

ORIGINAL

Decision 93203 JUN 16 1981

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the matter of the application)
of Southern California Edison)
Company to modify D.92115 to allow)
applicant to expense its initial)
capital investment and other costs)
that may be incurred in excess of)
marginal cost in the Cool Water)
Coal Gasification Demonstration)
Project.)

Application 60156
(Filed March 25, 1981)

ORDER CLARIFYING DECISION 92115

This application (A.) filed on March 25, 1981 is one in a series of documents filed by Southern California Edison Company (Edison) in the matter of the Cool Water Coal Gasification Demonstration Project (Project). A brief review of the history of that project before this Commission is as follows:

<u>Date</u>	<u>Event</u>
11/09/79	Edison files A.59268 requesting a certificate for Cool Water.
11/28/79	Edison amends A.59268.
2/19/80	Commission holds hearings on
to	A.59268 before ALJ Doran.
3/06/80	
8/19/80	Commission issues D.92115, granting a certificate to Edison for Cool Water.
9/18/80	Edison files a Petition for Rehearing of D.92115, which is docketed as a Petition for Modification.

<u>Date</u>	<u>Event</u>
10/29/80	Staff files a Response to Petition for Modification.
11/18/80	Commission issues D.92443, denying Edison's Petition for Modification.
12/18/80	Edison files a Petition for Reconsideration of D.92443, which is docketed as a Petition for Rehearing.
3/25/81	Edison files a Supplemental Petition withdrawing its 12/18/80 request for rehearing. The Supplemental Petition is docketed as A.60156.
4/24/81	Staff files a protest to A.60156 recommending that the Commission deny A.60156 and appending a list of suggested modifications to D.92115.
6/8/81	Edison files an answer to the staff's protest agreeing that D.92115 should be clarified and suggesting new and revised findings, conclusions, and ordering paragraphs to do so.

It is these last two documents with which this decision is primarily concerned. Edison's answer indicates that it has considered the points made by the staff in its protest, including the proposed clarification of Decision (D.) 92115 and believes that with such clarification and clearly defined principles and procedures for implementation, the approach contemplated by D.92115 for the development of the Project would be a reasonable basis on which to proceed with the Project.

The first modification that staff proposes is that all references to "marginal cost" in D.92115 should be replaced with the term "avoided cost." Edison agrees with this change. When as here, we are dealing with energy costs only, and not capacity costs, the terms avoided cost and marginal cost are essentially synonymous.

Use of the avoided cost concept, however, can be applied over a future period with greater certainty under our implementation of the avoided cost standard in the Public Utility Regulatory Policies Act and is consistent with our decision to use avoided cost for cogeneration payments. We will make the requested change and substitute the term "avoided cost" for "marginal cost" in the findings, conclusions, and order which follows.

Staff also recommends that the last sentence on page 17 of D.92115 should be deleted and suggests certain replacement language. The purpose of the change is apparently to clarify the Commission's position on the recovery of an allowance for funds used during construction (AFUDC) factor, and to correct the total Project cost of \$531 million (D.92115, Finding 11). There is no question that the Project costs for the fuel processing fees and coal expenses alone totals \$478 million. Therefore, we will use this figure in our adopted findings and conclusions and will not reexamine the validity of or modify the \$531 million figure included in D.92115.

Edison's response does not address the proposed change in language specifically; however, its proposed findings, conclusions, and ordering paragraphs have included the terms AFUDC, carrying costs, and interest. It is unclear from Edison's response to the staff protest whether it has used these terms interchangeably or independently. If it is the latter, it is not always clear what the interest rate to be applied is, or how the carrying charges are to be computed and whether they include a return component.

Discussion is not clear or even consistent throughout the body of D.92115 regarding our position on the circumstances under which Edison may recover AFUDC. Accordingly, some clarification is necessary.

