three periods of review are being considered in this decision.

1. Application (A.) 89-05-064 - December 1, 1987 through March 31, 1989;
2. A.90-06-001 - April 1, 1989 through March 31, 1990; and
3. A.91-05-050 - April 1, 1990 through March 31, 1991.

Two joint recommendations were executed by DRA and Edison: a Joint Proposal for a Thermal Performance Standard (TPS) for Edison's gas and oil-generating units and a Joint Recommendation relating to the reasonableness of operation of the San Onofre Nuclear Generating Station (SONGS) Unit 1, the Palo Verde Generating Station Unit 2, and Edison's Nuclear-Unit Incentive Procedure (NUIP). The method for evaluating the thermal performance of Edison's gas and oil power plants has been a matter of contention for the last three Energy Cost Adjustment Clause (ECAC) reasonableness proceedings. The proposed TPS is similar to the standard adopted for the other California electric utilities and is consistent with Decision (D.) 86-04-059 which directed Edison and DRA to design a methodology for assessing the performance of fossil fuel units. The Joint Proposal is intended

to supersede all previous testimony by both parties regarding the TPS for the three record periods.

Discussion

Because three different reasonableness review record periods are involved, we will discuss the issues in each record period separately and then focus on the disputed issues.

A.89-05-064

In its report on the reasonableness of the electric service agreement between the Dow Chemical Company and Edison, DRA concluded that the Dow contract terms were reasonable and were reasonably administered during the record period subject to modification of the outage probability factor, the method of contract modification notification, and the calculation of the floor price. Only the outage probability factor remains an issue since DRA has stated that the notification and floor price calculation issues have been resolved. DRA and Edison have agreed to defer the issue concerning DRA's recommended \$3.9 million adjustment to the ECAC Balancing Account for alleged overpayment to QFs resulting from the unbundling of gas-pricing components to the QF reasonableness phase of the proceeding. DRA does not contest the reasonableness of any other part of Edison's operations during this December 1, 1987 - March 31, 1989 period.

A.90-06-001

DRA found Edison's operations reasonable for this record period except for the following issues:

1. Nuclear expenses for SONGS 1, enrichment costs, and carrying charges associated with nuclear fuel costs and
2. The reasonableness of the outage probability adjustment factor in the Dow contract.

DRA eliminated nuclear enrichment costs as a disputed issue when its counsel stated during hearings that DRA does not take issue with these costs. The remaining nuclear issues were resolved by

the Joint Recommendation. Thus, other than the outage probability factor issue in the Dow contract, all other contested issues were resolved by the parties for the record period from April 1, 1989 through March 31, 1990 except as agreed to in the Joint Recommendation on nuclear plant operations and expenses.

A.91-05-050

DRA found Edison's operations reasonable for this record period except for the following issues:

1. SONGS 1 financing costs and costs associated with the underutilization of 20 equivalent full-power days for SONGS 1;
2. Changes to the NUIP;
3. NUIP penalties for SONGS 1 Fuel Cycle 10 and Palo Verde Fuel Cycle 2;
4. Recommendation for a \$884,000 disallowance associated with marine fuel expenses; and
5. 0.25 outage probability factor in all future special contracts. DRA recommended that Edison be required to prepare a new resale cities line-loss study and submit it for review in its next ECAC proceeding and use the system average line-loss in calculating its ECAC California Public Utilities Commission (CPUC) jurisdictional factor until its new study is accepted by the Commission. DRA's recommendations, if adopted, would result in a decrease of \$521,000 in Edison's ECAC Balancing Account.

Disputed Issues

In light of the Joint Proposal for a TPS and the Joint Recommendation on the disputed nuclear issues, only minor disputed issues remain between DRA and Edison. All other issues were either undisputed or resolved by the parties.

**Edison's Resale Loss-Factor
Calculation Used in Developing
the CPUC Jurisdictional Factor**

Edison uses the average resale loss factor to adjust the recorded sales to resale customers to reflect the amount of generation required to make such sales. The amount of resale customer generation is then divided by total system generation to determine the percentage of total generation associated with resale sales. This amount is then subtracted from 100% to obtain the CPUC jurisdictional factor which is used to allocate total system costs to CPUC ratepayers.

DRA identified several errors in the calculation of the resale loss factor in addition to its concern that it could not verify the accuracy of a portion of a 1986 Edison System-Loss Allocation Study since the power-flow runs supporting the study were no longer available. The 1986 study determined the amount of losses associated with serving the resale cities. DRA recommends that Edison should be required to use a system average-loss factor in calculating the CPUC jurisdictional factor. This would result in a disallowance of \$521,000 from Edison's ECAC Balancing Account.

Edison corrected the errors identified by DRA and recalculated the average resale loss factor. This resulted in a decrease of \$131,000 in the ECAC Balancing Account for the record period. Edison refused to abandon its 1986 study. It claims that due to the passage of time since the study was done, and the fact that no one, including DRA, had sought to review the power-flow studies in five years, the backup data for the power-flow analysis was unintentionally discarded.

Edison explains that the 1986 System-Loss Allocation Study that DRA rejects was used to develop the jurisdictional cost allocation in Edison's 1988 and 1992 Test Year general rate cases and several of the prior ECAC proceedings including A.89-05-064 and A.90-06-001. In both of the general rate cases, DRA found Edison's

jurisdictional cost allocation methodology reasonable. Moreover, Edison points out that DRA did not challenge Edison's calculation in the general rate cases or ECAC proceedings until A.91-05-050. Therefore, Edison believes that since the same jurisdictional cost allocation methodology has been adopted by the Commission in several proceedings, it should be adopted in this proceeding as well.

Edison asserts that DRA's use of system average losses is inappropriate because most of Edison's resale customers are served at higher voltage levels and cause fewer system losses than Edison's CPUC customers served from the distribution level. DRA's witness agreed that system average losses include losses from all voltage levels including the distribution level, which most of the resale customers do not use. Edison says that because the resale customers cause fewer losses, they should receive a lower loss allocation, not a greater loss allocation which would result if DRA's method is adopted.

DRA contends that its position is consistent with Commission policy and practice. Edison has simply failed to demonstrate that its jurisdictional factor is fair to California ratepayers. Edison bears the burden of proving that the expenses it seeks to pass on to California ratepayers are reasonable. In this instance, Edison failed to meet its burden, and a California disallowance is appropriate. In DRA's opinion, the 1986 study completely lacks support because Edison has discarded the data needed to support approximately 70% of the study. The study areas which Edison cannot support with data are the transmission and subtransmission levels, which are the primary levels used in determining the resale cities' line-loss factors.

DRA points out that General Order 28 requires public utilities to preserve records supporting entries in company ledgers and journals. The Federal Energy Regulatory Commission (FERC) Uniform System of Accounts (USOA) requires utilities to keep

generation and output logs, and supporting data, for six years (USOA, Section 125.3, item 22.1(d)). If Edison expects to receive rates based on a study, it must be prepared to fully present to the Commission the basis for the study. DRA concludes that Edison's study is out-of-date, relies on too little data, and lacks support; it cannot be used as a basis for Edison's rates. The reasonable alternative in DRA's estimation, is to use system average line-loss, calculated by dividing Edison's total net energy transmitted by Edison's total net energy consumed. System average line-loss can be supported by existing documents and results in a decrease of \$521,000 in Edison's ECAC Balancing Account.

DRA recommends that \$521,000 of expenses allocated to the CPUC jurisdictional customers be removed from the ECAC Balancing Account and charged to Edison's FERC customers. Edison recommends that its recalculated resale loss factor be used in determining the CPUC jurisdictional factor for the record period, which results in a decrease in the ECAC Balancing Account of \$131,000.

