

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA
I.D.# 8217
ENERGY DIVISION **RESOLUTION E-4227**
February 20, 2009

R E S O L U T I O N

Resolution E-4227. The Commission approves in part and denies in part Southern California Edison's request to establish a memorandum account and recover up to \$30 million in costs for a California IGCC study.

By Advice Letter 2274-E Filed on October 10, 2008.

SUMMARY

The Commission approves a memorandum account and determines that Southern California Edison Company's (SCE) must file an application in order to request recovery of \$30 million to evaluate the feasibility of an Integrated Gasification Combined Cycle (IGCC) plant.

This resolution approves Advice Letter (AL) 2274-E in part and denies AL 2274-E in part. The Commission approves SCE's request to establish a memorandum account to record costs for the Hydrogen Energy California (HECA) study. The Commission authorizes SCE to modify its tariff schedules at Preliminary Statement, Part N, Memorandum Accounts to include the HECA Memorandum Account (HECAMA). This resolution authorizes SCE to record, in HECAMA, up to \$30 million in costs resulting from its participation in the HECA study with Hydrogen Energy International LLC (HEI).

The Commission denies SCE's request to authorize recovery of the costs recorded in the HECAMA via this resolution. To seek authority to recover of costs recorded or to be recorded in the HECAMA, SCE may file an application with the Commission requesting authority for recovery of the costs.

BACKGROUND

On October 10, 2008 SCE submitted AL 2274-E, seeking authority to modify its tariff schedules to create HECAMA, to record up to \$30 million in costs related to its participation in the HECA study, and to recover those costs subject to Commission reasonableness review in a future ERRA proceeding. On October 24, 2008 HEI submitted a letter in support of the AL.

SCE proposes to participate in the HECA study with HEI. The motivation for the HECA study is to evaluate the feasibility of an IGCC plant with carbon capture and sequestration (CCS) via enhanced oil recovery (EOR). SCE states that such technology may be an important means of achieving sustained greenhouse gas (GHG) emissions reductions. As explained in the AL:

“the HECA study will evaluate the feasibility of an HECA facility that will be designed to produce low-carbon baseload electricity by gasifying California’s non-conventional fuels (primarily petroleum coke and potentially biomass) to produce hydrogen for electric generation through an IGCC, and to capture the CO₂ for EOR with sequestration in California’s oil fields.”¹

The HECA study is an investigation of a CCS technology, which, according to SCE, is a potentially important means of reducing California’s GHG emissions and meeting California’s environmental objectives. SCE states that a study of this type is consistent with a variety of state policies including Assembly Bill (AB) 32, Senate Bill (SB) 1368, AB 1925, Energy Action Plan II, Executive Order (EO) S-3-05, and EO S-7-04. Further, SCE quotes a letter from Governor Schwarzenegger to the president of this Commission in support of in-state CCS projects.²

The HECA facility would be a 250 MW baseload power plant³ interconnected with the California Independent System Operator (CAISO) transmission system. HEI has filed an Application for Certification (AFC) with the California Energy Commission (CEC) “for preliminary siting and

¹ AL 2274-E, pg 2

² AL 2274-E, pgs 5-6

³ AL 2274-E, pg 6

analysis of the plant to assess its permissibility.”⁴ The HECA facility would gasify petroleum coke ⁵(possibly blended with coal, biomass, or other solid fuels) to produce a hydrogen-enriched synthesis gas (syngas) for power generation. A portion of the hydrogen rich gas could be used for other purposes such as transportation fuel. SCE claims that approximately 90% of the CO₂ resulting from the combustion of the fuel would be transported via pipeline and sequestered by EOR at the Elk Hills Oil Field Unit in Kern County, CA. AL 2274-E claims that the gasification process used in HECA would result in near zero sulfur emissions.⁶

HEI is equally owned by two major energy companies, BP and Rio Tinto.⁷ Another major energy company, Occidental Petroleum (Oxy), will also participate as a CO₂ purchaser, using the CO₂ for EOR. HEI and Oxy jointly have substantial technical expertise relevant to carbon sequestration and EOR. The AL states that the partnership of SCE, HEI, and Oxy is a collaboration that may be a uniquely effective means of bringing IGCC with CCS to the energy marketplace.⁸