The major ambiguity in D.92115 comes from our use of the term AFUDC. In the traditional ratemaking sense, this is a factor, calculated according to a formula set forth by the Federal Energy Regulatory Commission and adopted by this Commission and applied to capital costs during the period of construction. At the end of this period, the plant goes into utility rate base and the costs including the AFUDC accrued are capitalized and earn a rate of return. That will not be the case with the Cool Water Project. The construction period is expected to take about two years. At the end of that time, it will go into operation; however, the operation will not be as a public utility as long as the participants do not dedicate the Project facilities to public use. The completed Project therefore will not go into rate base during the remainder of the demonstration period and therefore will not earn a return or accrue AFUDC in the traditional sense during the remainder of the demonstration. It was, however, our intention to provide that some factor representing an allowance for the use of shareholder funds continue to accrue throughout the demonstration period and that this allowance be recovered by Edison at the end of the demonstration period regardless of the success or failure of the Project. Further, it was our intent that this allowance accrue not only on capital costs, as with traditional AFUDC, but on any deferred expenses in excess of those estimated in this proceeding to the extent that Edison can show at the end of the demonstration period that these additional deferred expenses were prudently incurred.

We will amend the last sentence on page 17 of D.92115 to read:

"This would require Edison to carry the balance of the total Project cost (excluding a return) in deferred costs, until the conclusion of the demonstration period. After the demonstration period Edison shall recover all prudently incurred deferred costs, including those costs accrued by application of a factor calculated at the AFUDC rate for Edison."

Similarly, the staff recommends that the language on page 20a of D.92115 beginning "Consequently, we are compelled to treat..." to the end of that paragraph be struck and replaced with staff's recommended language. The purpose of this change is to clarify that Edison will recover a factor calculated at the AFUDC rate applied to prudently incurred deferred costs, including its capital contribution, regardless of the ultimate success or failure of the Project. The proposed revision also provides that Edison may recover its capital contribution through the Energy Cost Adjustment Clause (ECAC) to the extent that the avoided cost revenues exceed the cost of coal, O&M expense, and the coal processing fee. This latter revision represents a large change in D.92115; however, we will treat it as a clarification since the issue of excess revenues was simply not addressed in D.92115. We believe that this revised language will serve as a further incentive to Edison to keep costs down and to manage the Project prudently. We will therefore replace the language on page 20a of D.92115 beginning "Consequently, we are compelled to treat..." to the end of the paragraph with the following language:

"Edison may recover its capital contribution up to \$25 million through ECAC during the demonstration period to the extent that the avoided cost revenues exceed Project costs. If Edison has not recovered all Project costs including its capital contribution up to \$25 million, at the end of the demonstration period, it may apply for recovery of those costs, plus a factor

computed at the AFUDC rate accrued during the demonstration period. The purpose of this Project is to test the commercial feasibility of coal gasification in California. Whether the Project results indicate commercial feasibility or infeasibility, the demonstration purpose will have been met. Thus Edison is entitled to recover any deferred Project costs, after justifying them as prudently incurred, plus a factor computed at the AFUDC rate, regardless of the Project's result at the conclusion of the demonstration period. Conversely, the ratepayer will be entitled after the demonstration period to a refund of any surplus revenues if avoided cost revenues exceed the Project costs during the demonstration period."

Edison's response states that a balancing account procedure would be a simple and effective means for offsetting the costs and revenues attributable to the Project. It proposes a Cool Water Balancing Account (CBA) composed of two subaccounts, the Fuel Subaccount, and the Capital Expenditure Subaccount. Revenue, based on charging for such energy produced by the Project through ECAC at the avoided cost would be credited to the Fuel Subaccount monthly. O&M expenses, payments for coal for the Project, and the coal processing fee would be debited to the Fuel Subaccount monthly. If at the end of the month accumulated costs exceed accumulated revenues, the balance would be increased by the same interest rate applied monthly to the ECAC Balancing Account balances multiplied by the average of the current month balance and the preceding month balance. If accumulated revenues exceed accumulated costs, that balance, net of income tax effects if any, would be offset against the balance in the Capital Expenditure Subaccount. The Capital Expenditure Subaccount would accumulate Edison's capital outlays for the Project and monthly the balance in that account would be increased by the

