

STATE OF CALIFORNIA  
Energy Resources Conservation  
And Development Commission

DOCKET	
07-AFC-3	
DATE	AUG 13 2010
RECD.	AUG 13 2010

In the Matter of: ) Docket No. 07-AFC-3  
)  
Application for Certification for the )  
CPV Sentinel Energy Project ) August 13, 2010  
by the CPV Sentinel, L.L.C. )

Staff's Opening Brief on Air Quality Issues

INTRODUCTION

This brief addresses the factual and legal issues that were raised by testimony and legal argument submitted about the compliance of the Competitive Power Venture Sentinel project (Sentinel project) with applicable air quality law. All other issues associated with the California Energy Commission's (Energy Commission's) review of the Sentinel project have been briefed and placed before the assigned Committee for consideration. Staff, the applicant, and the South Coast Air Quality Management District (SCAQMD) are in agreement that the Sentinel project will comply with applicable air quality laws and staff recommends that the Committee should propose approval of the Sentinel project to the full Energy Commission in its Presiding Member's Proposed Decision (PMPD). Interveners California Communities against Toxics (CCAT) and Communities for a Better Environment (CBE) disagree. This brief addresses the relevant factual and legal issues, and demonstrates that interveners' arguments are flawed. This brief also recommends a Energy Commission finding that the Sentinel project complies with applicable federal air quality law, as supported by the evidence in the record.

## LEGAL ISSUES

### A. The Framework of Federal Clean Air Law Is Undisputed and Requires the Project Developer to Provide Offsets for a Number of Pollutants, Including PM10 and SO<sub>x</sub>.

There appear to be no disputes about the federal law framework that governs the Energy Commission's decision in this case. Both the June 15, 2010 testimony of Michael Harris, on behalf of CCAT, and SCAQMD's June 30, 2010 brief on legal issues (SCAQMD Legal Argument) identify the specific federal laws that are applicable to the Sentinel project. Given the common understanding of the parties, staff has chosen to present a brief discussion of applicable air quality law rather than an exhaustive analysis.<sup>1</sup>

In sum, federal law requires that states that fail to meet federal ambient air quality standards for one or more criteria pollutants adopt plans (called "state implementation plans" or SIPs) demonstrating how they will meet and maintain ambient air quality standards adopted by the Environmental Protection Agency (EPA). (42 U.S.C. § 7410(a)(1).) One of the requirements for all SIPs is that new projects that emit relatively large amounts of non-attainment pollutants or their precursors provide offsetting emission reductions of the same pollutants from other facilities. (42 U.S.C. § 7503(a)(1).) Although the Sentinel project is not a major source for PM<sub>10</sub>, SCAQMD Rules require emission offsets for all sources of nonattainment pollutants. Section 7503(a)(1)(A) mandates that a source obtain these offsets "by the time the source is to commence operation." As a result of the non-attainment status of the Salton Sea Air Basin for ozone and particulate matter (PM) with a diameter of 10 micrometers or less (PM<sub>10</sub>), the Sentinel project will be required to surrender offsets for oxides of nitrogen (NO<sub>x</sub>) and volatile organic compounds (VOC), both of which are precursor pollutants to ozone, and for PM<sub>10</sub> and oxides of sulfur (SO<sub>x</sub>), which

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<sup>1</sup> Some of the proposed findings of fact and conclusions of law included as an Appendix to this brief are based on the uncontested legal and factual summaries contained in those other filings.

is a precursor pollutant to PM10.<sup>2</sup> The applicant will obtain NOx offsets through purchase of RECLAIM Trading Credits (RTCs) as provided in SCAQMD's RECLAIM program (SCAQMD Rule 2000 et seq.). VOC offsets will be provided through purchase of Emission Reduction Credits (ERCs) on the open market. The applicant and SCAQMD agree that SCAQMD is directed by AB 1318 to provide the remaining PM10 and SOx offsets.

B. There is no Dispute that If Certain Findings Are Made, AB 1318 Requires SCAQMD to Transfer Offsets to the Sentinel Project.