In this instance DRA is seeking a penalty for Edison's loss of support data for its line-loss study. DRA's general principle is correct: a study without supporting documents has no value. But the history of this study points toward a different result; the study comes with the security of precedential value and an approved theoretical underpinning. The lost supporting documents had been available to DRA in the past. The study has been adopted in at least four recent major Edison rate cases. And its primary thesis, that resale customers are served at higher voltage levels and cause fewer system losses than customers served from the distribution level, is not challenged by DRA. We would have no hesitation in adopting DRA's position if DRA were challenging the theory of the study, or if we had not approved the study on four previous occasions. To adopt DRA's position would be to burden the resale cities with costs that DRA concedes are not caused by the cities, i.e., distribution level losses. To us, this

appears to be an unwarranted penalty. Notwithstanding the result here, we caution Edison and other utilities not to assume that a study once approved will be approved again without question. Our finding on this issue is based on its particular facts, not on a general regulatory principle.

Edison's Recovery of Fuel-Handling Expenses Associated with Leased Off-Loading Facilities

DRA claims that Edison is seeking recovery for fuel-oil handling expenses in both its general rate case and its ECAC proceeding, and that \$884,000 of marine fuel transportation, processing, and other handling expenses are general rate case expenses that should not be recorded in the ECAC Balancing Account. DRA seeks an adjustment to Edison's ECAC Balancing Account to decrease recorded expenses by \$935,000 (which includes interest). Edison says DRA is just plain wrong that these costs are general rate case costs; these expenses have not been recovered in the general rate case and they are appropriately recovered in an ECAC proceeding.

Edison has two types of fuel-oil handling expenses which Edison recovers either through base rates or the ECAC:

1. Those associated with deliveries of oil at leased marine fuel-oil facilities in the ports of Long Beach and Los Angeles and
2. Fuel-oil handling expenses associated with deliveries at a marine fuel-oil facility owned by Edison at Mandalay generating station near Oxnard.

Edison asserts that its fuel-oil handling expenses associated with deliveries to the leased fuel-oil facilities are recovered through the ECAC since these costs are variable and they are not incurred unless a delivery is made. On the other hand, all expenses associated with company-owned fuel-oil facilities are treated similarly to any other company-owned facility and are

recovered in base rates. The \$884,000 in expenses identified by DRA are all associated with shipments into leased facilities at the Port of Long Beach or the Port of Los Angeles and are not recovered in base rates. There is no double recovery as DRA alleges.

Edison maintains its rate recovery for fuel-oil handling expenses is consistent with D.85731 in which the Commission discussed the kinds of energy-related expenses which should be recovered in an ECAC proceeding. The Commission said that costs associated with company-owned fuel-oil facilities should be reflected in base rates, and that variable costs associated with the purchase of fuel oil should be recovered in the ECAC proceeding. Thus, according to Edison, DRA's assertion that the \$884,000 of fuel-oil handling expenses at issue here should not be included in the ECAC Balancing Account is incorrect. DRA's recommendation ignores the Commission's directive in D.85731, as well as over 15 years of ECAC proceedings in which such expenses were forecast and recorded in the ECAC Balancing Account.

Edison's witness testified that the only off-loading facility Edison owns is in Ventura County and is not interconnected by pipeline to Edison's oil and gas-generating stations located in Los Angeles and Orange counties. Therefore, if fuel oil were delivered at the owned facility, it would have to be trucked or barged down to most of Edison's generating facilities. It is clearly more efficient and less expensive to use the leased facilities when the fuel oil is needed at generating stations in the Los Angeles basin.

DRA contends that Edison is earning more money than it should by choosing to have fuel oil delivered at leased facilities instead of using owned facilities. DRA argues that this dual system of compensation is illogical and bad policy. It allows Edison to receive general rates for fuel-handling costs at Edison facilities, while permitting Edison to load and unload oil primarily at other facilities and collect ECAC rates for those

expenses, too. This is a perverse incentive that must not be allowed.

DRA's witness testified that the ECAC Balancing Account was developed to insulate the utility against increasing prices of fuel. Areas which do not involve fuel typically do not have that level of risk. In this instance, labor expenses or maintenance expenses for non-Edison-owned facilities are capable of being accurately forecast in a general rate case. Such expenses do not fluctuate wildly, in the way that oil commodity expenses can swing because of war, embargoes, or other dire factors.

In our opinion, Edison has reflected fuel-oil handling expenses associated with Edison-owned facilities in base rates, and fuel-oil handling expenses associated with fuel-oil facilities leased by Edison in the ECAC procedure. No double recovery of fuel-oil handling expenses has occurred.

DRA is challenging a concept that was articulated by this Commission years ago and followed consistently. We find no evidence that Edison is diverting shipments to Los Angeles which should have gone to its Ventura County facility. If the Ventura County facility is underutilized that concern should be an issue in Edison's next general rate case, not in this ECAC. Should DRA hold to its position that labor and maintenance expenses for non-Edison-owned facilities are capable of being accurately forecast in a general rate case, than DRA should advocate an allowance for those expenses in Edison's next general rate case. Having failed to provide for those expenses in a general rate case, we cannot disallow them in this ECAC.

**Edison's Preliminary Statement Change
Concerning Legal Fees Associated with
the Department of Energy Crude Oil
Overcharge Refunds**

In 1989, the Department of Energy (DOE) awarded refunds to companies that purchased petroleum products during the period 1973 through 1981. The refunds arose as a result of overcharges of

crude oil products by oil companies who violated federal petroleum-pricing allocation regulations.

Commission Resolution E-3165 authorized Edison to record the outside legal fees associated with the DOE crude oil refunds in the ECAC Balancing Account. Edison's tariffs currently do not reflect this authority. Edison proposes a Preliminary Statement change to update its tariffs to reflect the authority granted in Resolution E-3165 and make it clear that the DOE refunds are net of the outside legal fees. There is no impact on the current record period of this change since there were no DOE crude oil refunds recorded.

Besides opposing this Preliminary Statement change, DRA believes these legal fees should be treated as general rate case costs. Edison explains, however, that these outside legal fees are not reflected in the general rate case since the Commission has authorized Edison, Pacific Gas and Electric Company, and San Diego Gas & Electric Company to record them in the ECAC Balancing Account. Edison therefore requests that the Commission authorize Edison's Preliminary Statement change and reject DRA's argument that the legal fees associated with DOE crude oil refunds should be treated as general rate case costs.

In its brief, DRA did not press this issue. We will adopt Edison's position.

**DRA's Recommendation that the Dow
Contract Be Modified to Incorporate
A 0.25 Outage Factor**

DRA recommends that the Commission order that the Dow special contract¹ be modified to change the existing outage factor from 0.05 to 0.25. Edison contends that DRA's recommendation should be rejected because it is based upon an invalid extrapolation of Dow's operating experience for a different size and type cogeneration plant operating under different price incentives on a utility system in Texas.

DRA finds that the charges Dow pays to Edison under the contract to be reasonable except for the contract's use of an "unavailability ratio" of 0.05 to determine demand charge revenue. This ratio, DRA asserts, produces an unreasonably low payment by Dow to Edison, and thus is unfair to Edison's ratepayers. DRA argues that unavailability ratios or outage factors are important because they are used in setting demand charges for special electricity contracts. Demand charges for special electricity contracts are designed to mimic the demand charges for standby service which Edison would have collected from the cogeneration facility if it had been built. This is a reasonable goal in accord with Commission policy. D.90-12-128 holds that "it would be unreasonable for the utility to offer service at a rate lower than the cost of self-generation in the absence of overriding circumstances." (D.90-12-128, p. 193.) No reason exists why Edison should offer contractual standby service to Dow at less than the rate it would charge Dow for such service if it self-generated.

1 The special contract at issue here is a self-generation deferral rate contract similar to those executed between Edison and individual large customers who are considering leaving the Edison system. These special contracts are developed, executed, and administered in conformance with the Commission's guidelines set forth in D.88-03-008, D.88-07-058, and other relevant decisions.

If Dow had built a self-generating facility and left Edison's system, Dow would have still paid Edison demand charges for standby electricity service, in case the facility suffered a planned or forced outage.