are no new facts, material changes in conditions, or misconceptions normally necessary for the Commission to exercise its authority under Public Utilities (PU) Code § 1708 to rescind, alter, or amend a prior decision. While we concur with staff generally, we believe that some clarification of D.92115 is in order, particularly in those areas in which it was silent. In making this clarification, however, we will not make changes in our findings, conclusions, and orders which differ materially from those in D.92115 since no showing has been made to support such changes.

Use of the CBA is a reasonable way of accounting for revenues and costs associated with the Project, and will be authorized. However, no showing has been made that the application of the same interest rate applied to the ECAC balancing account is reasonable, or that a change from the factor computed at the AFUDC rate is necessary. We have no record which sets forth the effect of using this interest rate on the total Project costs, the additional revenue requirement which might need to be generated, or the effect on the cost benefit relationship of the Project, if any. There is presently a substantial difference between a factor computed at the AFUDC rate and interest at the ECAC balancing account rate. The former is what we allowed in D.92115 and Edison has advanced no argument to convince us that we should allow something greater. Further, use of the ECAC balancing account interest rate as it applies to ECAC has a certain symmetry to it that is lacking in the CBA. In ECAC, the interest rate applies to both under- and overcollections so that the ratepayer receives an interest component if ECAC revenues exceed costs and pays interest if fuel costs exceed revenues. That same principle does not apply as Edison describes the operation of the CBA. When the revenues from sale of electricity Project exceed costs, resulting in a credit balance, that credit, less income tax effects, is simply applied

against Edison's capital costs. Thus, although the accounting methodology is called a balancing account, there is not an exact balance of undercollections and overcollections (or costs and revenues) and therefore the use of an interest rate applicable to a true balancing account does not necessarily logically apply to the CBA. We will retain the use of the factor calculated at the AFUDC rate while authorizing establishment of the CBA.

Lastly, Edison has proposed alternative disposition of any unrecovered costs at the end of the demonstration period if the Project does not prove commercially feasible. The proposal is couched in permissive terms, however, and is not put forward as an exhaustive list of choices the Commission has in disposing of these costs. We believe Edison's real concern is that recovery of such costs not be dependent on the successful commercial demonstration of the coal gasification process used in the Project. While we wish to assure Edison that recovery is not contingent on a commercially successful project, we wish to emphasize that recovery of capital costs in excess of \$25 million and recovery of expenses which exceed estimates adopted in this proceeding is dependent on a justification by Edison that the costs were incurred in a prudent manner. We will require that Edison make application for such recovery, together with a showing of prudence, prior to authorizing recovery at the end of the demonstration program. We will not, at this time, commit a future Commission to a particular method of recovery, if the excess costs are found to have been prudently incurred.

Edison asks for a clear statement that this decision is not to be regarded as a precedent for recovery of costs incurred in the development of alternative resources. We concur and will make a finding to this effect.

Edison also asks that this decision be expedited to enable it to complete subscription of capital contribution and to proceed with the implementation of the construction schedule by July 1, 1981. We will therefore make the decision effective on the date we sign it.

In making our findings, conclusions, and orders in this decision, we have repeated findings, conclusions, and orders from D.92115 about which there was no controversy and which are unchanged. We do this for purposes of completeness so that there will be no question on the face of our decision which findings, conclusions, and orders relative to Cool Water Coal Gasification Demonstration Project are in effect.