AB 1318 (Stats. 2009, ch. 285) was enacted in 2009 to respond to a decision of the Los Angeles Superior Court that resulted in invalidating certain amendments made by SCAQMD to its New Source Review (NSR) Rules to allow, for a limited time and under specific conditions, qualified electrical generating facilities to obtain offsets from SCAQMD's internal accounts, upon paying a mitigation fee. Although some of offsets that are used to offset emission increases associated with new or modified projects result from the sale by one private party to another of ERCs, SCAQMD also provides offsets from its own internal accounts to projects which provide essential public services and to those which are exempt from offsets under SCAQMD rules. SCAQMD's proposal to expand the availability of these offsets to power plants was the subject of the lawsuit, which was successful in challenging SCAQMD's compliance with the California Environmental Quality Act in adopting the proposed rule changes, and resulted in invalidating this rule amendment, preventing SCAQMD from providing access to its internal account offsets, and causing a permit moratorium. AB 1318 responded to that decision by requiring

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<sup>2</sup> Although the Coachella Valley portion of the Salton Sea Basin, in which the project is located, is currently designated non-attainment for PM10, SCAQMD and the California Air Resources Board have submitted a request to the Environmental Protection Agency for an attainment designation, based on monitoring data. Once the re-designation request is granted, PM10 offsets will not be required for projects located in the Coachella Valley.

SCAQMD to credit its internal accounts and transfer from its internal accounts sufficient offsets for certain pollutants emitted by certain proposed projects (called "eligible electric generating facilities") to meet federal law requirements. There appears to be no dispute that the Sentinel project is the only project that meets the criteria of AB 1318.

In order to comply with the requirements of AB 1318, SCAQMD established an "AB 1318 tracking system" to account for the offsets it will transfer to the Sentinel project. This tracking system was submitted to the Energy Commission as part of the March 2, 2010, Addendum to the Determination of Compliance. (Exh. 141.) The available offsets were identified in two tables in the Addendum, Tables A and B. SCAQMD has made several revisions to the Tables, each time applying more conservative assumptions to the calculation of available offsets. (See, e.g., Exhs. 149, 150.) SCAQMD has also adopted a proposed revision to the SIP that includes the AB 1318 Tracking System containing the pool of offsets from which the offsets needed to satisfy the Sentinel project's offset obligation will be pulled. (SCAQMD Legal Argument, Attachment A; July 19, 2010, RT 64:18-24 (Nazemi).) The proposed SIP revision has been forwarded to the California Air Resources Board, which staff expects will forward the proposed SIP revision to EPA for approval.

C. Intervener's Claims that the Offsets are not Federally Enforceable are Erroneous.

The heart of the first legal dispute in this case is this: CCAT claims that, without federal approval of the SIP revision transferring offsets to the Sentinel Project, the offsets are not federally enforceable. And as federal enforceability is one of the fundamental requirements for all offsets (42 U.S.C. § 7503(a)), CCAT states that the Energy Commission cannot find that the Sentinel project is in conformity with federal law, as required by Public Resources Code section 25523 and provisions of AB 1318 that require the Energy Commission to "determine whether the emission credits to be credited and transferred satisfy all applicable legal requirements." (Health & Saf. Code, § 40440.14.)

SCAQMD claims that the offsets are federally enforceable. The offsets have been generated from permitted equipment only, the equipment has been shut down, and the permits for all of the equipment generating the offsets have been inactivated. Therefore, the offset sources cannot legally operate. (SCAQMD Legal Argument, p. 7-8.) In addition, SCAQMD states that even if the offsets are not federally enforceable, guidance provided by EPA supports a conclusion that the SIP approval process needed to make the offsets federally enforceable need not be complete for a construction permit to be issued. (*Id.* at p. 8-9.) SCAQMD cites EPA guidance stating that if creditable offsets have been identified, adopted as a matter of state law, and submitted to EPA, but the EPA administrative process to approve the offsets is not complete by the time the source commences construction, a construction permit may be issued so long as the source does not commence operation until the EPA approves the SIP amendment. (*Ibid.*)

