

**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION  
OF THE STATE OF CALIFORNIA**

**APPLICATION FOR CERTIFICATION FOR  
THE BEACON SOLAR ENERGY PROJECT**

DOCKET NO. 08-AFC-2

**DOCKET**

**08-AFC-2**

DATE DEC 21 2009

RECD. DEC 21 2009

**DRAFT STIPULATION REGARDING COOLING WATER AND ALTERNATIVES**

This Stipulation Regarding Cooling Water Alternatives (“Stipulation”) is entered into between Beacon Solar, LLC (Beacon), the California Energy Commission Staff (“Staff”) and California Unions for Reliable Energy (CURE).

**RECITALS**

1. On March 14, 2008, Beacon filed its Application for Certification for the Beacon Solar Energy Project (AFC), Docket Number 08-AFC-2.
2. On May 5, 2008, the California Energy Commission (the “Commission”) accepted Beacon’s AFC as complete, initiated the review of the AFC (the “Proceeding”) and selected a committee consisting of Commissioners Karen Douglas and Jeffrey Byron to review the AFC (the “Committee”).
3. In the AFC, Beacon proposed onsite groundwater for all power plant water needs including power plant cooling water needs but left open the possibility of obtaining recycled water from California City if the city expanded its treatment capacity.
4. Beacon believes it has the legal right to use onsite groundwater for all power plant water needs including cooling water. Staff disagrees with Beacon and believes certain restrictions on the use of potable groundwater for power plant cooling exist.
5. On May 12, 2008, CURE petitioned to intervene as a formal party in the Proceeding.
6. On May 22, 2008 the Committee granted CURE’s petition to intervene and CURE became a formal party to the Proceeding.
7. On October 22, 2009, Staff published its Final Staff Assessment of the Beacon Solar Energy Project (“Project”).
8. Staff concluded in the FSA that Beacon’s use of groundwater for cooling water violates Commission policy as adopted in the Commission’s 2003 Integrated Energy Policy Report (“Commission’s Water Policy”) and State Water Resources Control Board Policy Number 75-58. Beacon disagrees with these conclusions.

9. Staff presented five alternatives to avoid the alleged violation of Commission policy noted above including obtaining recycled water from Rosamond Community Services District (“Rosamond”), obtaining recycled water from California City, developing a source of degraded ground water from around Koehn Lake, using a dry cooling system, and employing photovoltaic technology.
10. Using recycled water from either California City or Rosamond, or degraded ground water as a cooling water source for the Project is consistent with the Commission’s Water Policy.
11. Staff found the addition of dry cooling or the employment of photovoltaic technology to be viable alternatives to the Project. Beacon disagrees with the calculations, assumptions and conclusions reached by Staff on both the dry cooling and photovoltaic alternatives.
12. On November 17, 2009, Beacon announced its intent to change the source of cooling water for the Project in an effort to settle cooling water alternatives issues with Staff and, if possible, with CURE.
13. The FSA analyzed the environmental impacts of using onsite groundwater for all project water needs and using recycled water from either California City or Rosamond.
14. The analysis in the FSA presents the maximum environmental impacts and applicable mitigation from using onsite groundwater or either of the recycled water options such that the environmental analysis in the FSA envelopes the recycled cooling water options presented by Beacon.

### STIPULATION

In consideration of the decision by Beacon to change the cooling water source for the Project, Beacon, Staff and CURE agree to the following:

1. Beacon will use an alternative cooling water (estimated at an average of 1,282 acre feet per year) source for the Project using one of two ~~three~~ options:
  - 1.1 Recycled water from California City using the maximum amount of water that is available each day to satisfy daily cooling water demand under a 5 year phased approach, in increments of no less than 300 acre feet per year (California City providing no less than 300 acre feet in year 1, no less than 600 acre feet in year 2, no less than 900 acre feet in year 3, no less than 1200 acre feet in year 4, and full Project cooling water demand in year 5);
  - 1.2 Recycled water from the Rosamond Community Services District (“Rosamond”) delivered at an assumed rate of 1.3 million gallons per day with the Project using the maximum amount of water available each day to satisfy daily cooling water demand; ~~or~~ **(Staff is currently evaluating the flow rates available from Rosamond.**
  - ~~1.3 Degraded groundwater with a total dissolved solids content of at least 1000 parts per million.~~