Findings of Fact

1. The Legislature in Public Resources Code § 25651(b) has specified a need for the development, demonstration, and commercialization of new and advanced technologies such as coal gasification.
2. On December 21, 1979, the California Energy Commission (CEC) approved the Application for Certification, Docket No. 78-AFC-2 of the Cool Water Coal Gasification Demonstration Project.
3. In its decision, the CEC determined that the Project meets the need specified in Public Resources Code § 25651(b) and certified an Environmental Impact Report prepared pursuant to the California Environmental Quality Act.
4. Much of the technology involved in this Project is proven, and the purpose of the demonstration is to ascertain the economic and environmental acceptability of a coal gasification combined cycle electric generation facility. The applicant estimates a less than 5% probability that the Project will not generate electricity.
5. The U.S. electric utility industry, as represented by EPRI, supports the proposed Project and will contribute \$50 million to the financing of the Project.

6. Coal gasification technology based upon Texaco's process has been employed in small pilot plants and industrial facilities but has never been demonstrated in a commercial-sized power plant.

7. Edison is proposing to participate in the design, construction, and operation of a 100-MW coal gasification combined cycle demonstration project at its Cool Water Generating Station near Daggett, California.

8. The extent of Edison's participation in the Project is set forth in a negotiated agreement with Texaco.

9. Edison currently is soliciting other participants and sponsors for the Project and expects to obtain the required funding from private sources. Grants from DOE or other government agencies will not be sought until private sources are exhausted.

10. Staff has not made an independent analysis of the coal expense and O&M cost for the Project and has assumed the reasonableness of those costs as specified by the applicant.

11. In protesting Edison's proposal in A.60156, the staff has proposed a clarification of D.92115 to permit Edison to recover the avoided cost of electricity produced by the Project during the demonstration period with recovery of any excess costs including a factor calculated at Edison's AFUDC rate, deferred until the end of the demonstration period after review to determine whether these excess costs were prudently incurred.

12. Use of avoided cost is appropriate to calculate the value of electricity generated by this Project.

13. The currently estimated total Project cost for construction and demonstration is \$478 million, exclusive of Edison's capital contribution. Edison proposes to recover all such costs, including capital and carrying costs, by charging ratepayers, through ECAC rate adjustments, at avoided cost for all electricity produced by

the Project over the demonstration period using the ECAC balancing account concept with monthly interest adjustment. If such costs exceed revenues at the end of the demonstration period Edison proposes they be capitalized as part of the cost of an unrecovered balance of this or any successor project or written off through ECAC rates over a period not to exceed five years.

14. Edison has currently limited its capital contribution to \$25 million. Its original application proposed recovery through base rates of \$25 million, plus a rate of return amounting to \$53 million for the seven-year demonstration period.

15. The use of the ECAC balancing account concept and avoided cost to recover Project costs coupled with review of excess costs for prudence after the demonstration period is a reasonable application of the cost recovery method which matches costs borne by the ratepayer with benefits of the Project. Under such implementation future beneficiaries of a coal gasification technology will share the cost of this Project.

16. Such cost recovery method gives Edison an opportunity to be made whole for Project costs reasonably incurred up to the level of costs projected in this proceeding with faster recovery of capital costs if Project costs can be reduced below the avoided cost of electricity produced. Such a cost recovery method gives Edison a financial incentive to select, construct, operate, and prudently manage the Project.

17. The adopted method of cost recovery will not require renegotiation, revision, or amendment of the Texaco-Edison Agreement.

18. Edison will purchase all coal processed in the Project's coal gasification facility and will own all electricity generated from the combined cycle unit. No other individual or entity may directly purchase electricity generated from this Project.

19. The Project is not intended to meet the electric generating needs of Edison during the demonstration period, or to be entered into regular utility service, and no attempt has been made to include this facility in Edison's resource plans.

20. Other participants and sponsors may be deterred from contributing capital to the Project if the joint venture owning and managing the Project is found to be a public utility subject to this Commission's jurisdiction.

21. Recovery through ECAC of Project costs, including the repayment of capital advanced by Edison limited to the avoided cost valuation of electricity produced, is reasonable. Recovery of the balance of any unrecovered Project costs plus a factor computed at Edison's AFUDC rate at the end of the demonstration period is reasonable if Edison demonstrates that these costs were prudently incurred. The method of recovery will be determined at the time recovery is authorized.