The HECA study would be divided into two phases. Phase I will produce approximately 28 reports and documents on a variety of subjects: technology appraisal; feedstock and water; process and system configuration; EOR and carbon sequestration; environmental safety and health; operations, maintainability, and constructability; water treatment; acid gas removal; CAISO interconnection; value engineering; and process design package.⁹ Prior to beginning Phase II:

“SCE and HEI intend to negotiate and execute agreements related to the development of HECA including, but not limited to, the purchase of hydrogen through a fuel supply agreement (FSA), the purchase of electricity through a PPA, and/or a development agreement for HECA. If SCE and HEI determine to enter into agreement on the terms of either an FSA or PPA, including whether to apply for a CPCN, a) SCE will require additional co-applicants, and b) HEI will require reasonable commercial

⁴ AL 2274-E, pg 10

⁵ Petroleum coke, often abbreviated as “pet-coke,” is a byproduct of petroleum refining.

⁶ AL 2274-E, Attachment C, pgs 1-2

⁷ <http://www.hydrogenenergy.com/32.html>

⁸ AL 2274-E, pg 9

⁹ AL 2274-E, Attachment C, pgs 10 & 13

certainty regarding HECA implementation contracts and commercial structures.”¹⁰

SCE and HEI are not obligated to commence Phase II, and may choose not to do so, based on the results of Phase I and the availability of adequate funding assurance. Phase II will consist of Front End Engineering Design reports.¹¹ SCE’s Phase I payments would total \$17 million and SCE’s Phase II payments would be \$13 million less SCE’s incremental costs of applying for Commission approval of a CPCN, FSA, or PPA.¹²

SCE notes that it will “strive to make information relevant to public policy developed by the HECA study publicly available,” but “the development of such a new process and related technology requires confidential treatment.”¹³ SCE requests to maintain confidentiality of detailed technical information, trade secrets, intellectual property of parties and third parties, and information obtained in confidence from businesses not regulated by the Commission.

Resolution E-4182 describes certain circumstances wherein a utility may file an AL to establish a memorandum account to record new generation or long-term procurement costs. However, SCE states that Resolution E-4182 does not apply in this case because it is actually seeking authorization for a feasibility study.¹⁴

Decision (D.)07-01-039 implements SB 1368 and sets requirements for load serving entities (LSEs) requesting the compliance approach applied to research units under the Emissions Performance Standard for a new power plant with CCS. Such LSEs must demonstrate a reasonable and feasible plan for sequestration.¹⁵

D.06-05-016, SCE’s most recent general rate case decision, discusses project development costs. In that application, SCE requested a ratepayer funded Project Development Division (PDD). This PDD would: identify sites with the potential for new utility-owned generation projects; conduct financial

¹⁰ AL 2274-E, pg 10

¹¹ AL 2274-E, pg 10

¹² AL 2274-E, pg 11

¹³ AL 2274-E, pg 13

¹⁴ AL 2274-E, pg 14

¹⁵ D.07-01-039, pgs 94 and 279

and commercial evaluation of development options; oversee preliminary project engineering, permitting and negotiations; manage regulatory approval processes; develop plans to advance projects from development to construction and operation; and provide ongoing support for development-related issues during construction and operation.¹⁶ D.06-05-016 excluded the PDD from rates and allowed SCE to track “supportive” project development costs which are not associated with specific projects in a memorandum account. Further, the Commission stated, “we feel it is important that the project development costs for proposed new projects should not be specifically included in rates.”¹⁷

SCE represents that it “is pursuing a course of action consistent with Decision (D.)08-04-038.”¹⁸ That decision approved a similar feasibility study for a Clean Hydrogen Power Generation (CHPG) plant. Relevant findings of that decision include:

- CCS and EOR will reduce GHG emissions;
- carbon sequestration is an immature technology;
- a study of gasification and sequestration may advance these technologies;
- the process of approving studies on new technologies to reduce GHG emissions needs more coordination;
- due to the unique nature of IGCC and CCS technologies, the CHPG study must consider specific technology, location, and fuel source;
- in the case of the CHPG study, property and commodity options, Front End Engineering Design study and permitting assessment are not project development costs;
- these same costs may have benefits beyond California;
- SCE affiliates are unlikely to gain competitive advantage if study results are public; and
- Affiliate Transaction Rules provide sufficient restrictions on information sharing and employee transfer.¹⁹

Further, the Commission concluded that the requirements in D.07-01-039 for carbon sequestration do not apply to the CHPG feasibility study because the application did not request authorization to construct a plant