Staff finds SCAQMD's arguments compelling. The emission reductions identified in the proposed SIP amendment are undoubtedly enforceable, as the permits for these sources have been inactivated. (SCAQMD Legal Argument, p. 8.) Moreover, the memorandum from John Seitz, (Director, EPA Office of Air Quality Planning and Standards), which is cited by both Mr. Harris and SCAQMD, indicates that it is legal for SCAQMD to issue a permit to construct for a project that has identified sufficient offsets when the only barrier to enforceability of those offsets is EPA approval of a proposed SIP revision. (SCAQMD Legal Argument, Attachment E, p. 2.) In this instance, SCAQMD has identified ample offsets available for the Sentinel project, and adopted a SIP revision to allow their transfer. The possibility that the SIP amendment may not be completed by the time the project begins construction does not create a barrier preventing the Energy Commission from certifying the Sentinel project now. The Energy Commission certified the Victorville 2 Hybrid Power Project (07-AFC-01) in similar circumstances, and the facts of this case

support the affirmative findings required by Public Resources Code section 25523 and Health & Safety Code section 40440.14.

D. Intervener's Claim that the Offsets Require Further Downward Adjustment is Erroneous.

The second legal dispute at issue in this case concerns the adjustments that must be made to the amount of offsets transferred from SCAQMD's internal accounts to a project. Intervener CBE apparently believes that the offsets provided to the Sentinel project pursuant to AB 1318 must be adjusted to reflect current "Best Available Control Technology" or "BACT" levels, prior to their transfer. (*See e.g.*, Exh. 401, p. 7.) However, citing to federal law, SCAQMD points out that the applicable legal requirement is that the offsets that are transferred to the Sentinel project must be "surplus." (40 C.F.R., section 51.165.)<sup>3</sup> The surplus requirement reflects the provision in the federal Clean Air Act that "emission reductions otherwise required by this chapter shall not be creditable as emission reductions for purposes of any such offset requirements." (42 U.S.C. section 7503(c)(2).) SCAQMD implements this requirement by reducing the amount of offsets that are available by the amount of emission reductions that would have been created by control requirements applicable to the source category since the shutdown occurred, had the facility remained in operation. In order to reflect the most recent level of control, SCAQMD typically completes the adjustment at the time that the offsets are issued. (SCAQMD Legal Argument, p. 10.)

However, because CBE raised the issues of adjusting offsets now to ensure that they remain surplus, SCAQMD has indicated that it would be willing to discount them and has

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<sup>3</sup> While discounting to "BACT" levels is required when the SCAQMD issues tradeable emission reduction credits, discounting to "BACT" does not apply to offsets issued from the SCAQMD's internal accounts. (*See, Natural Resources Defense Council v. South Coast Air Quality Management District*, 2010 U.S. Dist. LEXIS 36865 at \*13 (Jan. 7, 2010).)

made a preliminary calculation of the amount of reduction that would result, concluding that for PM10, the adjustments will leave 132,816 pounds available to the Sentinel project. (July 17, 2010, RT 55:22-25, 55:1 (Nazemi).) SCAQMD conducted a similar exercise for SO<sub>x</sub> offsets, concluding that the adjustments leave 24,550 pounds available to the Sentinel project. (*Id.* at 55:8-13.) As the Sentinel project requires 118,120 pounds of PM10 and 13,928 pounds of SO<sub>x</sub> offsets (*Id.* at 55:3-4, 13-14; Exh. 149, Appendix N, p. 2), this testimony resolves any doubts about the sufficiency of the “surplus” adjustments made to the offsets, and about the amount of the offsets available for the Sentinel project.

### FACTUAL ISSUES

Intervener CBE raised a series of factual issues, all directed at SCAQMD’s assessment of the quantity of offsets that can be transferred to the Sentinel project. In her first declaration, CBE witness Julia May argued that SCAQMD has overestimated the availability of offsets from seven facilities, as well as the fractional amount of PM10 in total particulate matter. (Exh. 401.) (Her assertion that the offset quantities should have been reduced to reflect current BACT levels is a legal argument refuted above.) In her late-filed declaration, Ms. May also states that SCAQMD used incorrect emission factors for certain facilities whose emissions are included in Tables A and B. (Exh. 403) SCAQMD responded by identifying a series of verification steps and conservative assumptions used to create the list of offsets in the AB 1318 Tracking System. (Exh. 218, p. 5-7.) These steps include verifying that each offset source had operated under a valid permit, that the source providing the offsets has been shut down and the permit has been invalidated, that no ERCs have been issued for the emission reductions identified in Tables A and B of the Addendum to the Determination of Compliance, and that the offsets have not been used for permitting of any other source. The conservative assumptions include using the lower

of the reported emission factor or the standard emission factor, and using the last two years of operation (when emissions are generally lower). (*Ibid.*)

