

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



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Order Instituting Rulemaking to Implement the Commission's Procurement Incentive Framework and to Examine the Integration of Greenhouse Gas Emission Standards into Procurement Policies.

Rulemaking 06-04-009
(Filed April 13, 2006)

**SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY
RESPONSE TO PETITION FOR MODIFICATION OF DECISION 07-01-039**

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I. INTRODUCTION.

Pursuant to Rule 16.4(f) of the California Public Utilities Commission ("Commission") Rules of Practice and Procedure and in accordance with the extension of response date granted by Administrative Law Judge Jean Vieth on December 9, 2009, the Southern California Public Power Authority ("SCPPA")¹ hereby respectfully responds to the "Petition of the Natural Resources Defense Council (NRDC), the Environmental Defense Fund (EDF), Green Power Institute (GPI), Union of Concerned Scientists (UCS), and The Utility Reform Network (TURN) for modification of Decision 07-01-039, 'Interim Opinion on Phase 1 Issues: Greenhouse Gas Emissions Performance Standard'" ("Petition"), filed on November 30, 2009.

¹ SCPPA is a joint powers authority. The members are Anaheim, Azusa, Banning, Burbank, Cerritos, Colton, Glendale, Los Angeles Department of Water and Power, Imperial Irrigation District, Pasadena, Riverside, and Vernon. This comment is sponsored by Anaheim, Azusa, Banning, Burbank, Cerritos, Colton, Glendale, the Imperial Irrigation District, Pasadena, and Riverside.

II. BACKGROUND AND SUMMARY OF ARGUMENT.

Decision 07-01-039 (“Decision”) imposes various requirements on load-serving entities (“LSEs”) that seek to obtain power from fossil-fuel-fired generating facilities that conduct carbon capture and sequestration (“CCS”).

The Petition seeks to have the following language (“Petition Language”) inserted at each point in the Decision that refers to the obligations of LSEs in relation to CCS:

The plan must include sufficient ongoing monitoring and reporting activities, which are enforceable under Federal and/or State law, to determine the subsurface extent and behavior of the injected CO₂, verify the permanence of sequestration, and account for any releases from the subsurface.

Petition at 6-8.

SCPPA accepts and supports emissions performance standards and the appropriate regulation of CCS projects. SCPPA objects only to unnecessary and impractical regulation that may have the effect of reducing virtually to nil the valuable opportunity to purchase clean power from generation facilities with CCS.

As discussed below, the Commission should deny the Petition on the grounds that:

- the Petition Language is unnecessary as the Decision already requires the LSE to submit plans, projections, and supporting documentation on the permanence of the sequestration and on compliance with applicable laws and regulations; and
- other regulatory authorities, at the State and Federal level, are more appropriately placed to regulate CCS and review ongoing monitoring plans than the Commission.

If the Commission does not deny the Petition altogether, it should not accept the Petition Language, which is imprecise and impracticable in several respects. The Petition Language should be amended as follows:

The plan must include sufficient ongoing monitoring and reporting activities, ~~which are enforceable under Federal and/or State law,~~ to determine to the extent technically feasible the subsurface extent and behavior of the injected CO₂, verify that the injected CO₂ continues to be sequestered~~the permanenece of sequestration,~~ and ~~report~~account for any measurable releases from the subsurface.

III. THE PETITION SHOULD BE DENIED AS THE DECISION ALREADY CONTAINS SUFFICIENT REGULATION OF CCS.

The Decision currently contains several requirements for LSEs in relation to CCS projects, including that LSEs provide to the Commission:

documentation demonstrating that the CO₂ capture, transportation and geological formation injection project has a reasonable and economically and technically feasible plan that will result in the permanent sequestration of CO₂ once the project is operational, and that the CO₂ injection project complies with applicable laws and regulations.

Decision at 279 (Ordering Paragraph 3(c)(ii)); 281 (Ordering Paragraph 6). Similar language is found at other points in the Decision.

Notably, under this section LSEs are already required to provide documentation regarding the permanence of the sequestration, and compliance with applicable laws and regulations, which are two of the key issues covered in the Petition Language.

The Decision already provides the Commission with the degree of oversight over CCS projects that is appropriate to the Commission's role as a regulator of LSEs (particularly considering the jurisdictional authority of other regulatory bodies, as discussed below). Further or more detailed provisions on CCS are not required in the Decision. Therefore the Petition Language should not be included.

