State Of California The Resources Agency of California

Memorandum

Date: January 21, 2010
Telephone: (916) 654-4679
File: 09-AFC-10

To: Commissioner Robert Weisenmiller, Presiding Member
Chair Karen Douglas, Associate Member
Hearing Officer Kourtney Vaccaro

From: California Energy Commission - John Kessler
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Sacramento, CA 95814-5512

DOCKET
09-AFC-10
DATE JAN 21 2010
RECD JAN 21 2010

Subject: **RICE SOLAR ENERGY PROJECT (09-AFC-10)**
ISSUES IDENTIFICATION REPORT

Attached is staff's Issues Identification Report for the Rice Solar Energy Project (RSEP). This report serves as a preliminary scoping document that identifies issues that Energy Commission staff believes will require careful attention and consideration. Energy Commission staff will present the issues report at the January 25, 2010 Informational Hearing and Site Visit, that has been separately noticed by the assigned Committee for this proceeding.

This Issues Identification Report also provides a proposed schedule pursuant to the agreement for solar thermal projects 50 MW or larger with joint Bureau of Land Management (BLM) and California Energy Commission jurisdiction. BLM will consider issuing a Right-of Way grant for use of public lands associated with a portion of the proposed transmission line. As a result of the RSEP's proposed interconnection to a transmission line managed by the Western Area Power Administration (Western), Western will also be cooperating with BLM and the Energy Commission, and will serve as the lead federal agency for complying with the National Environmental Policy Act (NEPA).

cc: Proof of Service List
Docket 09-AFC-10

PROOF OF SERVICE (REVISED 1/7/10) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 1/21/10
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RICE SOLAR ENERGY PROJECT

(09-AFC-10)

ISSUES IDENTIFICATION REPORT

CALIFORNIA ENERGY COMMISSION

Siting, Transmission and Environmental Protection Division

ISSUES IDENTIFICATION REPORT
RICE SOLAR ENERGY PROJECT

(09-AFC-10)

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ISSUES IDENTIFICATION REPORT

Energy Commission Staff Report

PURPOSE OF THE REPORT

This report has been prepared by the California Energy Commission staff to inform the Committee and all interested parties of the potential issues that have been identified in the case thus far. These issues have been identified as a result of our discussions with federal, state, and local agencies, and our review of the Rice Solar Energy Project (RSEP) Application for Certification (AFC) filed October 21, 2009 and AFC supplemental material filed November 19, 2009. The Issues Identification Report contains a project description, summary of potentially significant environmental and engineering issues, and a discussion of the proposed project schedule. The staff will continue to address the status of issues and progress towards their resolution in periodic status reports to the Committee.

PROJECT DESCRIPTION

The proposed project is located in an unincorporated area of eastern Riverside County, California, immediately south of State Route (SR) 62 about 1 mile east of the junction with Blythe-Midland Road. The nearest permanent settlement is Vidal Junction, approximately 15 miles northeast, at the junction of SR 62 and U.S. Route 95. Blythe, California, is 40 miles south via Blythe-Midland Road.

The proposed RSEP project is a solar electric generating facility to be located on approximately 1,410 acres of private land which makes up a portion of the land used during World War II as Rice Army Airfield. The proposed site has some historical interest in that General George Patton trained troops at this field to acclimate them to desert warfare involving infantry, artillery and air support forces. After being abandoned in 1944, it was transferred into private ownership and remained operational until the late 1950s. Currently, Rice Army Airfield includes remnants of runways, dispersal pads, a concrete parade ground and concrete pads that were foundations for administrative structures, barracks, etc. The entire site has been recolonized by burrobush and native grasses, and partially by creosote bush scrub.

RSEP would be a 150-megawatt (MW) concentrating solar thermal power project with a central receiver tower, sun-tracking heliostat field and an integral thermal storage system using liquid salt as the heat transfer and storage medium. When electricity is to be generated, the heated salt would be routed to a steam generation system, which produces steam for reheated use in a high-efficiency turbine-generator. The RSEP proposes to use dry cooling technology for steam condensation using an air-cooled condenser (ACC).