In addition, SCAQMD expert witness Mr. Nazemi, responding specifically to the late-filed declaration, testified at the hearing that Ms. May misrepresented the source of offsets (July 19, 2010, RT 44:3-4 (Nazemi)), and dramatically underestimated emission factors that should have been used. (*Id.* at 50:16-24, 53:15-22.) Specifically, for sandblasting operations used as a source of offsets, Ms. May based her calculations on the emission factor for an enclosed metal sandblasting cabinet (Exh. 403, pp. 2-3), when in fact the source of the offset was open abrasive sandblasting, which has a different and higher emission factor. (July 19, 2010, RT 43:5-16, 44:1-8 (Nazemi).) Mr. Nazemi also testified that Ms. May misrepresented emission factors for aggregate, sand, and cement production facilities, and used incorrect assumptions and emission factors to calculate the amount of emissions from these sources. (*Id.* at 51:8-20, 52:24-25, 53:1-22 (Nazemi).) These errors skew all of Ms. May's conclusions about the amount of offsets that are available for the specific sources she identifies in her late-filed declaration. Finally, Mr. Nazemi rebutted Ms. May's contention that SCAQMD erred in assuming that ratio of 50 percent of total PM from non-combustion is PM10. He explained that an evaluation of non-combustion sources in the total inventory demonstrates that the average ratio is actually in excess of 58%, so that the 50% factor is actually conservative. (Exh. 218, p. 9; July 19, 2010, RT 49:13-20 (Nazemi).) In sum, CBE's factual challenges to the amount of offsets available have been shown to be without basis. As noted above, SCAQMD has identified ample offsets for the Sentinel project in the AB 1318 Tracking System.

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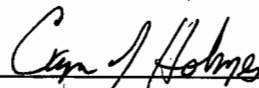


## CONCLUSION

The Addendum to the Final Determination of Compliance has been available since April 5, 2010. Although interveners claim that legal and factual barriers prevent the Energy Commission from certifying the Sentinel project, a review of the record demonstrates that no such barriers exist. A thorough and conservative analysis underlies the identification of the offsets available to the Sentinel project under the AB 1318 Tracking Systems. The AB 1318 Tracking System is incorporated into the SIP revision lawfully adopted by SCAQMD and forwarded to the California Air Resources Board for approval and forwarding to EPA. The Sentinel project is in conformity with all applicable air quality laws, and the offsets proposed as a result of the AB 1318 Tracking System satisfy all applicable legal requirements. The Energy Commission can and should make the findings required by Public Resources Code, section 25523 and Health and Safety Code, section 40440.14 and approve the Application for Certification for the Sentinel project.

Date: August 13, 2010

Respectfully submitted,



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CARYN J. HOLMES  
Attorney for the California  
Energy Commission Staff  
1516 9<sup>th</sup> St., MS-14  
Sacramento, CA. 95814  
Ph: (916) 654-3951  
E-mail: [cholmes@energy.state.ca.us](mailto:cholmes@energy.state.ca.us)