22. Edison's request for a finding that the Project does not involve (a) the issuance of securities, or other evidence of interest, or ownership, or indebtedness, or (b) the assumption of any obligation or liability as guarantor, endorser, surety, or otherwise in respect of the securities of any other person, firm, or corporation, was not adequately supported or explained in the record; accordingly, that request is denied.

23. Although the cost recovery method adopted here might be found reasonable in future demonstration projects, the method adopted here will not be considered a precedent for implementation of future demonstration projects since we wish to give further consideration to any general criteria for cost recovery methods used in demonstration projects before adoption.

Conclusions of Law

1. The Legislature has specified a need for projects developing and demonstrating coal gasification.

2. The CEC has determined that this Project meets the need specified by the Legislature for the development, demonstration, and commercialization of coal gasification.

3. The adopted cost recovery method is preferable and more reasonable than Edison's original financing proposal since the former better matches costs with the expected benefits of the Project. The adopted method is also superior in meeting public interest since it gives the utility an incentive to promote worthwhile demonstration projects. For the foregoing reasons the adopted cost recovery method using Edison's avoided cost to calculate the value of electricity, and implemented as set forth herein is reasonable and should be adopted.

4. Since the Project is proposed for experimental demonstration reasons only and is not intended to provide a reliable source of electric power to the public during the demonstration period the facilities involved have not been dedicated to public use and the joint venture owning, managing, and controlling the Project is not a public utility subject to the jurisdiction of this Commission.

5. The projected capital cost of \$292 million is reasonable; any capital costs exceeding the \$292 million estimate must be justified as a prudent expenditure by Edison before any recovery of that cost is authorized. In addition, Edison is expected to demonstrate the reasonableness of the Project's coal expenses and O&M expenses in future ECAC proceedings and the Commission will make findings on that issue in those proceedings.

6. Edison's capital contribution of \$25 million to the Project cannot properly be included in rate base until the Project facilities are dedicated to public use as public utility property. Accordingly, base rate recovery of \$53 million, including a rate of return during the seven-year demonstration period, as originally requested by Edison is unreasonable and should be denied.

7. Edison's capital contribution of up to \$25 million to the Project may be recovered during the demonstration period to the extent that revenues from electricity produced by the Project calculated at Edison's avoided cost exceed the cost of coal, operation and maintenance expense, and the coal-processing fee during the demonstration period. Any balance of unrecovered operating expense and capital costs including a factor calculated at Edison's AFUDC rate will be allowed at the end of the demonstration period upon application and showing by Edison that these costs were prudently incurred.

This conclusion of law is made in light of the fact we found in D.92115 total project costs of up to \$503 million (including \$292 million in capital costs, of which Edison's share is up to \$25 million) to be reasonable for a project of this type. While we are here allowing for recovery of costs in excess of this amount at the end of the demonstration period if Edison demonstrates that they were prudently incurred, we expect Edison's relationship with other Project participants to provide for sharing of cost overruns among them and we shall examine the appropriateness of charging ratepayers for such overruns with great care.

8. The adopted method of implementing the recovery of such costs, including the use of a balancing account procedure and application for recovery of any remaining prudently incurred costs at the end of the demonstration period is reasonable and should be approved.

9. Because the Coal Gasification Generation Act (1978) provides that coal gasification demonstration projects are to be expedited by state agencies, this order should be effective on the date it is signed.

10. This decision should not be considered a precedent for regulatory treatment of costs associated with demonstration projects since general criteria for such treatment are still under consideration by the Commission.

IT IS ORDERED that:

1. A certificate of public convenience and necessity is granted to Southern California Edison Company (Edison) to participate in the construction and operation of the 100-MW Project entitled "The Cool Water Demonstration Project" (Project) to be constructed at Edison's Cool Water Generating Station in San Bernardino County.

