DOCKET
09-AFC-9
DATE JUN 11 2010
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June 11, 2010

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

RE: Ridgecrest Solar Power Project (RSPP), Docket No. 09-AFC-9, Responses to Basin and Range Watch, Data Requests Set 3, #1-#5.

Dear Mr. Solorio:

As requested, attached please find Ridgecrest Solar I, LLC's responses to Basin and Range Watch, Data Requests Set 3, #1-#5. This has been docketed in accordance with CEC requirements.

If you have any questions, please feel free to contact me at 510-809-4662 (office) or 949-433-4049 (cell).

Sincerely,

Billy Owens
Director, Project Development

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

Docket No. 09-AFC-9

PROOF OF SERVICE
(Revised 6/9/2010)

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DECLARATION OF SERVICE

I, Elizabeth Copley, declare that on June 11, 2010, I served and filed copies of the attached Ridgecrest Solar Power Project (Docket No. 09-AFC-9) Responses to Basin and Range Watch Data Requests Set 3. 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/solar_millennium_ridgecrest].

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:

(C*heck all that Apply*)

For service to all other parties:

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

_ by personal delivery;

X by delivering on this date, for mailing with the United States Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses **NOT** marked "email preferred."

AND

For filing with the Energy Commission:

X 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. 09-AFC-9
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct.

RIDGECREST SOLAR POWER PROJECT (09-AFC-9)
BASIN AND RANGE NO. 3 DATA REQUESTS #1 - #5

Technical Area: Biological Resources (Section 5.3) **Response Date: June 11, 2010**

Following are responses to Set 3-Data Requests of Basin and Range, dated May 14, 2010.

B&R No. 3 DR-1

Data Request:

Regarding the conversion rates for the proposed cash-for-grass water offset program, we request answers to these items:

a. The 625.52 homes needed to convert from turf to xeriscape are 625 per year, correct? This would mean 18,765.6 homes (625.52 x 30) need to convert over the life of the project, correct?

b. In order to know whether this many homes can be converted in a reasonable time frame, we request to know the conversion rate in units of: homes converted to xeriscape/total number of homes in area/year for the Southern Nevada Water Authority.

c. In Data Response set 1 and 2 (Data Requests 132-192 Soils and Water), Jan 26 2010, it was stated that there are 6,191 owner occupied homes in Ridgecrest. Is this the current number of homes in the Indian Wells Valley (IWV) water district?

d. What is the growth rate in terms of homes per year of the IWV water district?

Response:

a. In order to achieve the required water offset of 215 afy from the conversion of turf to xeriscape, a total of 632 homes need to be enrolled in the cash-for-grass program each year. The number of homes required to achieve the offset of 215 afy is not cumulative over the years.

- Water Savings: 56 gallons per sq ft/yr (water savings) x 2,000 sq ft (average lawn) = 112,000 gal/yr per household (0.34 afy)
- 215 afy (required offsets) / 0.34 afy (water savings) = 632 homes
- 632 Homes is approximately 10% enrollment based on 6,191 homes in the City of Ridgecrest.

b. The average number of homes (statewide) that voluntarily participate in cash-for-grass programs is 5 percent (Addink 2004). Data does not say how long it takes to get to this level of participation.

c. The current number of single family homes in the Indian Wells Valley Water District is 10,848.

d. The growth rate in 2009 in terms of homes in the City of Ridgecrest (not including Inyokern), which is served by the IWVWD, is approximately 6 percent. This number is based on the 36 building permits issued in 2009 and on 6,191 owner occupied households in the City of Ridgecrest. In 2005, the growth rate for single family homes was 34 percent and declined to 3 percent in 2008. However, since a total of 632 homes are needed in the Cash-for-Grass program to achieve 215 afy of water savings and there are approximately 6,191 single family homes in the City of Ridgecrest, the growth rate is not relevant because there are enough homes to meet the water offset volume required for the Project.