## *Appendix A*

### **Proposed Findings of Fact**

1. SCAQMD has established a regulatory system for ensuring that stationary sources subject to the requirements of the federal Clean Air Act meet the requirements imposed by the Act, and the Environmental Protection Agency (EPA) has approved the elements of that regulatory scheme as part of California's federally-required State Implementation Plan (SIP).
2. Although SCAQMD and the California Air Resources Board have submitted a request, based on monitoring data, that the portion of the Salton Sea Basin in which the Sentinel project is located be re-designated as attainment, the EPA has not yet ruled on the request.
3. Until a re-designation request is granted, sources located in the Salton Sea Air Basin portion of the SCAQMD must offset their emissions of non-attainment pollutants and their precursors.
4. Although the Sentinel project is not a major source of PM10 and therefore under federal law is not required to provide offsets, the Sentinel project is providing offsets of PM10 and the PM10 precursor, SO<sub>x</sub> through SCAQMD crediting to its account sufficient offsets for PM10 and SO<sub>x</sub> to its AB 1318 Tracking System.
5. SCAQMD has created internal offset accounts for each pollutant and has verified that the sources from which the offsets were generated had valid permits, that those permits have been inactivated, that the source has been , shut down or over-controlled, and that the owner never claimed or was not eligible to claim emission reduction credits for such reductions.
6. Certain types of public services and other sources are eligible for offsets in the internal accounts through SCAQMD's Priority Reserve, established in Rule 1309.1.
7. In 2006, and 2007, SCAQMD amended its existing Rule 1309.1 to allow power plants to access the Priority Reserve, and adopted a new regulation -- Rule 1315 -- to codify its tracking system for the offsets in its internal accounts.

8. In 2008, a Superior Court judgment enjoined SCAQMD from implementing the amended Rule 1309.1 and the new Rule 1315.
9. Subsequent to the Superior Court decision, AB 1318 was enacted, which requires SCAQMD to transfer offsets from its internal accounts to projects that meet specific requirements (referred to as “eligible electric generating facilities”.)
10. The parties do not dispute that the Sentinel project is the only eligible electric generating facility.
11. SCAQMD established an “AB 1318 Tracking System” in order to account for the offsets it will transfer to the Sentinel project.
12. The tracking system identifies offsets only from facilities whose permits have been inactivated. These offsets are identified in Tables A and B of SCAQMD’s May 12, 2010, filing with this Commission, which has been identified as Exh. 141.
13. The tracking system incorporates multiple verification steps and conservative assumptions in determining the amount of offsets that are available.
14. The AB 1318 Tracking System identifies 132,816 pounds of PM<sub>10</sub> and 24,550 pounds of SO<sub>x</sub> offsets available to the Sentinel project.
15. SCAQMD adopted a SIP revision to reflect the transfer of offsets to the Sentinel project pursuant to the AB 1318 Tracking System on July 9, 2010, and forwarded the SIP revision to the Air Resources Board, who will forward it to EPA for its approval.
16. Prior to the issuance of a permit to construct to the Sentinel project, SCAQMD will review and adjust each offset as necessary to assure that it remains surplus, including reducing the amount of offsets as necessary to reflect the requirements of any federal, state, or local air pollution laws that became applicable to that source category since the time of shutdown.
17. SCAQMD has performed a preliminary “surplus adjustment” for the offsets contained in Tables A and B, and determined that there are more than sufficient offsets to meet the needs of the Sentinel project.

## Proposed Conclusions of Law

1. The Sentinel project is required by federal law to obtain 13, 928 pound per year of SO<sub>x</sub> and 118, 120 pounds per year of PM<sub>10</sub> offsets.
2. All offsets must be surplus, permanent, quantifiable, and federally enforceable.
3. SCAQMD is prohibited by court order from using its Rule 1309.1 to provide offsets to the Sentinel Project.
4. AB 1318 requires SCAQMD to transfer offsets needed for permitting to eligible electric generating facilities.
5. The Sentinel project is an eligible electric generating facility within the meaning of AB 1318.
6. SCAQMD has complied with the requirements of AB 1318 by establishing an "AB 1318 Tracking System" to account for the offsets it will transfer to the Sentinel project.
7. The offsets identified in the AB 1318 Tracking System are federally enforceable.
8. Even if the offsets were not yet federally enforceable, EPA guidance allows approval of the project under circumstances such as these, although the requirement that the approval include a federally enforceable condition prohibiting operation of the equipment until the offsets become federally enforceable is not applicable to this project because the offsets are federally enforceable already.
9. All offsets provided to the Sentinel project from the AB 1318 Tracking System are currently, and upon issuance of the permit to construct will be, surplus.
10. The offsets to be credited and transferred to the Sentinel project satisfy all applicable legal requirements.
11. The Sentinel project will comply with all applicable air quality standards.