2. Edison is authorized, upon commencement of operation of the Project, to recover through its Energy Cost Adjustment Clause (ECAC) costs of the Project limited to the avoided cost value of electricity produced by the Project during the demonstration period. All costs of the Project are subject to review for reasonableness in Edison's ECAC proceedings.

3. Edison is authorized to set up the Cool Water Balancing Account (CBA) to account for Project revenues and costs, including income taxes, if any, and to recover Edison's capital contribution up to \$25 million if avoided cost revenues exceed Project expenses.

4. The CBA shall consist of two subaccounts, the Fuel Subaccount and the Capital Expenditure Subaccount.

5. The Fuel Subaccount shall be credited monthly and ECAC debited monthly at avoided cost for all electricity produced. Said subaccount shall be debited on a monthly basis for all Project costs borne by Edison in connection with the operation and maintenance of the Project, coal procured for use by the Project, and the coal-processing fee and any related income tax effects associated with the operation of the CBA.

6. The Capital Expenditure Subaccount shall be debited monthly for capital expenditures or contributions by Edison associated with the Project, plus a factor calculated at Edison's AFUDC rate, and shall be credited on a monthly basis with any credit balance from the Fuel Subaccount.

7. At the conclusion of the demonstration period any net credit in the CBA shall be credited to ECAC.

8. If, at the end of the demonstrations, there is a net debit in the CBA, Edison shall recover these excess costs after application to the Commission with a showing that these excess costs were prudently incurred and after our determination that it is appropriate to charge the ratepayers for any cost overruns which may have occurred. Recovery may be through transfer to the ECAC balancing account or amortization over a period to be determined by the Commission or by such other method as the Commission may find reasonable at the time.

9. Edison is allowed one year after the commencement of operations of the Project within which to file a combined cost report for its participation in the Project and related structures, equipment, and facilities.

10. No participant, sponsor, or other entity involved in the Project shall, solely by virtue of its participation in the Project, be deemed a public utility under the Public Utilities Code.

11. Edison shall file at least 30 days prior to the commencement of the Project, an updated report on the capital cost and coal expense for the Project. The report shall include a detailed explanation of any cost overruns incurred or anticipated at the time the report is submitted and shall include copies of any coal supply agreements.

12. The last sentence on page 17 of D.92115 is deleted and replaced with the following sentence:

This would require Edison to carry the balance of the total Project cost (excluding a return) in deferred costs, until the conclusion of the demonstration period. After the demonstration period Edison shall recover all prudently incurred deferred costs, including those costs accrued by application of a factor calculated at the AFUDC rate for Edison.

13. The language in the first paragraph on page 20a of D.92115 beginning "Consequently we are compelled to treat Edison..." to the end of the paragraph is deleted and replaced with the following language:

Edison may recover its capital contribution up to \$25 million through ECAC during the demonstration period to the extent that the avoided cost revenues exceed Project costs. If Edison has not recovered all Project costs including its capital contribution up to \$25 million at the end of the demonstration period, it may apply for recovery of those costs, plus a factor computed at the AFUDC rate accrued during the demonstration period. The purpose of this Project is to test the commercial feasibility of coal gasification in California. Whether the Project results indicate commercial feasibility or infeasibility, the demonstration purpose will have been met. Thus Edison is entitled to recover any deferred Project costs, after justifying them as prudently incurred, plus a factor computed at the AFUDC rate, regardless of the Project's result at the conclusion of the demonstration period. Conversely, the ratepayer will be entitled after the demonstration period to a refund of any surplus revenues if avoided cost revenues exceed the Project costs during the demonstration period.

14. The remainder of the body of D.92115 remains in full force and effect. The findings of fact, conclusions of law, and ordering paragraphs contained in D.92115 have been completely replaced by the findings of fact, conclusions of law, and ordering paragraphs set forth in this decision.

This order is effective today.

Dated JUN 16 1981, at San Francisco, California.

John E. Brown President
Richard D. Brown
Samuel L. Brown
Victor Calvo
Frederic C. Gray Commissioners