



# DOCKET

11-AFC-1

DATE APR 13 2012

RECD. APR 13 2012

500 Capitol Mall, Suite 1600  
Sacramento, California 95814  
main 916 447 0700  
fax 916 447.4781  
www.stoel.com

MELISSA A. FOSTER  
Direct (916) 319-4673  
mafoster@stoel.com

April 13, 2012

## VIA EMAIL

Mr. Eric Solorio, Siting Project Manager  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814

**Re: Pio Pico Energy Center Project (11-AFC-01)  
Proposed SOIL&WATER-9 – Water Conservation Plan**

Dear Mr. Solorio:

On February 22, 2012, CEC Staff published the Preliminary Staff Assessment (“PSA”) for the Pico Pico Energy Center project (“PPEC” or “Project”). Subsequent to the publication of the PSA, CEC Staff held a PSA Workshop on March 1, 2012, in Chula Vista, California. On the eve of the Workshop, CEC Staff provided Applicant Pio Pico Energy Center, LLC (“Applicant”) with a copy of proposed SOIL&WATER-X, a proposed condition of certification regarding a water conservation plan that was not included in the published PSA. Due to the short notice regarding the proposed condition, Applicant was not prepared to address the proposed condition during the March 1, 2012 PSA Workshop. On March 9, 2012, CEC Staff docketed a revised version of the proposed condition, proposed SOIL&WATER-9, from what was provided to Applicant on February 29, 2012. Applicant responded to proposed SOIL&WATER-9 on March 13, 2012.<sup>1</sup>

Subsequent to Applicant’s response, Staff held a second PSA workshop on March 23, 2012, to discuss proposed SOIL&WATER-9. During the March 23, 2012 workshop, Applicant reiterated its objections to proposed SOIL&WATER-9, specifically noting that the requirements set forth therein are not required by law or appropriate for this project. However, Applicant agreed to

---

<sup>1</sup> Applicant’s March 13, 2012 comments regarding Staff’s proposed Condition of Certification SOIL&WATER-9 are incorporated herein by reference.



April 13, 2012

Page 2

provide Staff with additional information to support its contention that SOIL&WATER-9 is unnecessary for this project.

Staff has acknowledged that the Water Supply Assessment prepared by Otay Water District indicates that there are sufficient potable water supplies available to support PPEC, even if recycled water is not available. (PSA pp. 4.9-1, 4.9-41). As Applicant's March 13, 2012 correspondence and the PSA noted, the use of potable water in the event that recycled water is not available is consistent with all LORS as well as State water policy. Moreover, there are no significant impacts associated with the project's proposed water supply; therefore, SOIL&WATER-9 is not required as "mitigation," but rather is a possible enhancement or benefit of the project for the community.

The Warren-Alquist Act notes that it is the "policy of the state and the intent of the Legislature to promote all feasible means of energy and water conservation and all feasible uses of alternative energy and water supply sources." (Pub. Res. Code § 25008 (emphasis added).) As Applicant previously noted, the California Energy Commission's Integrated Energy Policy Report ("IEPR") (2003) notes that the Energy Commission will approve the use of fresh inland water for cooling purposes only where alternative water supply sources are shown to be "environmentally undesirable" or "economically unsound." (*Id.*) The Energy Commission interprets "environmentally undesirable" to mean the same as having a "significant adverse environmental impact" and "economically unsound" to mean the same as "economically or otherwise infeasible." "'Feasible' is defined under CEQA and by the CEC in its siting regulations as being "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors." (14 Cal. Code Regs. § 15364; 20 Cal. Code Regs. § 1702(f); *see* 2003 IEPR at 40.). Here, Applicant has already incorporated the most feasible means of water conservation into the PPEC.

In an effort to reduce the water consumption associated with a conventional wet cooling system, the Applicant proposed a hybrid wet/dry cooling system in its original AFC submittal. This added hybrid cooling technology, designed to reduce maximum water consumption by 427 acre-feet/year, is estimated to cost an additional \$6.8M. In an effort to further reduce PPEC's water requirements, the Applicant submitted an AFC Refinement for an Enhanced Water Treatment System that will further reduce maximum water consumption by 67 acre-feet/year at an estimated additional cost of \$8M. With the Refinement, PPEC is now projected to have a maximum annual water use of 311 acre-feet/year. This is approximately 20% less water than proposed in the original AFC and approximately 60% less than if conventional cooling and wastewater treatment systems were used. This water savings, coupled with the fact that Otay Water District already incorporates conservation into new development and into the cost of



April 13, 2012

Page 3

potable water supplied by the District, further dictates that there is not a LORS compliance reason for SOIL& WATER-9. Nevertheless, Applicant is amenable to providing a reasonable enhancement that does not unduly burden the project. In order to be acceptable to Applicant, SOIL&WATER-9, if incorporated into the PPEC, must be revised.