IV. THE PETITION SHOULD BE DENIED AS OTHER AUTHORITIES REGULATE CCS.

The Commission's role in relation to energy is the regulation of privately-owned utilities in California. Unlike other regulatory bodies, at both State and Federal levels, the Commission

has no authority to directly regulate CCS projects, and has no role in the ongoing monitoring of CCS projects. Given the existence and activities of other more appropriate bodies as discussed below, it is not appropriate for the Commission to set conditions on monitoring plans for CCS projects or to determine whether or not a monitoring plan is sufficient. Therefore the Petition Language should not be included in the Decision.

A. Regulation at Federal level

CCS falls under the purview of the United States' Environmental Protection Agency ("EPA"). The Petition notes that the EPA proposes to regulate CCS under the Safe Drinking Water Act, without consideration of emissions to air (Petition at 3-5). However, subsequent to the date of the Petition, the EPA declared that CO₂ and other greenhouse gases threaten public health and the welfare of current and future generations under the Clean Air Act.² Therefore the EPA now has the opportunity and has demonstrated its intention to regulate CO₂, including in the context of CCS, under the Clean Air Act.

Such regulation is likely to include monitoring requirements, as such requirements form a necessary basis for determining whether any breach of other CCS standards has occurred.

Regulation by the EPA has the advantage of nation-wide application, and of direct application to CCS project proponents, rather than the indirect method of regulation via LSEs to which the Commission is restricted.

B. Regulation at State level

In addition to likely regulation by the EPA, the Petition itself notes (at 2) that "a number of other statutes and regulations will apply to these operations", including the California Environmental Quality Act. Under this Act and other State laws, the California Energy

Commission and the Division of Oil, Gas and Geothermal Resources will play a role in regulating CCS projects. These entities may be able to provide more direct and comprehensive regulation of CCS projects than the Commission.

C. Negative consequences of overlapping regulation

If the Commission and one or more other State and/or Federal agencies develop requirements for monitoring plans for CCS projects, the Commission's requirements, being issued first, are unlikely to dovetail with the requirements of other agencies. Therefore a CCS project proponent may need to prepare two (or more) sets of monitoring plans, for approval by two (or more) separate agencies using different approval criteria. This duplication of time and resources is undesirable for both the project proponent and the regulators.

D. The body with long-term oversight of CCS projects is best placed to review monitoring plans

The most appropriate regulatory body to determine whether monitoring plans are adequate will be the body with oversight of the ongoing performance of CCS projects, and this body will have (or will develop) the necessary expertise in relation to the monitoring and performance of CCS projects. The Commission does not have this role, as the CCS provisions in the Decision (even including the Petition Language) only relate to the initial approval of a CCS project. Given the Commission's one-time initial review role for each CCS project, it will not develop experience as to what monitoring plans, in practice, provide sufficient information on the performance of CCS projects.

² 40 CFR Chapter I Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, available at http://epa.gov/climatechange/endangerment/downloads/Federal_Register-EPA-HQ-OAR-2009-0171-Dec.15-09.pdf.

E. No urgency for Commission regulation

It appears that the earliest any commercial Californian CCS project could commence operation is 2015.³ Therefore there is no urgent need for the Commission to change the Decision to address an issue relating to the ongoing monitoring of CCS projects, even if there is currently perceived to be a deficiency in the regulation of CCS projects by the Commission and other authorities. Other authorities have up to 5 years to prepare detailed requirements for CCS projects, and are very likely to take this action within this timeframe.

If the Commission finds, shortly prior to the first Californian CCS project commencing operations, that gaps remain in the regulation of CCS projects, it will be in a better position at that stage to fill the gaps in a way that does not conflict with CCS regulations promulgated by other bodies.

V. IF THE PETITION IS NOT DENIED, THE PETITION LANGUAGE SHOULD BE AMENDED.

Although SCPPA considers that the Petition should be denied, if the Commission does not deny the Petition, at a minimum the Petition Language should be amended to increase its clarity, avoid negative consequences, and ensure it can be implemented.

A. Reference to Federal and State law

The Petition Language requires monitoring and reporting activities to be enforceable under Federal and/or State law.

If there continues to be no Federal or State law providing for enforceable monitoring and reporting in relation to CCS by the time a CCS project is operational (which is perhaps unlikely, but possible), the Petition Language would have the effect that the Commission could not approve the CCS project for the purposes of the emissions performance standard. This would be

the result even if the CCS project proponent did in fact prepare detailed monitoring plans: if there were no Federal or State law under which those plans could be enforced, the project would not satisfy the requirements of the Petition Language.