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT  
COMMISSION OF THE STATE OF CALIFORNIA  
1516 NINTH STREET, SACRAMENTO, CA 95814  
1-800-822-6228 – [WWW.ENERGY.CA.GOV](http://WWW.ENERGY.CA.GOV)

APPLICATION FOR CERTIFICATION FOR THE  
**CPV SENTINEL ENERGY PROJECT**  
BY THE CPV SENTINEL, L.L.C

DOCKET No. 07-AFC-3

**PROOF OF SERVICE**  
(Revised 7/1/2010)

**APPLICANT**

CPV Sentinel, LLC  
Mark O. Turner, Director  
Competitive Power Ventures, Inc.  
55 2<sup>nd</sup> Street, Suite 525  
San Francisco, CA 94105  
[mturner@cpv.com](mailto:mturner@cpv.com)

**APPLICANT'S CONSULTANT**

Dale Shileikis - URS Corporation  
221 Main Street, Suite 600  
San Francisco, CA 94105-1916  
[dale\\_shileikis@urscorp.com](mailto:dale_shileikis@urscorp.com)

**COUNSEL FOR APPLICANT**

Michael J. Carroll  
LATHAM & WATKINS LLP  
650 Town Center Drive, 20th Floor  
Costa Mesa, CA 92626-1925  
[michael.carroll@lw.com](mailto:michael.carroll@lw.com)

**INTERESTED AGENCIES**

California ISO  
[e-recipient@caiso.com](mailto:e-recipient@caiso.com)

Mohsen Nazemi, PE  
South Coast AQMD  
21865 Copley Drive  
Diamond Bar, CA 91765-4178  
[mnazemi@aqmd.gov](mailto:mnazemi@aqmd.gov)

**INTERVENORS**

Angela Johnson Meszaros  
CA Communities Against Toxics  
1107 Fair Oaks Avenue, #246  
South Pasadena, CA 91030  
[Angela@CleanAirMatters.net](mailto:Angela@CleanAirMatters.net)

Communities for a Better Environment  
c/o Shana Lazerow  
1904 Franklin Street, Suite 600  
Oakland, California 94612  
[slazerow@cbeocal.org](mailto:slazerow@cbeocal.org)

**ENERGY COMMISSION**

JAMES D. BOYD  
Vice Chair and Presiding Member  
[jboyd@energy.state.ca.us](mailto:jboyd@energy.state.ca.us)

Kenneth Celli, Hearing Officer  
[kcelli@energy.state.ca.us](mailto:kcelli@energy.state.ca.us)

John Kessler, Project Manager  
[jkessler@energy.state.ca.us](mailto:jkessler@energy.state.ca.us)

Tim Olson  
Advisor to Commissioner Boyd  
[tolson@energy.state.ca.us](mailto:tolson@energy.state.ca.us)

Caryn Holmes, Staff Counsel  
[cholmes@energy.state.ca.us](mailto:cholmes@energy.state.ca.us)

Dick Ratliff, Staff Counsel  
[dratliff@energy.state.ca.us](mailto:dratliff@energy.state.ca.us)

**Jennifer Jennings**  
**Public Adviser**  
***E-mail preferred***  
**[publicadviser@energy.state.ca.us](mailto:publicadviser@energy.state.ca.us)**

**DECLARATION OF SERVICE**

I, **Chester Hong**, declare that on August 13, 2010, I served and a filed copies of the attached "**Staff's Opening Brief on Air Quality Issues**", dated **August 13, 2010**. The original documents, filed with the Docket Unit, are accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at:

**[<http://www.energy.ca.gov/sitingcases/sentinel/index.html>]**

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

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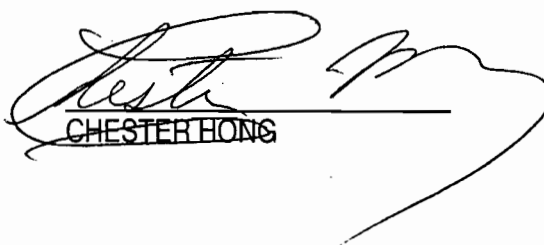
Attn: Docket No. 07-AFC-3

1516 Ninth Street, MS-4

Sacramento, CA 95814-5512

[docket@energy.state.ca.us](mailto:docket@energy.state.ca.us)

I declare under penalty of perjury that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

  
CHESTER HONG