CEC Staff's proposed SOIL&WATER-9 provides for payments to offset annual potable water use. While Applicant is willing to provide a Water Conservation Plan for the PPEC, Applicant requests that SOIL&WATER-9 be revised to allow Applicant the choice to either pay a one-time water conservation payment to the Otay Water District (or some other suitable water purveyor or conservation entity as set forth in the Water Conservation Plan) at project outset, based on anticipated potable water use, or to pay annually based on actual potable water used in the preceding year. Only potable water used for power plant cooling should be subject to this condition. Applicant would make the payment choice as part of submitting the Water Conservation Plan.

The required payment amounts should be roughly proportional to the costs needed to accomplish the offset benefits. In order to provide a conservative (leaning toward over-conservation of water) but reasonable and fair amount for the proposed payment amounts, Applicant conducted an evaluation of typical water savings and costs using a standard conservation measure, the pint urinal (which uses 0.125 gallons per flush), as the basis for determining savings. Water savings associated with the pint urinal range from 20,000 to 40,000 gallons per year. Applicant thus used the average savings of 30,000 gallons/urinal as the baseline, with an installed cost per urinal of \$500.

Using that as a guide, Applicant estimates that it is very reasonable to use \$275 per acre-foot of potable water used by the project to be offset as the payment amount. For the one-time payment calculation, Applicant used the reasonable estimate of 10 years of potable water use at a rate of 155.5 acre-feet/year (~2000 operating hours) and recommends a one-time payment option of \$425,000. Inclusion of this option in the Condition allows the project owner to choose to fold the cost into project financing or make it an operational cost.

Applicant wishes to reemphasize that the project is expected and required to use reclaimed water once it is available and it is expected to be available during the life the of the project. Thus, the annual payment option is likely to be extra-beneficial as it will provide for significant savings of water that was never utilized by the project.



April 13, 2012

Page 4

To this end, Applicant is amenable to the following proposed Condition regarding water conservation:

Prior to commencement of Commissioning activities, project owner shall provide a Water Conservation Plan (WCP) to the CPM. The WCP shall propose one or more recipients of either a one-time pre-payment or annual payments of funds to be used to conserve potable water in the region around the project site. At the time of submission of the WCP, project owner shall identify whether reclaimed water has been made available and will be used for power plant cooling processes. If potable water is expected to be used for cooling or process uses then project owner shall declare in the WCP plan whether it will make a one-time payment or pay water conservation funds annually and retrospectively.

Prior to using potable water for power plant cooling or process water needs, if such use will occur and project owner elected in the WCP to make a one-time payment, project owner shall pay the one-time payment specified below.

If potable water is used for cooling or process water needs and the project owner has elected in the WCP to make annual retrospective payments for actual water used by the project, then project owner shall make such payments as noted below by March 15 following a year in which project owner used potable water for cooling or process needs.

If, at the time of submitting the WCP, project owner intends to use reclaimed water beginning with Commissioning activities for the life of the project because reclaimed water is available to the project, then the project owner shall so state in the WCP and not be required to make any payments. Project owner shall then use reclaimed water for all process and cooling needs with potable only acting as an emergency, limited-time use should reclaimed water be temporarily unavailable when the power plant is required to operate or is dispatched.

**Water Conservation Payments:**

One-time payment: \$425,000

Annual payment: \$275 per acre-foot



April 13, 2012

Page 5

**Water Conservation Plan Components:**

The WCP shall include the following information:

If reclaimed water is available and potable water is not going to be used:

- A summary statement that reclaimed water is available and will be used for cooling and process water at plant start up; and
- Supporting information confirming the availability and feasibility of use of reclaimed water, such as a letter from the reclaimed water provider.

If reclaimed water is not available and potable water will be used at plant start-up for cooling and process water:

- Identity of the entities proposed to accept conservation funds and information on each entity's programs and successes;
- Description of the type of entity or entities proposed to accept conservation funds (governmental, not for or non-profit organization, etc)
- Contact information for the entity or entities;
- A statement from an authorized representative of each entity that is willing to accept the funds and use them for funding water conservation programs;
- A description of the current status of reclaimed water availability for the project;
- A statement that water meters have been or will be installed prior to plant start up and used to monitor actual amounts of potable water used; and
- A description supporting the general benefits and effects of the payments specified above as to water conservation resulting from the use of the funds.

**Verification:** The project owner shall submit the Water Conservation Plan to the CPM for review and approval 90 days before the commencement of Commissioning activities.

Any required one-time payment chosen by the project owner shall be made to the designated recipient entity for water conservation programs within 30 days of the CPM's approval of the Water Conservation Plan. Proof of such payment shall be provided to the CPM within 15 days of the date of payment. Any required annual payments to a water conservation program as outlined in the Water Conservation Plan shall be calculated on a calendar year basis and shall be based on potable



April 13, 2012

Page 6

water actually used for process and cooling needs by the project. Such annual payments shall be paid to the approved entity by March 15 of the year following the project's potable water use.

Applicant reiterates its position that SOIL&WATER-9 is not required for mitigation purposes as there are no significant impacts to water resources from PPEC. If the Commission determines that a Water Conservation Plan is required, Applicant is amenable to providing a Plan as described in the condition set forth above.