¹⁶ D.06-05-016, pgs 45-46

¹⁷ D.06-05-016, pgs 52-53 and pg 376

¹⁸ AL 2274-E, pg 3

¹⁹ D.08-04-038, pgs 31-33

and that “SCE should seek opportunities to leverage the research authorized.”²⁰ The Commission authorized SCE to create certain memorandum and balancing accounts, authorized recovery of some of the funding requested, and directed SCE to “publicly disclose all detailed study information and results” or to identify specific information to be kept confidential and to apply to reopen A.07-05-020, the proceeding that developed D.08-04-038.²¹

NOTICE

In accordance with Section III, Paragraph G, of General Order (GO) No. 96-A, SCE served copies of this advice letter filing to the interested parties on the GO 96-B and A.07-05-020 service lists.

PROTESTS

Advice Letter (AL) 2274-E was protested by The Utilities Reform Network (TURN), Division of Ratepayer Advocates (DRA), Independent Energy Producers Association (IEP), and Western Power Trading Forum (WPTF) on October 20, 2008. Protests generally included both procedural and substantive concerns.

Protestants assert that the issues raised in AL 2274-E are inappropriate for an advice letter.

TURN, WPTF and DRA all state that AL 2274-E does not fall within the appropriate scope of an AL as stated in General Order (GO) 96-B. Each of these protests raises Section 5.1 of GO 96-B, which states:

“The advice letter process provides a quick and simplified review of the types of utility requests that are expected neither to be controversial nor to raise important policy questions. The advice letter process does not provide for an evidentiary hearing; a matter that requires an evidentiary hearing may be considered only in a formal proceeding.”²²

²⁰ D.08-04-038, pgs 33-34

²¹ D.08-04-038, pgs 35-36

²² GO 96-B, pg 8

Protestants state that AL 2274-E is controversial and raises important policy questions. DRA further argues that:

“AL 2274-E relies completely on conjecture and hearsay that raise questions and issues the Commission cannot explain, verify or otherwise justify without evidentiary hearing.”²³

TURN, WPTF, and DRA also raise Section 5.2 of GO 96-B, which states that “a utility must file an application,” if:

“The utility seeks Commission approval of a proposed action that the utility has not been authorized, by statute, by this General Order, or by other Commission order, to seek by advice letter;”²⁴

Protestants claim that SCE’s request in AL 2274-E is inappropriate for an informal filing.

Protestants assert the study proposed in AL 2274-E should not be funded by ratepayers.

Protestants note that D.08-04-038 and AL 2274-E are closely related, but describe separate feasibility studies. DRA observes that D.08-04-038 did not authorize AL 2274-E²⁵ and TURN contends that SCE’s assertion that AL 2274-E is consistent with the “leveraging” discussed in D.08-04-038²⁶ is unreasonable.²⁷ WPTF quotes relevant language from D.08-04-038²⁸ and adds that D.08-04-038 “clearly directed SCE to seek other sources of funding for CHPG Plant Feasibility work”²⁹ (emphasis in original).

Protestants note that AL 2274-E does not describe direct benefits to SCE ratepayers from the HECA study.³⁰

²³ DRA protest, pg 3

²⁴ GO 96-B, pg 8

²⁵ DRA protest, pgs 5-6

²⁶ At pg 34

²⁷ TURN protest, pg 4

²⁸ At pg 21

²⁹ WPTF protest, pg 2

³⁰ TURN protest, pg 6

TURN notes that the AL does not include a detailed budget on which the Commission can determine the reasonableness of a \$30 million contribution from SCE ratepayers.³¹

TURN argues that the HECA study includes project development costs that D.06-05-016 states should not be recovered in rates.

TURN argues that the HECA study includes project development costs and that SCE's request to recover costs from its participation in the HECA study would require changes to previous Commission decisions. TURN, noting that D.08-04-038 determined that the CHPG study is not "project development" and confirmed that D.06-05-016 forbids rate recovery of project development costs, states:

"TURN submits that the role of HEI in pursuing this plant at this particular site, and the fact that HEI has filed an Application for Certification with the California Energy Commission of this project, warrant the opposite conclusion – this clearly is "project development" within the ambit of D.06-05-016, such that SCE should be prohibited from recovering in rates any associated costs."³²

IEP and WPTF argue that AL 2274-E conflicts with the Commission's long-term procurement policies.