The Commission should be able to request information on monitoring plans regardless of whether there is a Federal or State law to enforce them.

To avoid the possibility of the negative consequence discussed above, the reference to “enforceable under Federal and/or State law” should be removed from the Petition Language, as follows:

The plan must include sufficient ongoing monitoring and reporting activities, ~~which are enforceable under Federal and/or State law~~...

B. Monitoring requirements must reflect technological capabilities

CCS technology is still in a relatively early stage of development and application. Therefore, although SCPPA does not dispute that monitoring is required, it is important to ensure that monitoring requirements are not so extensive that they are impossible to satisfy in practice and act as a de facto prohibition on CCS projects.

The term “behavior” as used in the Petition Language is not defined and is capable of bearing a broad meaning. It may not currently be technically possible to determine the exact “behavior” of injected CO₂. Thus the Petition Language should be amended to limit monitoring requirements to the technically feasible, as follows:

... to determine to the extent technically feasible the subsurface extent and behavior of the injected CO₂, ...

As monitoring technology improves over time, the monitoring requirements will also extend. This is a valuable characteristic when regulating technology such as CCS which is

³ The Hydrogen Energy California facility is not scheduled to become operational until 2015 - <http://www.hydrogenenergycalifornia.com/content.aspx?pageid=21>

rapidly developing.

C. Sequestration can only be confirmed at the time of investigation

The Petition Language requires monitoring to “verify the permanence of sequestration”. This is in addition to the requirement currently contained in the Decision for LSEs to provide documentation of a technically feasible plan to ensure permanent sequestration of CO₂. Decision at 273.

“Permanence” is not defined in the Decision or in the Petition Language. In the Preliminary Draft Regulation for a California Cap-and-Trade Program prepared by the California Air Resources Board (dated November 24, 2009), “permanent” is defined in the context of greenhouse gas sequestration projects with a reference to the internationally-accepted standard of 100 years. However, this definition will not apply to the Decision unless the Decision states that it does.

In the absence of a context-specific definition, a general dictionary definition such as “lasting or intended to last indefinitely without change”⁴ would be assumed be the definition of “permanence”. Using this meaning, it is not possible to *verify* permanence from time to time. Permanence under the dictionary definition continues into the indefinite future, but verification must necessarily be done at a particular time with reference to activities up to the time of verification. It is only possible to verify that the injected CO₂ remains sequestered at the time the monitoring takes place.

Therefore the Petition Language should be amended as follows:

... verify that the injected CO₂ continues to be sequestered~~the~~
permanence of sequestration, ...

⁴ Webster’s New World Dictionary of the American Language, Second College Edition, 1978.

D. Reasonable measurement and reporting requirements

The Petition Language requires the monitoring plan to “account for any releases from the subsurface”. This gives rise to two separate issues.

First, the intended meaning of the phrase “account for” is unclear, as it may imply different things in different contexts. As the expressed intention of the Petition Language is to address regulatory deficiencies in relation to monitoring and reporting (Petition at 2), the language should be clarified to refer to reporting.

Second, “any releases” is too high a standard for both technical and financial feasibility. Measuring equipment will not be able to detect all minute releases of CO₂. Even if this becomes technically possible, project operators should not have the burden of reporting (nor the regulator the burden of responding to the reports of) all such minute releases.

A reference to “measurable releases” is required at a minimum to address the issue of technical feasibility. The regulatory agency with ongoing oversight of CCS projects is likely to establish more detailed provisions on the level of releases that should be reported to it (and the Decision already requires the LSE to provide evidence of compliance with applicable laws and regulations).

Therefore the Petition Language should be amended as follows:

... and ~~report~~account for any measurable releases from the subsurface.

VI. CONCLUSION

For the above reasons, SCPA respectfully requests that the Commission deny the Petition, or, if the Commission does not wish to deny the Petition, that it adopt the above modifications to the Petition Language.

Respectfully submitted,

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PUBLIC POWER AUTHORITY**

Dated: January 15, 2010

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the **SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY RESPONSE TO PETITION** on the service list for CPUC Docket No. R.06-04-009 by serving a copy to each party by electronic mail and/or by mailing a properly addressed copy by first-class mail with postage prepaid.

Executed on January 15, 2010, at Los Angeles, California.

/s/ Sylvia Cantos

Sylvia Cantos

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