DRA states that a reasonable outage factor should reflect the monthly probability of plant outages containing a 15 minute or longer outage during the on-peak period. Under Edison's tariffs, on-peak demand charges are incurred for months in which the customer uses electricity for 15 minutes or longer during the on-peak period. The Dow contract fails to reflect a reasonable application of that principle. The contract uses a 0.05 unavailability factor, which assumes that, if the Dow facility had been built, it would have been expected to experience a 15 minute or longer on-peak outage during 5% of all the summer months the unit operated. In other words, a 0.05 outage factor assumes a 15 minute or longer on-peak outage is expected to occur only about once every three years. In DRA's opinion, the data doesn't even begin to support such a low outage factor or the low standby charge based on that factor.

DRA maintains that substantial data exists to demonstrate that a 0.05 outage factor is unrealistically low. Dow owns and operates its own self-generation electricity unit in Houston, Texas. DRA reviewed data from Dow's Houston facility which shows that the facility was out of service 28 hours (out of a possible 498 hours) during the summer period. The data demonstrates that the probability is infinitesimal that 28 hours worth of outages would not contain at least one continuous block of 15 minutes duration during the on-peak period. DRA used a very conservative 0.25 outage factor, representing its conclusion that, if the Dow plant had been built, a 15 minute on-peak outage could be expected in at least one of the four summer months.

Edison also used the operating data from Dow's Houston facility in deriving its outage factor. However, unlike DRA,

Edison used Dow's Houston facility data in conjunction with additional data (such as Electric Power Research Institute studies and National Electric Reliability Council studies) to arrive at the 0.05 outage factor incorporated in the Dow special contract. DRA's recommended 0.25 outage factor does not take this additional data into account.

The 0.05 outage factor arrived at by Edison takes into account the fact that:

1. The Dow Houston cogeneration plant is a different size than the Dow California plant;
2. The Houston plant is a different type of cogeneration plant than the California plant; and,
3. The Houston plant has no incentive to defer outages or operate on a derated basis, unlike the California plant. The 0.25 outage factor recommended by DRA fails to take any of these considerations into account.

Futhermore, in Edison's opinion, DRA's contention that the Commission should find the administration of the Dow special contract to be unreasonable unless a 0.25 outage probability factor is adopted is contrary to well-established law. In reviewing the reasonableness of special contracts, the Commission has consistently recognized that, in the absence of such contracts, customers (such as Dow) would have bypassed the utility's system and therefore not provided any contribution to margin. With that in mind, the Commission established a standard of review for special contracts which requires that the contract provide a positive contribution to margin. DRA admits that the Dow special contract does, in fact, produce a positive contribution to margin. DRA also admits that its assertion that the Dow special contract is unreasonable is premised upon its belief that the contribution to margin has not been "maximized to the optimal degree." This is

inconsistent with the standard adopted by the Commission in D.90-12-128.

Moreover, Edison believes that DRA's proposed standard of review ignores the realities of contract negotiations and thereby places the substantial ratepayer benefits provided by the Dow special contract at risk. In D.91-11-016, the Commission reaffirmed that special contracts are the "product of bilateral negotiations between the utility and one of its customers." (At p. 15.) Accordingly, the Commission has declined to impose a uniform format for special contracts. Thus, the Commission recognizes that the ratepayer benefits of special contracts are provided by the effect of the contract as a whole, not by any single element of the contract. DRA fails to recognize this basic fact when it argues that the outage factor of the Dow special contract must be changed to 0.25 in order to maximize the customer's contribution to margin. Edison's witness testified that Edison developed a rate for Dow that would approximate, as closely as possible, Dow's opportunity costs and credits had it built the project.

We agree with Edison. The Dow contract was negotiated to prevent bypass of Edison's system. The issue is whether, taken as a whole, it contributes to margin and is not lower than the cost of self-generation. DRA has admitted that the contract does make a positive contribution to margin. A reading of the contract shows that there are a number of elements in the contract, all of which are negotiable, which affect revenue and costs. For us to say that the parties must use an outage factor of 0.25 rather than 0.05 would not necessarily change the outcome of the negotiations. It would just shift the emphasis from the outage factor to a different factor. This contract contributes \$1.7 million annually to Edison; the outage factor issue concerns an additional \$18,800 annually. Considering the contract in its entirety, we find it makes a positive contribution to margin, is not lower than the cost of self-generation, and is reasonable.

**DRA's Recommendation that a 0.25
Outage Factor Be Incorporated Into
All Future Special Contracts**

DRA recommends that the Commission establish a policy in this proceeding which would mandate that all future special contracts adopt a 0.25 outage factor. Edison says that DRA's proposed generic outage factor should not be adopted because it is based on unsound analysis. It is derived by averaging the recorded performance data of a statistically invalid and nonhomogeneous aggregation of a small number of cogeneration units on Edison's system.

Edison presented data regarding the performance of 23 of the cogenerators operating on its system. In providing this data, Edison warned that the size of the sample was statistically invalid for purposes of averaging. Edison stressed that the divergence in type, size, and operating criteria of these cogeneration units invalidates the use of any averages taken from this data. In Edison's opinion, the only valid conclusion which can be drawn from an analysis of Edison's study is that this small sample of the cogenerators have extremely diverse operating histories.

Edison recommends a reasonable alternative. For the present, no generic outage factor should be adopted and the outage factor for each project should be derived from available data. However, Edison's current study (if continued, updated, and expanded) may provide useful data about typical installations which are indicative of specific types of cogeneration projects. Accordingly, Edison recommends that it be authorized to continue its study of the operational reliability of cogeneration systems. If its study provides an adequate statistical basis from which valid generic outage factors can be derived for typical cogeneration installations, the issue of adopting generic outage factors can be revisited at that time.

We have no objection to recommending to Edison that it use a 0.25 outage factor when negotiating its special contracts. But requiring 0.25 to be incorporated into every contract seems misleading. The outage factor is a very small part of a very large contract. We are concerned with the end result, not the value the parties allocate to various elements of the contract. We agree with DRA that an outage factor of 0.25 appears reasonable, but to mandate it would not necessarily increase revenue to Edison; it would merely shift the negotiations to other areas of the contract.

The Joint Recommendation

Joint recommendations that resolve issues between parties are encouraged by the Commission. DRA and Edison met several times to discuss and try to resolve their differences on a number of issues. While Edison and DRA were unable to resolve their differences on all issues, agreement was reached with respect to Edison's nuclear operations, nuclear fuel expenses, the NUIP, and certain related tariff modifications. Accordingly, Edison and DRA executed a Joint Recommendation and submitted it to the Commission for adoption. The Joint Recommendation is the result of concession and compromise by both parties and resolves all the reasonableness issues associated with the SONGS and Palo Verde Nuclear Generating Station (PVNGS) operations addressed in testimony in A.89-05-064, A.90-06-001, and A.91-05-050.²

In the Joint Recommendation, Edison and DRA agreed that \$3.2 million should be removed from Edison's ECAC Balancing Account for the period ending March 31, 1991 associated with the operation of SONGS Unit 1. The components of the \$3.2 million are as follows:

² There are issues associated with PVNGS Units 1 and 3 which have not been addressed that are the subject of Order Instituting Investigation (OII) 89-12-025.

1. NUIP penalty of \$1.68 million for SONGS 1 Fuel Cycle 10;
2. \$1.0 million of nuclear fuel expense, associated with the premature discharge of 39 Batch 11 fuel assemblies, which should be removed from the ECAC Balancing Account and placed in the unamortized nuclear fuel account to be treated consistent with other Edison unamortized fuel. The \$1.0 million in unamortized fuel will be subject to recovery by Edison as specified in the Joint Recommendation; and
3. \$0.52 million of SONGS 1 nuclear fuel financing costs should be removed from the ECAC Balancing Account through the end of Fuel Cycle 10. In addition, the SONGS Unit 1 nuclear fuel account should be decreased by \$0.70 million to reflect the decrease in prereactor financing charges associated with SONGS 1 nuclear fuel which will be amortized in future periods.