IEP and WPTF argue that Commission's long-term procurement policies require a competitive solicitation, which is not described in AL 2274-E. These parties note that the contract structure that would be used if SCE and HEI decide to go forward with Phase II is not defined in the AL, but utility-owned generation is indicated as a possibility.³³ In particular, IEP suggests that D.07-12-052³⁴ prohibits SCE from taking an equity stake in a HECA plant without either a competitive solicitation or a demonstration of "truly extraordinary circumstances."³⁵ WPTF suggests more generally, that SCE, "has secured a preferential right (or obligation) to own or

³¹ TURN protest, pg 3

³² TURN protest, pg 5

³³ See WPTF protest, pg 3, referencing AL 2274-E, pg 10.

³⁴ D.07-12-052 was issued by the 2006 long-term procurement plan rulemaking, R.06-02-013. D.07-12-052 adopts, with modifications, the procurement plans of the three IOUs.

³⁵ IEP protest, pg 2. D.07-12-052 describes the appropriate role of utility owned generation in Section 4.1.

purchase the output of the project without any demonstration that such agreement is consistent with" Commission long-term procurement policies.³⁶ Moreover, WPTF believes that the Commission set a precedent in D.08-04-038, which required a competitive solicitation for a "similar utility feasibility study."³⁷

DRA requests hearings.

DRA highlights several instances of similar text and ideas in this AL and in A.07-05-020 and concludes that much of the feasibility study proposed in the AL may be unnecessarily duplicative of the CHPG study.³⁸ DRA also notes that Edison Mission Group, an SCE affiliate, has previously announced a joint effort with BP for a project very similar to HECA.³⁹ DRA suggests that discovery is necessary to evaluate the possibility of affiliate transactions.⁴⁰ Finally, DRA suggests that hearings are appropriate to evaluate evidence presented in the attachments to AL 2274-E.⁴¹

SUSPENSION

Advice Letter (AL) 2274-E was suspended on November 10, 2008 on the grounds that the AL required staff review.

DISCUSSION

The request to establish a memorandum account to record costs for the HECA project is reasonable and should be approved.

SCE has demonstrated that this project is sufficiently consistent with existing State and Commission policy to warrant establishing a memorandum account to record costs for the HECA study. This resolution authorizes SCE to record, in HECAMA, up to \$30 million in costs resulting from its participation in the HECA study with Hydrogen Energy

³⁶ WPTF protest, pg 3

³⁷ WPTF protest, pg 3, referencing D.08-04-038 at pg 24.

³⁸ DRA protest, pgs 6-8

³⁹ DRA protest, Attachment 1

⁴⁰ DRA protest, pg 8

⁴¹ DRA protest, pg 6

International. The Commission authorizes SCE to modify its tariff schedules at Preliminary Statement, Part N, Memorandum Accounts, to include the HECAMA. Through the establishment of the HECAMA, SCE is authorized to record costs expended while the Commission considers the recovery of those costs through an application process.

Authorization to establish a memorandum account and to track expenses in a memorandum account does not automatically approve the recovery of those expenses. Approval of the proposed HECAMA and associated tariff sheets will allow SCE to record its HECA costs for possible future recovery, without prejudging Commission disposition of any subsequent application related to AL 2274-E. The tariff sheets included in Attachment A are approved and SCE is authorized to create the HECAMA.

The request to recover \$30 million cannot be granted through the advice letter process.

Protestants state that the request made in AL 2274-E is controversial and raises important policy issues, and therefore requires a formal proceeding as described in GO 96-B. AL 2274-E cites “urgent mitigating circumstances” that, SCE argues, warrant this request using the AL format. Further, the AL contends that the request is “consistent with Commission and State policy on GHG reduction” and is thus consistent with GO 96-B.⁴² In reply to protests, SCE claims that while “protestors seek to create controversy here,” there is no significant controversy because of the consistency of this request with existing policies.⁴³ While this request is generally consistent with existing policy, each of the State and Commission policies cited by SCE are general in nature and none of them specifically point to the HECA study. Although the goals of the policies may be clear, implementation details can still be controversial. Advice letters are generally reserved for implementing specific Commission direction already articulated in a decision.

Moreover, some of the issues raised by protestants invoke market structure concerns; these issues are not spoken to in the policies that SCE cites as being consistent with the request in AL 2274-E. We find that the request for recovery of HECA study costs is controversial and raises

⁴² AL 2274-E, pg 14

⁴³ SCE reply to protests, pg 3

important policy issues that we cannot adequately address on their merits in an advice letter filing.