References:

Addink, S. 2004, “Cash for Grass” – A Cost Effective Method to Conserve Landscape Water?, University of California – Riverside Truffgrass Research Facility, accessed at http://ucrturf.ucr.edu/).

B&R No. 3 DR-2

Data Request:

Were biological soil crusts surveyed for or encountered on the project site?

Response:

No surveys for biological soil crusts have been requested by CEC, USFWS, and/or CDFG. No biological soil crusts were reported during biological field surveys conducted for the RSPP.

B&R No. 3 DR-3

Data Request:

The applicant will be applying herbicides to keep weeds down, and these could potentially wash into the drainages and groundwater. Please specify exact management practices to prevent such occurrences.

Response:

Pre-emergent herbicides will be used to control invasive plant populations on site. Herbicide use for weed control is a common application in restoration sites, construction areas, and other disturbance areas. Herbicides will be applied by a licensed professional and will be selected based on site conditions. The herbicide application will not be conducted prior to or during a predicted rain event. The Weed Management Plan for the project details the application of herbicides for the project (Draft plan submitted with Data Request responses on January 6, 2009).

B&R No. 3 DR-4

Data Request:

Has the applicant entered into agreements with the farmers whose land they plan to fallow?

Response:

No, the applicant has not entered into agreements with the farmers whose land they plan to fallow, at this time.

B&R No. 3 DR-5

Data Request:

During field walks of the project site, we noticed along the western edge of the southern solar field an active wash coming out of the El Paso Mountain foothills to the west, focused through a narrow cement culvert structure in the old railway grade. This wash forms a deep channel with apparent high-energy flows at times through this narrow gap, then turns northwards and meanders in a less constrained channel along the western edge of the project South Field. It appears to flow within the Right of Way, and touch corners of the project footprint.

In the Staff Assessment/Draft Environmental Impact Statement for the Ridgecrest Solar Power Project (March 2010), p. c.9-41, it is said that: berms will be constructed along the south and west property boundaries to divert flow west and north into existing drainage to the west of the project.

In Data Response set 1 and 2 (Data Requests 132-192 Soils and Water) Jan 26 2010, the applicant states:

The upstream area from the south field is a relatively small area compared to the site as a whole and is generally centered in a flat ridge between El Paso Wash and a small un-named wash to the west. As such, the upstream area does not create a large flow of water to either channel, and the slopes, ground cover condition, and rocky crust in this area does not create much opportunity for sediment transport. The construction of the south field will intercept some of the drainage in a minor ephemeral wash that drains to the west, but this drainage will be allowed to meander westerly along the south boundary of the site to its prior point of connection with a drainage depression west of the solar field. This new drainage flow path is longer than the current flow path and thus flow velocities should be reduced compared to the existing small flow upstream of the south field. In addition, using the low impact drainage approach preferred by the BLM (allowing this intercepted water to migrate westerly in an overland flow condition) will not result in any discernible increase in sedimentation or erosion in this area.

Personal observation of the large amount of scour caused by this western ephemeral wash to the railway grade, as well as a plunge pool formed at the outflow side, lead us to request more information on how this wash might impact and erode the southwestern project boundary berms. Will soil cement be applied to the area? Berms may be eroded away over the 30-year life of the project. Please detail how flows from this meandering western wash will be managed to prevent erosion and disturbance to downstream washes.

Response:

The drainage culvert referenced above that is located beneath the old Southern Pacific Railroad ROW is approximately 1000 feet to the southwest of the site and the drainage coming through this culvert turns north into the less constrained channel referenced above in the first paragraph of Question 5 and there is no apparent impact to the site from this flow. This flow appears to be generally located 150 to 450 feet west of the project boundary (security fence) and the site is generally 5 to 10 feet higher in elevation than the 'less constrained' westerly channel referenced above.

The berm located at the south side of the site will be protected with soil cement and this protection will extend along the face of the berm as well as being extended below grade to guard against erosion. Any berm on the western periphery of the property along this 'less constrained' westerly wash that will experience erosional type flows as defined by the CEC Staff Assessment will be protected with soil cement.