Respectfully submitted,



Melissa A. Foster

MAF:jmw

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 *PIO PICO ENERGY CENTER, LLC*

Docket No. 11-AFC-1  
PROOF OF SERVICE  
(Revised 3/20/12)

**Pio Pico Energy Center, LLC**  
**Applicant's Submittal of Proposed SOIL&WATER-9 – Water Conservation Plan**

**APPLICANT**

Gary Chandler, President  
Pio Pico Energy Center  
P.O. Box 95592  
South Jordan, UT 84095  
[grchandler@apexpowergroup.com](mailto:grchandler@apexpowergroup.com)

David Jenkins, Project Manager  
Pio Pico Energy Center, LLC  
1293 E. Jessup Way  
Mooresville, IN 46158  
[djenkins@apexpowergroup.com](mailto:djenkins@apexpowergroup.com)

**APPLICANT'S CONSULTANTS**

Maggie Fitzgerald  
Sierra Research  
1801 J Street  
Sacramento, CA 95811  
[MFitzgerald@sierraresearch.com](mailto:MFitzgerald@sierraresearch.com)

**COUNSEL FOR APPLICANT**

John A. McKinsey  
Melissa A. Foster  
Stoel Rives, LLP  
500 Capitol Mall, Suite 1600  
Sacramento, CA 95814  
[jamckinsey@stoel.com](mailto:jamckinsey@stoel.com)  
[mafoster@stoel.com](mailto:mafoster@stoel.com)

**INTERESTED AGENCIES**

California ISO  
*e-mail service preferred*  
[e-recipient@caiso.com](mailto:e-recipient@caiso.com)

**PETITIONERS**

April Rose Sommer  
Attorney for Rob Simpson  
P.O. Box 6937  
Moraga, CA 94570  
*e-mail service preferred*  
[aprilsummerlaw@yahoo.com](mailto:aprilsummerlaw@yahoo.com)

**ENERGY COMMISSION-  
DECISIONMAKERS**

CARLA PETERMAN  
Commissioner and Presiding Member  
[cpeterma@energy.state.ca.us](mailto:cpeterma@energy.state.ca.us)

KAREN DOUGLAS  
Commissioner and Associate Member  
*e-mail service preferred*  
[kldougla@energy.state.ca.us](mailto:kldougla@energy.state.ca.us)

Raoul Renaud  
Hearing Adviser  
[rrenaud@energy.state.ca.us](mailto:rrenaud@energy.state.ca.us)

Jim Bartridge  
Presiding Member's Adviser  
[jbartrid@energy.state.ca.us](mailto:jbartrid@energy.state.ca.us)

Galen Lemei  
Associate Member's Adviser  
*e-mail service preferred*  
[glemei@energy.state.ca.us](mailto:glemei@energy.state.ca.us)

**ENERGY COMMISSION STAFF**

Eric Solorio  
Siting Project Manager  
[esolorio@energy.state.ca.us](mailto:esolorio@energy.state.ca.us)

Kevin W. Bell  
Staff Counsel  
[kwbell@energy.state.ca.us](mailto:kwbell@energy.state.ca.us)

Eileen Allen  
Commissioners' Technical Advisor for  
Facility Siting  
*e-mail service preferred*  
[eallen@energy.state.ca.us](mailto:eallen@energy.state.ca.us)

**ENERGY COMMISSION – PUBLIC  
ADVISER**

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

**DECLARATION OF SERVICE**

I, Judith M. Warmuth, declare that on April 13, 2012:

I deposited copies of the aforementioned document and, if applicable, a disc containing the aforementioned document in the United States mail at 500 Capitol Mall, Suite 1600, Sacramento, California 95814, with first-class postage thereon fully prepaid and addressed to those identified on the Proof of Service list herein and consistent with the requirements of California Code of Regulations, Title 20, sections 1209, 1209.5, and 1210.

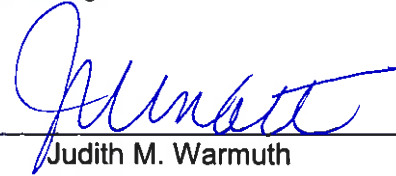
**OR**

I transmitted the document(s) herein via electronic mail only pursuant to California Energy Commission Standing Order re Proceedings and Confidentiality Applications dated November 30, 2011. All electronic copies were sent to all those identified on the Proof of Service list herein and consistent with the requirements of California Code of Regulations, Title 20, sections 1209, 1209.5, and 1210.

**OR**

On the date written above, I placed a copy of the attached document(s) in a sealed envelope, with delivery fees paid or provided for, and arranged for it/them to be delivered by messenger that same day to the office of the addressee, as identified on the Proof of Service list herein and consistent with the requirements of California Code of Regulations, Title 20, sections 1209, 1209.5, and 1210.

I declare under penalty of perjury under the laws of the State of California 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.

  
\_\_\_\_\_  
Judith M. Warmuth