DRA and Edison also agreed that a NUIP penalty of \$40,821 should be applied to Palo Verde Unit 2, Fuel Cycle 2, and to recommend a change in the definition of the Incentive Period for all of Edison's nuclear units under the NUIP. The definition of the Incentive Period, if adopted, would be equal to two consecutive fuel cycles, and the fuel-cycle definition would be changed. The Joint Recommendation specifies when these changes would commence for each of the SONGS and Palo Verde units. In the Joint Recommendation, the parties also agreed that the determination of NUIP rewards and penalties should only include the nuclear energy costs associated with the reasonable operation of the units. Prereactor financing costs associated with the operation of the unit found unreasonable by the Commission should not be reflected in the nuclear fuel expense in the calculation of the NUIP reward or penalty.

Edison believes the Joint Recommendation is reasonable and recommends that the Commission adopt it without modification.

In Light of the ALJ's Ruling to Consolidate Portions of these Proceedings with Investigation 89-12-025, Edison Seeks a Finding that the Palo Verde Generation and Expenses Not Removed to the OII are Reasonable

On January 29, 1992, DRA filed a motion to consolidate with Investigation (I.) 89-12-025 the portions of these ECAC proceedings that concern the reasonableness of additional power costs associated with the outages at the PVNGS Units 1, 2, and 3 during the outages which began in March 1989. On the same day, DRA also filed a parallel motion in I.89-12-025. On February 3, 1992, ALJ Barnett issued a ruling removing certain replacement power costs from these ECAC proceedings to I.89-12-025.

The reasonableness of the generation and outages of the PVNGS units were reviewed in these proceedings except for the outages at issue in I.89-12-025. Therefore, except for issues expressly reserved, no other adjustments should be considered beyond the three record periods. (See D.92496, 4 CPUC 2d 693 at p. 702.)

In A.89-05-064, DRA found Edison's nuclear generation and expenses reasonable. In A.90-06-001, DRA found Edison's Palo Verde nuclear expenses for this record period reasonable except for the reasonableness of any Palo Verde 1 or 3 issues which are the subject of I.89-12-025. DRA also recommended that the reasonableness of Palo Verde 2 be deferred until Edison's next ECAC pending completion of its next fuel cycle. In A.91-05-050, DRA found the amount of nuclear energy and related expenses for Palo Verde reasonable except for three months of Palo Verde Unit 1 operation covered by the OII. DRA also found that none of the 11 outages at PVNGS were unreasonable.

Other than the OII issues, DRA has not deferred the reasonableness review of any other issue related to the operation of PVNGS. Therefore, except for the replacement power costs

associated with the outages which are the subject of the OII, the nuclear fuel expenses and generation for the Palo Verde Units 1, 2, and 3 during the record periods covered by A.89-05-064, A.90-06-001, and A.91-05-050 were reasonable.

Depending on the Commission's Findings
In I.89-12-025, the NUIP Penalties for
PVNGS Units 1 and 2 May Need to Be
Adjusted

Edison's tariffs approved by the Commission explicitly provide for the adjustment to the NUIP calculations to reflect the Commission's determination in an annual reasonableness review:

"The Average Gross Capacity Factor for the Company's share of ownership of each SONGS Unit and each PVNGS Unit specified herein shall be the Incentive Period Gross Capacity Factor based on Edison's share of each Unit's maximum gross capacity shown below, computed from the most recent Incentive Period Data adjusted:
(a) to provide for Economic Modifiers; and
(b) to reflect the performance of each unit found to be reasonable as determined by the Commission in the Annual Review of Reasonableness." (Emphasis added.)

Edison submits that depending on the Commission's findings in the consolidated proceeding, there may be a need to adjust the NUIP penalties for Palo Verde Units 1 and 2 that were calculated by the parties in A.90-06-001 and A.91-05-050 if any portion of the outages are found to be unreasonable.⁴ In its motion to consolidate the two proceedings filed in I.89-12-025, DRA acknowledges that there would be overlap in refunds/disallowance

³ Edison's Preliminary Statement, Part G. 11.c.(3).

⁴ There is a \$5,340,102 penalty to be applied to PV1 Fuel Cycle 2 and a \$40,821 penalty to be applied to PV2 Fuel Cycle 2. PV3 Fuel Cycle 2 fell within the deadband so no NUIP calculation was required.

based on replacement power costs or base rates between the OII/ECAC and the NUIP. Edison recommends that the determination of the NUIP reward/penalties associated with the Palo Verde Units 1, 2, and 3 should be left open pending a final decision in the consolidated proceeding. We disagree. The reward/penalties agreed upon in these applications should be imposed but may be modified for any changes found in I.89-12-025.

Language Differences in Uncontested Findings and Conclusions

Edison and DRA jointly submitted over 110 proposed findings of fact and conclusions of law on uncontested issues. There were, however, differences in wording for some of the findings. Those differences are:

A. A.89-05-064

17. DRA Version:

No party challenges the reasonableness of Edison's purchases under the Pacific Power and Light (PP&L) and Arizona Public Service (APS) Cholla contracts during the record period.

Edison Version:

Edison's purchases under the PP&L and APS Cholla contracts during this record period were reasonable.

18. DRA Version:

No party challenges the reasonableness of Edison's purchases under its other long-term power purchase and exchange agreements (Hoover, Metropolitan Water District (MWD), Comision Federalde Electricidad (CFE), Portland General Electric (PGE), California Department of Water Resources (CDWR), and Washington Water Power (WPP)) during the record period.

Edison Version:

Edison's administration of its other long-term power purchase and exchange agreements (Hoover, MWD, CFE, PGE, CDWR, and WWP) was reasonable during the record period.

B. A.90-06-001

9. DRA Version:

The reasonableness of conversion, enrichment, and fabrication costs, in addition to uranium costs, should be reviewed in the record period where the costs were incurred.

Edison Version:

The reasonableness of Edison's procurement of and prices paid for conversion, enrichment, and fabrication costs, in addition to uranium costs, should be reviewed in the record period where the costs were incurred.

17. DRA Version:

No party challenges Edison's administration of its long-term power purchases and exchange agreements (Hoover, MWD, CDWR, APS Cholla, CFE, PGE, PP&L, Bonneville Power Administration (BPA), and WWP) during the record period.

Edison Version:

Edison's administration of its long-term power purchases and exchange agreements (Hoover, MWD, CDWR, APS Cholla, CFE, PGE, PP&L, BPA, and WWP) during the record period were reasonable.

18. DRA Version:

No party challenges the reasonableness of Edison's fossil fuel expenses, volumes, and prices paid for the record period.

Edison Version:

Edison's fossil fuel expenses, volumes, and prices paid for the record period were reasonable.

19. DRA Version:

No party challenges the reasonableness of the balances in the fuel-oil, nuclear fuel, and coal inventory memorandum accounts and the balances should be transferred to the ECAC Balancing Account for subsequent rate recovery through the Energy-Cost Adjustment Billing Factor (ECABF).

Edison Version:

Balances in the fuel-oil nuclear fuel, and coal inventory memorandum accounts are reasonable and should be transferred to the ECAC Balancing Account for subsequent rate recovery through the ECABF.

20. DRA Version:

No party challenged the costs recorded in the Electromagnetic Fields Study Memorandum Account and the balance should be transferred to the ECAC Balancing Account for 100% future recovery through the operation of the ECABF.

Edison Version:

The costs recorded in the Electromagnetic Fields Study Memorandum Account are reasonable and the balance should be transferred to the ECAC Balancing Account for 100% future recovery through the operation of the ECABF.

27. DRA Version:

DRA found Edison's administration of the Dow contract reasonable with the exception that the outage probability factor of 0.25 be used.

Edison Version:

The terms of the Dow contract are fair to other ratepayers and its administration by Edison should be found reasonable.

C. A.91-05-050

2. **DRA Version:**

The generation and nuclear fuel expenses were reasonable for the record period for SONGS Units 2 and 3 and Palo Verde Units 1, 2, and 3 except as noted in Findings of Fact 31 and 47 and the Joint Recommendation. Review of the reasonableness of Palo Verde 1 operation from the beginning of the record period until the unit was synchronized to the grid is deferred until the conclusion of OII 89-12-025.