In its protest, DRA contends that evidentiary hearings are appropriate to evaluate the recovery of costs for the HECA study. SCE responds that the issues raised in protests have been vetted in other proceedings. As we are requiring SCE to file an application in order to recover the HECA study costs from its ratepayers, *if* there are material disputed issues of fact, it will be possible to conduct an evidentiary hearing.

As noted in protests, approval of AL 2274-E may require modification of the project development and competitive procurement provisions of D.06-05-016 and D.07-12-052. Pursuant to Rule 5.2 of General Order 96-B, a request to modify a decision must be made in a formal proceeding.

For the forgoing reasons, the Commission denies, without prejudice, authorization for all relief not explicitly granted herein. To obtain authorization for further relief requested in AL 2274-E, SCE may file an application.

Any application for further relief for the HECA study shall meet certain conditions.

D.08-04-038, referring to applications for feasibility studies of technologies to reduce GHG emissions, states that, “we expect the utilities to include in future applications an explanation of how their proposal fits into their overall procurement strategy and publicize their research to the greatest extent possible in order to reduce duplication of effort.”⁴⁴ The HECA study is similar to the CHPG study, and application to recover the costs of the HECA study should include the aforementioned explanations.

To recover costs for the HECA study, D.06-05-016 and D.07-12-052 would potentially need to be modified. Under P.U. Code Section 1708, parties on the service lists for the proceedings that developed those decisions are entitled to notification before these decisions can be modified. If SCE files an application to recover costs associated with the HECA study, the application must be served on the parties to those decisions, in addition to the parties to AL 2274-E.

⁴⁴ D.08-04-038, pgs 12 and 35

Protests suggest that this request should include a detailed budget that the Commission and parties can use to evaluate the reasonableness of SCE's proposed \$30 million contribution from ratepayers. If SCE files an application for recovery, the application shall include a detailed budget for the HECA study.

COMMENTS

Public Utilities Code section 311(g)(1) generally provides that resolutions must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. This draft resolution was mailed to parties for comment, and will be placed on the Commission's agenda no earlier than 30 days from the date of mailing.

FINDINGS

1. SCE filed AL 2274-E on October 10, 2008 to establish the Hydrogen Energy California Memorandum Account (HECAMA) and to request authorization to recover up to \$30 million in costs stemming from SCE's participation in the HECA study.
2. Approval of recovery of costs for the HECA study may conflict with D.06-05-016 and D.07-12-052. AL 2274-E was not served on parties to these decisions.
3. Authorization to recover the costs of the HECA study is controversial and raises important policy questions.
4. Authorization to track expenses via a memorandum account does not authorize recovery of those costs. Therefore, authorization to create the HECAMA is not controversial and does not conflict with prior Commission decisions or raise important policy questions.
5. Authorization to create the HECAMA as described in the tariff pages attached to AL 2274-E is reasonable and should be approved.
6. In any future application for approval of costs related to the HECA study, SCE should include an explanation of how its proposal fits into its overall procurement strategy, as directed by D.08-04-038. Further, SCE should include, in such an application, a plan to publicize detailed study results to the greatest extent possible.
7. In any future application for approval of costs related to the HECA study, SCE should provide notice to all parties to D.06-05-016 and D.07-

12-052 any other decisions which may require modification in order to approve the application.

8. In any future application for approval of costs related to the HECA study, SCE should include a detailed budget for the HECA study.

THEREFORE IT IS ORDERED THAT:

1. Southern California Edison Company (SCE) is authorized to modify its tariffs, Preliminary Statement, Part N, Memorandum Accounts to include the Hydrogen Energy California Memorandum Account (HECAMA). Up to \$30 million in costs resulting from SCE's participation in the HECA study may be recorded in the HECAMA.
2. Revised tariff sheets 44296-E, 44297-E, and 44298-E, as included in Attachment A to AL 2274-E, are approved.
3. To obtain authority to recover from ratepayers costs recorded or to be recorded in the HECAMA, SCE shall file an application. Such an application shall meet the requirements described in Findings Nos. 6 through 8 above.
4. To the extent not approved by this resolution, SCE's AL 2274-E is denied, without prejudice. SCE may obtain authority for the remaining relief via an application.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on February 20, 2009; the following Commissioners voting favorably thereon:

Paul Clanon
Executive Director