2. Beacon will use onsite groundwater for potable, mirror washing and process uses (153 acre feet per year). Beacon will also use onsite groundwater for construction to allow site construction to proceed simultaneously with the construction of the selected alternative water supply pipeline and necessary infrastructure. Beacon will use onsite groundwater to provide cooling water for supplemental and emergency needs. **(Staff is currently evaluating the supply level from Rosamond and flow rates available and will be submitting revised Soil and Water Conditions of Certification to reflect the applicant's proposed use of recycled water and comments made by the applicant and CURE. This stipulation will be changed to reflect staff's Conditions of Certifications.)**

2.1 Beacon's use of onsite groundwater as a cooling water supply will not exceed 47 acre feet per year for emergency water needs without approval from the Compliance Project Manager (CPM). **(Staff is currently evaluating the use of onsite potable water for non-cooling purposes and will be submitting revised Soil and Water Conditions of Certification. This stipulation will be changed to reflect staff's Conditions of Certifications.)**

2.2 If Beacon selects California City as the cooling water supply for the Project, Beacon will use decreasing amounts of onsite groundwater as a cooling water supply over an anticipated 5 year period beginning with the recycled water supply providing 300 acre feet in year 1 and adding 300 acre feet each year until the entire cooling water needs for the Project are met from this source in year 5.

2.3 If Beacon selects Rosamond as the cooling water supply for the Project, Beacon will use onsite groundwater for cooling water when Rosamond has an insufficient daily supply of recycled water under normal treatment plant operations. The supplemental onsite groundwater use is anticipated to be 179 acre feet per year used from April through August. **(Staff is currently evaluating the supply level from Rosamond and flow rates available and will be submitting revised Soil and Water Conditions of Certification. This stipulation will be changed to reflect staff's Conditions of Certifications.)**

~~2.4 — If Beacon selects degraded groundwater near Koehn Lake as the cooling water supply for the Project, Beacon will use the degraded water for power plant cooling.~~

3. Because Beacon has decided to use one of the ~~three~~ two recycled-cooling water options presented by Staff in the FSA – recycled water from Rosamond or recycled water from California City, ~~or degraded groundwater from around Koehn Lake~~ -- the evaluation of dry cooling and photovoltaic technology does not need to be presented at the evidentiary hearings in the Proceeding.

4. Beacon, Staff and CURE acknowledge ~~agree to~~ disagreement on the assumptions, calculations and conclusions reached by each other in this Proceeding on the feasibility of using dry cooling for the Project or changing technology and employing a photovoltaic array.

5. Beacon, Staff and CURE agree to present no evidence, beyond entering into the record material already docketed such as the FSA and the parties responses to the FSA, on the

technical or financial infeasibility or feasibility of using dry cooling for this Project or employing photovoltaic technology and to limit evidence and testimony regarding alternatives to the two recycled water options

IN WITNESS WHEREOF, Beacon, Staff and CURE have executed this Stipulation as of December \_\_\_\_\_, 2009.

BY: \_\_\_\_\_

On Behalf of Beacon Solar LLC

BY: \_\_\_\_\_

On Behalf of California Energy Commission Staff

BY: \_\_\_\_\_

On Behalf of California Unions for Reliable Energy



**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT  
COMMISSION OF THE STATE OF CALIFORNIA  
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APPLICATION FOR CERTIFICATION  
For the *BEACON SOLAR ENERGY  
PROJECT*

Docket No. 08-AFC-2

PROOF OF SERVICE

*(Revised 12/15/09)*

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\*indicates change

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DECLARATION OF SERVICE

I, **Chester Hong**, declare that on **December 21, 2009**, I served and filed copies of the attached, **Draft Stipulation Regarding Cooling Water And Alternatives**, dated **December 21, 2009**. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at:

[\[http://www.energy.ca.gov/sitingcases/beacon/index.html\]](http://www.energy.ca.gov/sitingcases/beacon/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:

*(Check all that Apply)*

FOR SERVICE TO ALL OTHER PARTIES:

sent electronically to all email addresses on the Proof of Service list;

by personal delivery or by depositing in the United States mail at Sacramento with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."

**AND**

FOR FILING WITH THE ENERGY COMMISSION:

sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (*preferred method*);

**OR**

depositing in the mail an original and 12 paper copies, as follows:

**CALIFORNIA ENERGY COMMISSION**

Attn: Docket No. 08-AFC-2  
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.

\_\_\_\_\_  
/s/