Edison Version:

The generation and nuclear fuel expenses were reasonable for the record period for SONGS Units 2 and 3 and Palo Verde Units 1, 2, and 3 except for three months of Palo Verde 1 operation the reasonableness review of which is deferred until the conclusion of OII 89-12-025.

7. **DRA Version:**

No party challenged Edison's administration of long-term PGE, BPA, MWD, and CDWR power purchases and exchange agreements during the record period.

Edison Version:

Edison's administration of the BPA, PGE, MWD, and CDWR contracts during the record period were reasonable.

12. DRA Version:

No party challenges the reasonableness of all payments made during the record period pursuant to long-term interutility contracts found to have been reasonably administered.

Edison Version:

All payments made during the record period pursuant to long-term interutility contracts found to have been reasonably administered.

20. DRA Version:

DRA found Edison's administration of the Dow contract reasonable with the exception that the outage probability factor of 0.25 be used.

Edison Version:

Edison's administration of the Dow contract during the record period was reasonable.

25. DRA Version:

No party challenges Edison's administration of its Low-Income Rate Assistance (LIRA) program during the record period.

Edison Version:

Edison's administration of its LIRA program during the record period was reasonable. Accordingly, the LIRA discounts recorded in the LIRA Balancing Account and the incremental administrative and legal expenses are reasonable.

31. DRA Version:

With the exception of matters deferred to in I.89-12-025, none of the outages which were forced or scheduled at SONGS and

Palo Verde that were reviewed during this record period, were unreasonable.

Edison Version:

None of the outages which were forced or scheduled at SONGS and Palo Verde that were reviewed during this record period, were unreasonable.

47. DRA Version:

Except for expenses and revenue requirements associated with the outages at Palo Verde Units 1, 2, and 3 which began in March 1989, the nuclear expenses for the Palo Verde units during the record period covered by A.89-05-064, A.90-06-001, and A.91-05-050 were reasonable.

Edison Version:

Except for the issues regarding replacement power costs addressed in the Palo Verde OII 89-12-025, the nuclear fuel expenses for the Palo Verde Units 1, 2, and 3 during the record periods covered by A.89-05-064, A.90-06-001, and A.91-05-050 were reasonable.

D. Conclusions of Law

5. DRA Version:

The Commission expects to consider the reasonableness of expenses and revenue requirements associated with the prolonged outages at Palo Verde Units 1, 2, and 3 in 1989 and 1990 in a special investigation. These issues are being considered in I.89-12-025, and we defer making findings of fact regarding these operations until we have had the opportunity to review the record in I.89-12-025.

Edison Version:

The issues regarding replacement power costs associated with outages at PVNGS, Units 1, 2, and 3, covering the period from March 3, 1989 through March 31, 1992 are removed from these ECAC proceedings. Those issues shall be reviewed in I.89-12-025.

E. Discussion

For the most part the differences between DRA's language and Edison's concern the effect these findings may have on future reasonableness reviews. In almost every instance of dispute Edison wants a finding that its activity during the record period was reasonable while DRA merely wants a finding that no party challenges the reasonableness of the activity. As we understand the differences, under both versions of a particular finding the underlying revenues and expenses are accepted, but under the Edison version the activity itself is found reasonable while under the DRA version the activity may be challenged in a future reasonableness review. We are acutely aware of the number and importance of the contested proceedings before this Commission and the oftentimes lack of staff to investigate adequately every aspect of every proceeding. Some issues must be deferred. In our opinion, the DRA version of the disputed findings should be adopted. It protects the public by giving DRA the opportunity to raise the issue at another time more appropriate to the issue presented.

F. Comments on Proposed Decision

This decision was issued as a Proposed Decision to which DRA and Edison filed comments. Edison's comments were technical in nature and were agreed to by DRA. They have been incorporated into this decision. DRA's comments concern the Proposed Decision's failure to use an outage factor of 0.25 to determine the reasonableness of special contracts. DRA argues that because of that failure the Proposed Decision misinterprets D.90-12-128 and

has reversed it by implication. DRA quotes the pertinent portion of D.90-12-128:

"DRA argues that in order to maximize the customer's contribution to the utility's fixed costs, the contract rate should equal or exceed the customer's estimated cost of self-generation. The logic of this requirement is that a customer will generally prefer to purchase from the utility if the cost of self-generation is no lower than the cost of utility service. Although it points out that DRA may have applied a less strict standard in the past, PG&E offers no objection to this criterion. We agree that it would be unreasonable for the utility to offer service at a rate lower than the cost of self-generation in the absence of overriding circumstances." (39 CPUC 2d at 193, emphasis added.)

DRA argues that "No commission decision has ever reversed the above holding in D.90-12-128. But, if the Commission adopts the Proposed Decision without modification, it will reverse D.90-12-128 by implication. The Commission's message to utilities will be that they may offer service to customers at rates lower than the customer's estimated cost of self-generation, so long as a positive margin contribution is achieved. Such a message is contrary to good public policy, and must not be delivered to utilities."

DRA has misinterpreted our decision. We do not want utilities to offer service at rates lower than a customer's estimated cost of self-generation; to do so is imprudent. As we view the evidence DRA has not shown that Edison is offering service to Dow at a rate lower than the cost of self-generation. Edison has shown that its rate is at least equal to Dow's cost of self-generation at the time the contract was negotiated. We shall clarify our reasoning in the body of the decision and in the findings.

Findings of Fact

A. ECAC A.89-05-064
Findings of Fact
Uncontested Issues

1. The amount of hydroelectric energy generated by Edison during the record period is reasonable.
2. Edison's expenses for coal and gas burned at Mohave and Four Corners and its coal generation were reasonable during the record period.
3. The reward to Edison for the Coal Plant Incentive Procedure for the Four Corners Units 4 and 5 for the record period is \$5,883,886.
4. The coal prices at Mohave and Four Corners were reasonable when compared with competitive alternative coal supplies.
5. Edison's record period nuclear fuel expenses and generation, except as covered in the December 3, 1991 DRA/Edison Joint Recommendation on nuclear issues, were reasonable.
6. Edison's procurement of and prices paid for uranium during the record period were reasonable.
7. DRA investigated Edison's enrichment costs for the record period and does not take issue with enrichment costs.
8. Edison's procurement of and prices paid for conversion, enrichment, and fabrication for nuclear fuel batches expensed during the record period were reasonable.
9. The Target Capacity Factor (TCF) was applicable to SONGS 3 for the completion of Fuel Cycle 3 during the record period.
10. The TCF reward of \$437,935 for SONGS' Unit 3 operation during its fueling cycle is reasonable.

11. Storage costs and the prices paid for SONGS 1 spent-fuel which is currently being stored at General Electric's (GE) Morris, Illinois, facility are reasonable.

12. Edison's short-term economy energy purchases from other utilities during the record period were reasonable.

13. Edison's ratepayers benefited from the operation of its system made with respect to short-term economy energy purchases during the record period.

14. Edison's fossil fuel procurement practices for the record period were reasonable.

15. DRA's recommendation for a \$20 million disallowance for Edison's contract with PP&L for the record period was withdrawn by DRA.

16. Edison's cost to continue the agreement with APS Cholla No. 4 power purchase was \$95 million less than Edison's overall cost to terminate the agreement.

17. No party challenges the reasonableness of Edison's purchases under the PP&L and APS Cholla contracts during the record period.

18. No party challenges the reasonableness of Edison's purchases under its other long-term power purchase and exchange agreements (Hoover, MWD, CFE, PGE, CDWR, and WWP) during the record period.

19. Edison's oil and gas-plant generation and outages for the record period were reasonable.

20. The fuel-oil expenses related to the Chevron option agreement contract and fuel-oil burns during natural gas curtailment periods were reasonable.

21. The market conditions that existed in Southern California at the time of the economic burns provide sufficient justification to warrant accepting the economic burn volumes as reasonable.

22. DRA withdrew its recommendation to disallow \$1.9 million of fuel-oil carrying costs.

23. Edison's carrying costs for its oil, gas, and coal inventories were reasonable during the record period.

24. DRA withdrew its recommendation to disallow \$20.76 million of fuel-oil sale losses during the record period since the actual amount of losses was \$20,000.76 and that amount of fuel-oil sales losses was not unreasonable.

25. Edison's fossil fuel supply management of its gas, oil, and coal resources was reasonable during the record period.

26. DRA and Edison agreed that the issue raised by DRA concerning a \$3.9 million adjustment to the ECAC Balancing Account for QF demand-related charges should be deferred to the QF reasonableness phase of A.89-05-064.

27. DRA found Edison's execution and administration of the Dow special contract during the record period to be reasonable with the exception that an outage probability factor of 0.25 be used.

B. ECAC A.90-06-001
Findings of Fact
Uncontested Issues

1. Edison's hydroelectric generation for this record period is reasonable.

2. Palo Verde Unit 1 Fuel Cycle 2 capacity factor of 37% falls short of the required deadband capacity factor of 55% resulting in a TCF penalty for Edison of \$5,340,102.

3. San Onofre Units 1, 2, and 3 generation for the record period was reasonable.

4. Edison's record period nuclear fuel expenses, except as covered in the December 1991 DRA/Edison Joint Recommendation on nuclear issues and as deferred to in OII 89-12-025, were reasonable.

5. Palo Verde Unit 1 had no generation for the record period due to extended outages.

6. Palo Verde Units 1 and 3 both triggered an OII because of their extended continuous outages.

7. DRA recommends that the reasonableness review of Edison's replacement and additional energy expenses associated with the outages of Palo Verde Units 1, 2, and 3 which began in March 1989 during the record period be consolidated with OII 89-12-025.

8. DRA investigated Edison's enrichment costs and does not take issue with enrichment costs in any of the three applications.

9. The reasonableness of conversion, enrichment, and fabrication costs, in addition to uranium costs, should be reviewed in the record period where the costs were incurred.

10. Edison's procurement of and prices paid for uranium during the record period were reasonable.

11. Edison's procurement of and prices paid for conversion, enrichment, and fabrication for nuclear fuel batches expensed during the record period were reasonable.

12. Edison's expenses for coal and gas burned at the Mohave and Four Corners generating stations and its coal generation were reasonable during the record period.

13. The coal prices at Mohave and Four Corners were reasonable when compared with competitive coal supplies.

14. Edison operated its system prudently with respect to its short-term economy energy purchases from other utilities during the record period.

15. Edison's ratepayers benefited from Edison's operation of its system with respect to short-term economy energy purchases during the record period.

16. DRA's recommendation for a \$17 million disallowance for Edison's contract with PP&L for the record period was withdrawn by DRA.

17. No party challenges Edison's administration of its long-term power purchases and exchange agreements (Hoover, MWD, CDWR, APS Cholla, CPE, PGE, PP&L, BPA, and WWP) during the record period.

18. No party challenges the reasonableness of Edison's fossil fuel expenses, volumes, and prices paid for the record period.

19. No party challenges the reasonableness of the balances in the fuel-oil, nuclear fuel, and coal inventory memorandum accounts and the balances should be transferred to the ECAC Balancing Account for subsequent rate recovery through the ECABF.

20. No party challenged the costs recorded in the Electromagnetic Fields Study Memorandum Account and the balance should be transferred to the ECAC Balancing Account for 100% future recovery through the operation of the ECABF.

21. Edison's expenses related to fuel-oil burns during curtailment periods, fuel-oil procurements during curtailment, and forced outages of base-load capacity at Mohave coal plant were reasonable.

22. Edison's fuel-oil expenses related to the Chevron option agreement were reasonable.

23. The recorded fuel-oil inventory levels were reasonable.

24. Edison's oil burns during the record period due to extended gas curtailment episodes and forced outages of some of Edison's generating units were reasonable.

25. Edison's fossil fuel-supply management of its oil, gas, and coal resources for the record period was reasonable.

26. Edison's fossil fuel procurement practices during the record period were reasonable.

27. DRA found Edison's administration of the Dow contract reasonable with the exception that the outage probability factor of 0.25 be used.

28. The terms of the ARCO agreement have been met and are within the allowed funding range and its execution by Edison should be found reasonable for this record period.

29. Edison's energy resource mix for the record period was reasonable except for QF costs which will be the subject of DRA testimony in the QF reasonable phase of this proceeding.

30. Edison's natural gas expenses for the record period were reasonable.

31. Edison's coal expenses for the record period were reasonable.

32. Edison's recorded LIRA cost for the record period is reasonable.

33. The generation and outages of the oil and gas units during the record period were reasonable.

34. In October 1991, DRA and Edison agreed on a Joint Proposal for a TPS for Edison's gas and oil-generating units to be implemented April 1, 1992.

35. The Joint Proposal recommends a methodology for reviewing the thermal efficiency of Edison's oil and gas-fired generating plants.

36. The methodology jointly recommended by DRA and Edison is termed Heat-Rate Deviation Methodology which compares the system average recorded and theoretical heat rates and is described in detail in the Joint Proposal.

37. The TPS proposed by DRA and Edison established a measure of the expected operating efficiency of Edison's generating system.

38. The Joint Proposal for a TPS for the gas and oil-generating units by DRA and Edison is the consequence of the prior proposals, recommendations, and discussions between DRA and Edison with regard to the adoption of an adequate heat-rate deviation methodology.

39. DRA and Edison propose that the Commission implement this standard for Edison for three years and then review it in order to provide DRA and Edison an opportunity to identify and analyze performance relative to the TPS and if appropriate, to recommend modifications in order to maintain a reasonable standard.

40. The proposed TPS yardstick of 250 British thermal unit (Btu)/kilowatt-hour (kWh) is based on a review of historical heat-rate data for Edison over the past eight years (1983-1990).

41. The thermal performance of Edison's oil and gas-fired power plants was reasonable for the 1987-88, 1988-89, and 1989-90

ECAC record periods using the proposed heat-rate deviation TPS of 250 Btu/kWh.

42. The Joint Proposal for TPS is reasonable and should be adopted by the Commission.

C. ECAC A.91-05-050
Findings of Fact
Uncontested Issues

1. Edison's hydroelectric generation for the record period is reasonable.

2. The generation and nuclear fuel expenses were reasonable for the record period for SONGS Units 2 and 3 and Palo Verde Units 1, 2, and 3 except as noted in Findings of Fact 31 and 47 and the Joint Recommendation. Review of the reasonableness of Palo Verde 1 operation from the beginning of the record period until the unit was synchronized to the grid is deferred until the conclusion of OII 89-12-025.

3. The outages and expenses related to coal and gas burned at Edison's coal plants were reasonable during the record period.

4. Edison operated its system prudently with respect to its short-term economy energy purchases during the record period and those purchases were reasonable.

5. Ratepayers benefited from Edison's purchases of short-term economy energy purchases during the record period.

6. In cases where short-term economy energy purchase expenses exceeded Edison's own incremental costs, the DRA investigated the circumstances and confirmed that those purchases were needed.

7. No party challenged Edison's administration of long-term PGE, BPA, MWD, and CDWR power purchases and exchange agreements during the record period.

8. Edison's administration of the PP&L contract during the record period was reasonable.

9. Based upon the efforts of Edison to reduce the contract cost and the economic studies conducted, Edison's administration of the CFE contract for the record period was reasonable.

10. Edison's administration of the APS Cholla 4 contract was reasonable during this record period.

11. Edison's administration of the Hoover contract was reasonable during this record period.

12. No party challenges the reasonableness of all payments made during the record period pursuant to long-term interutility contracts found to have been reasonably administered.

13. Edison's record period fuel-oil burns were reasonable.

14. In Supplemental Testimony dated October 1991 (Exhibit 24), DRA withdrew its recommended disallowance of \$1.780 million in excess fuel inventory level carrying costs.

15. Edison's operation of its fuel-oil inventory system during the record period was reasonable.

16. Edison's fossil fuel-supply management of its oil, coal, and gas resources during the record period was reasonable.

17. Edison's oil and gas-generation and associated fuel expenses for the record period were reasonable.

18. Edison's fossil fuel procurement for its gas, oil, and coal resources was reasonable during the record period.

19. Edison's carrying costs associated with its oil, gas, and coal-fuel inventories during the record period were reasonable.

20. DRA found Edison's administration of the Dow contract reasonable with the exception that the outage probability factor of 0.25 be used.

21. On November 7, 1991, Edison provided to DRA the ARCO data concerning the amount of natural gas deferred by using waste gas at the ARCO Ellwood plant.

22. Edison's administration of the ARCO special contract during the record period was reasonable.

23. Edison's execution and administration of the Shell special contract during the record period were reasonable.

24. Edison's ECAC Balancing Account for the record period should be adjusted to remove rounding errors thereby increasing the undercollection in Edison's ECAC Balancing Account by \$6,000.

25. No party challenges Edison's administration of its LIRA program during the record period.

26. DRA and Edison agree that the Commission should review for the record period during which the expenses occur the reasonableness of the conversion, enrichment, and fabrication costs, in addition to uranium costs.

27. The uranium fuel purchases that occurred in this record period were reasonable.

28. The enrichment costs held over from D.91-05-054, and during the record periods encompassed in ECAC A.89-05-064, A.90-06-001, and A.91-05-050, from December 1, 1986 through March 31, 1991, were reasonable.

29. Edison's procurement of and prices paid for conversion, enrichment, and fabrication for nuclear fuel batches expenses during the record period were reasonable.

30. The Palo Verde 3 nuclear fuel expenses in A.91-05-050 were reasonable.

31. With the exception of matters deferred to in I.89-12-025, none of the outages which were forced or scheduled at SONGS and Palo Verde that were reviewed during this record period, were unreasonable.

32. Palo Verde Units 1 and 3 are the subject of an extensive investigation in OII 89-12-025.

33. During the record period, SONGS Unit 1 completed Fuel Cycle 10 and experienced a low-capacity factor and a NUIP penalty.

34. In December 1991, Edison and DRA executed a Joint Recommendation resolving specified reasonableness issues associated with SONGS Unit 1 and Palo Verde Unit 2 operations and NUIP

modifications as addressed in A.89-05-064, A.90-06-001, and A.91-05-050.

35. In the Joint Recommendation, Edison and DRA agree that a total of \$3.2 million should be removed from Edison's ECAC Balancing Account for the period ending March 31, 1991 associated with operation of SONGS Unit 1, as specified below.

36. In the Joint Recommendation, DRA and Edison agree that a SONGS Unit 1 NUIP penalty of \$1.68 million should be applied to SONGS Unit 1 Fuel Cycle 10.

37. In the Joint Recommendation, DRA and Edison agree that \$1.0 million of nuclear fuel expense associated with the premature discharge of 39 fuel assemblies will be removed from the ECAC Balancing Account and be placed in the unamortized nuclear fuel account to be treated consistent with other Edison unamortized nuclear fuel subject to recovery by Edison. If some or all of the 39 nuclear fuel assemblies are utilized in fuel cycles subsequent to SONGS 1 Cycle 10, the unamortized value associated with each assembly will be recovered over the electrical production during such cycles consistent with current nuclear fuel amortization practices. However, if some or all of the 39 nuclear fuel assemblies are not used due to the premature shutdown of SONGS 1, then the value of the unamortized nuclear fuel assemblies will be recovered in the same manner as any other unamortized SONGS 1 nuclear fuel value.

38. In the Joint Recommendation, DRA and Edison also agree that \$0.52 million of SONGS Unit 1 nuclear fuel financing costs be removed from the ECAC Balancing Account through the end of Fuel Cycle 10.

39. In the Joint Recommendation, DRA and Edison agree that Edison will decrease its SONGS Unit 1 nuclear fuel account by \$0.70 million to reflect the decrease of prereactor financing charges associated with SONGS 1 nuclear fuel which will be amortized in future periods.

40. In the Joint Recommendation, DRA and Edison agree that a NUIP penalty of \$40,821 be applied to Palo Verde Unit 2 Fuel Cycle 2.

41. In D.91-05-054, in A.88-02-016, Edison was authorized to institute a three-fuel cycle averaging for the NUIP.

42. DRA and Edison recommend that the definition of the Incentive Period for all of Edison's nuclear units under the NUIP be changed in Edison's Preliminary Statement.

43. DRA and Edison recommend that the definition of the Incentive Period be changed to two consecutive fuel cycles. The Incentive Period is defined as the time period which begins immediately after refueling the reactor when circuit breakers are closed and the unit is synchronized to the grid and ends simultaneously with the beginning of the subsequent fuel cycle.

44. In the Joint Recommendation, Edison and DRA recommend that any prereactor financing charges associated with operation of the unit found unreasonable by the Commission should not be reflected in the nuclear fuel expense in the calculation of the NUIP reward or penalty.

45. The December 1991 DRA/Edison Joint Recommendation on nuclear issues is reasonable and should be adopted by the Commission without modification.

46. The generation and nuclear fuel expenses for SONGS for the record periods covered by A.89-05-064, A.90-06-001, and A.91-05-050 were reasonable with the exception of expenses related to 39 days of outages found previously unreasonable by the Commission.

47. Except for expenses and revenue requirements associated with the outages at Palo Verde Units 1, 2, and 3 which began in March 1989, the nuclear expenses for the Palo Verde units during the record period covered by A.89-05-064, A.90-06-001, and A.91-05-050 were reasonable.

48. Edison will advise DRA annually as part of its annual ECAC reasonableness filing of any special contract modifications.

49. The Commission in D.91-12-076 ordered Edison to file additional testimony in these consolidated ECAC proceedings regarding the (1) incremental operations and maintenance costs of shortening nuclear power plant refueling outages, and (2) replacement power costs associated with extending refueling outages. The non-QF phase of these proceedings should remain open for the filing of testimony and hearings on this issue.

D. Findings of Fact
Contested Issues

1. Edison's use of its 1986 System-Loss Allocation Study to determine the average resale loss factor for resale cities is reasonable.

2. Edison's ECAC Balancing Account should be decreased by \$131,000 to compensate for errors found in Edison's calculations on its resale loss factor.

3. Edison's fuel-oil handling expenses associated with deliveries of oil at leased marine fuel-oil facilities in the ports of Long Beach and Los Angeles are reasonable.

4. Edison may modify its Preliminary Statement to reflect the authority granted in Resolution E-3165 to make clear that DOE refunds are net of outside legal fees.

5. DRA's recommendation that the Dow contract be modified to incorporate a 0.25 outage factor is denied.

6. The service offered by Edison to Dow in the Dow contract is not at a rate lower than the cost of self-generation.

7. DRA's recommendation that a 0.25 outage factor be incorporated into all future special contracts is denied, but Edison is encouraged to use a 0.25 outage factor when determining the value of any self-generation deferral rate contract.

8. Except for the replacement power costs associated with the outages which are the subject of I.89-12-025, the nuclear fuel

expenses and generation for the Palo Verde Units 1, 2, and 3 during the record periods covered by A.89-05-064, A.90-06-001, and A.91-05-050 are reasonable.

9. The determination of the NUIP reward/penalties associated with the Palo Verde Units 1, 2, and 3 should not be left open pending a final decision in I.89-12-025, but may be modified in I.89-12-025.

Conclusions of Law

1. Except as provided in this decision, and except for further proceedings regarding (1) the reasonableness of nonstandard QF contracts and all affiliate contracts, (2) the adjustment to the ECAC Balancing Account of \$3.9 million for QF demand-related charges, and (3) incremental operations and maintenance costs of shortening nuclear power plant refueling outages and replacement power costs associated with extending refueling, outages, and except for matters deferred to in I.89-12-025, it is concluded that Edison's energy expenses and plant operations for the three record periods (December 1, 1987 through March 31, 1989, April 1, 1989 through March 31, 1990, and April 1, 1990 through March 31, 1991) were reasonable.

2. The Joint Recommendation of Edison and DRA relating to the reasonableness of operations of SONGS and Palo Verde and other nuclear issues is reasonable and is adopted.

3. The principles and methodologies underlying the December 1991 DRA/Edison Joint Recommendation on nuclear issues shall not be used as a precedent in any other proceeding or litigated beyond this proceeding.

4. The October 1991 Edison and DRA Joint Proposal for a TPS for Edison's gas and oil-generating units is reasonable and consistent with the Commission's directive in D.86-04-059 and is adopted.

5. The Commission expects to consider the reasonableness of expenses and revenue requirements associated with the prolonged

outages at Palo Verde Units 1, 2, and 3 in 1989 and 1990 in a special investigation. These issues are being considered in I.89-12-025, and we defer making findings of fact regarding these operations until we have had the opportunity to review the record in I.89-12-025.

ORDER

IT IS ORDERED that:

1. The reward to the Southern California Edison Company (Edison) for the Coal Plant Incentive Procedure for the Four Corners Units 4 and 5 for the record period in Application (A.) 89-05-064 is \$5,883,886, plus interest.
2. The target capacity factor (TCF) reward for San Onofre Nuclear Generating Station (SONGS) Unit 3 operation during its fuel cycle for the A.89-05-064 record period is \$437,935, plus interest.
3. The TCF penalty for Palo Verde Unit 1 for the A.90-06-001 record period is \$5,340,102, plus interest.
4. The Joint Proposal for a Thermal Performance Standard (TPS) for Edison's gas and oil-generating units should be implemented on or after April 1, 1992. This standard shall be reviewed at the first opportunity after April 1, 1995, at which time the parties may recommend modifications.
5. Edison's Energy-Cost Adjustment Clause (ECAC) Balancing Account for the record period in A.91-05-050 should be adjusted by increasing the undercollection in Edison's ECAC Balancing Account by \$6,000.
6. A total of \$3.2 million should be removed from Edison's ECAC Balancing Account for the period ending March 31, 1991 associated with operation of SONGS Unit 1, as specified in Ordering Paragraphs 7, 8, and 9.

7. A SONGS Unit 1 Nuclear-Unit Incentive Procedure (NUIP) penalty of \$1.68 million should be applied to SONGS Unit 1 Fuel Cycle 10, plus interest.

8. \$1.0 million plus interest, of nuclear fuel expense associated with the premature discharge of 39 fuel assemblies shall be removed from the ECAC Balancing Account and be placed in the unamortized nuclear fuel account to be treated consistent with other Edison unamortized nuclear fuel subject to recovery by Edison. If some or all of the 39 nuclear fuel assemblies are utilized in fuel cycles subsequent to SONGS 1 Cycle 10, the unamortized value associated with each assembly shall be recovered over the electrical production during such cycles consistent with current nuclear fuel amortization practices. However, if some or all of the 39 nuclear fuel assemblies are not used due to the premature shutdown of SONGS 1, then the value of the unamortized nuclear fuel assemblies shall be recovered in the same manner as any other unamortized SONGS 1 nuclear fuel value.

9. \$0.52 million of SONGS Unit 1 nuclear fuel financing costs shall be removed from the ECAC Balancing Account through the end of Fuel Cycle 10.

10. Edison shall decrease its SONGS Unit 1 nuclear fuel account by \$0.70 million to reflect the decrease of prereactor financing charges associated with SONGS 1 nuclear fuel which shall be amortized in future periods.

11. A NUIP penalty of \$40,821, plus interest shall be applied to Palo Verde Unit 2 Fuel Cycle 2.

12. The definition of the Incentive Period for all of Edison's nuclear units under the NUIP set forth in Edison's Preliminary Statement shall be changed to two consecutive fuel cycles. The Incentive Period is defined as the time period which begins immediately after refueling the reactor when circuit breakers are closed and the unit is synchronized to the grid and

ends simultaneously with the beginning of the subsequent fuel cycle.

13. Any prereactor financing charges associated with operating of the unit found unreasonable by the Commission should not be reflected in the nuclear fuel expense in the calculation of the NUIP reward or penalty.

14. The December 1991 Division of Ratepayer Advocates (DRA)/Edison Joint Recommendation on nuclear issues is reasonable and is adopted without modification.

15. The generation and nuclear fuel expenses for SONGS for the record periods covered by A.89-05-064, A.90-06-001, and A.91-05-050 are reasonable with the exception of expenses related to 39 days of outages found previously unreasonable by this Commission.

16. Except for expenses and revenue requirements associated with the outages at Palo Verde Units 1, 2, and 3 which began in March 1989, the nuclear expenses for the Palo Verde units during the record period covered by these three applications are reasonable.

17. Edison shall advise DRA annually as part of its annual ECAC reasonableness filing of any special contract modifications.

18. Edison's ECAC Balancing Account should be decreased by \$131,000, plus interest, to compensate for errors found in Edison's calculations.

19. Edison may modify its Preliminary Statement to reflect the authority granted in Resolution E-3165 to make clear that Department of Energy (DOE) refunds are net of outside legal fees.

20. Except for the replacement power costs associated with the outages which are the subject of Investigation (I.) 89-12-025, the nuclear fuel expenses in generation for the Palo Verde Units 1, 2, and 3 during the record periods covered by these three applications are reasonable.

21. The determination of the NUIP reward/penalties associated with the Palo Verde Units 1, 2, and 3 may be modified in I.89-12-025.

22. Except as provided in this decision, and except for further proceedings regarding (1) the reasonableness of nonstandard QF contracts and all affiliate contracts, (2) the adjustment to the ECAC Balancing Account of \$3.9 million for QF demand-related charges, and (3) incremental operations and maintenance costs of shortening nuclear power plant refueling outages and replacement power costs associated with extending refueling outages, and except for matters deferred to I.89-12-025, it is concluded that Edison's energy expenses and plant operations for the three record periods (December 1, 1987 through March 31, 1989, April 1, 1989 through March 31, 1990, and April 1, 1990 through March 31, 1991) were reasonable.

23. The Joint Recommendation of Edison and DRA relating to the reasonableness of operations of SONGS and Palo Verde and other nuclear issues is reasonable and is adopted.

24. The principles and methodologies underlying the December 1991 DRA/Edison Joint Recommendation on nuclear issues shall not be used as precedent in any other proceeding or litigated beyond this proceeding.

25. The October 1991 Edison and DRA Joint Proposal for a TPS for Edison's gas and oil-generating units is reasonable and consistent with the Commission's directive in Decision 86-04-059 and is adopted.

26. The Commission expects to consider the reasonableness of expenses and revenue requirements associated with the prolonged outages at Palo Verde Units 1, 2, and 3 in 1989 and 1990 in a special investigation. Those issues are being considered in I.89-12-025, and we defer making findings of fact regarding those operations until we have had the opportunity to review the record in I.89-12-025.

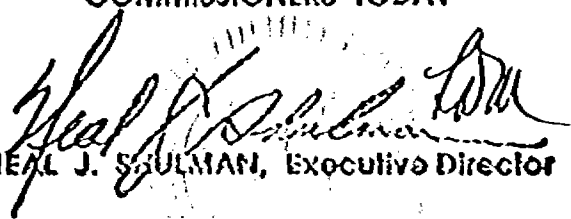
27. Consistent with our directive in D.91-12-076, we order Edison to file additional testimony in these consolidated ECAC proceedings regarding the (1) incremental operations and maintenance costs of shortening nuclear power plant refueling outages, and (2) replacement power costs associated with extending refueling outages. The non-QF phase of these proceedings shall remain open for the filing of testimony and hearings on this issue as determined by the assigned Administrative Law Judge.

This order is effective today.

Dated June 17, 1992, at San Francisco, California.

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

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


NEAL J. SULMAN, Executive Director