TRANSMISSION

The proposed transmission line is a 10.0-mile-long generation tie-line that would connect with the Western's Parker-Blythe 161 kilovolt (kV) transmission line. The generation tie-line would be constructed partly on private land and partly on public land managed by BLM, and would require construction of 4.6 miles of new unpaved access road and use of 5.4 miles of existing dirt roads. A new substation would also be required at the point of interconnection with Western's existing transmission line. The new facilities would be constructed to design standards that allow operation at 161 kV and eventual upgrade to 230 kV.

WATER USE AND DISCHARGE

RSEP would use a dry-cooled system to significantly reduce water consumption, given the project's desert environment location and limited water supply. Water would be needed to dilute chemical concentrations of boiler water used in the steam cycle and for washing of the heliostats. The project would require up to 235 gallons per minute of raw water makeup, to be drawn from two onsite wells. Each well would have sufficient capacity to supply water for the plant needs throughout the expected 30-year operational life of the plant. Groundwater would be used as-is for domestic, service and fire water needs and further purified for use as boiler makeup and for washing mirrors in the heliostat field. The treatment process includes two multi-stage reverse osmosis (RO) units, and electrodeionization (EDI) equipment. Wastewater from the water treatment system, including first-pass RO reject and EDI as well as a portion of the steam cycle blowdown, would be discharged into three evaporation ponds of approximately 5 acres each. During project operations, RSEP's maximum total project water consumption would be approximately 180 acre-feet per year.

CONSTRUCTION AND OPERATION

If approved, construction of the generating facility, from site preparation and grading to commercial operation, is expected to take place from the second quarter of 2011 to the third quarter of 2013 (30 months total). If approved, the applicant anticipates that the project would be in commercial operation by the fourth quarter of 2013.

POTENTIAL MAJOR ISSUES

This portion of the report contains a discussion of the potential issues the Energy Commission staff has identified to date. The Committee should be aware that this report might not include all of the significant issues that may arise during the case. Discovery is not yet complete, and other parties have not had an opportunity to identify their concerns. The identification of the potential issues contained in this report is based on comments of other government agencies and on our judgment of whether any of the following circumstances could occur:

- Potential significant impacts which may be difficult to mitigate;

- Potential areas of noncompliance with applicable laws, ordinances, regulations or standards (LORS);
- Areas of conflict or potential conflict between the parties for which resolution may be difficult or may affect the schedule.

This report will not limit the scope of staff's analysis throughout this proceeding, but it aids in the analysis of the potentially significant issues that the Rice Solar Energy Project proposal poses. The following discussion summarizes the potential issues, identifies the parties needed to resolve the issues, and where applicable suggests a process for achieving resolution.

The table on the following page lists all the subject areas evaluated and notes that Biological, Soil and Water Resources, Transmission System Design and Visual Resources have been identified as potentially presenting significant issues. However, because discovery is not yet complete, it is possible that other significant issues will arise. The table also indicates the subject areas in which staff, at the present time, expects to issue data requests. Data requests in additional areas may become necessary as the case progresses.

Major Issues	DRs	Subject Area	Major Issues	DRs	Subject Area
No	Yes	Air Quality	No	Yes	Project Overview
No	Yes	Alternatives	No	Yes	Public Health
Yes	Yes	Biological Resources	No	No	Reliability
No	Yes	Cultural Resources	No	Yes	Socioeconomics
No	No	Efficiency	Yes	Yes	Soil and Water Resources
No	No	Facility Design	No	Yes	Traffic and Transportation
No	No	Geological Hazards	No	No	Trans. Line Safety & Nuisance
No	Yes	Hazardous Materials Management	Yes	Yes	Transmission System Design
No	Yes	Land Use	Yes	Yes	Visual Resources
No	No	Noise	No	Yes	Waste Management
No	No	Paleontological Resources	No	No	Worker Safety

BIOLOGICAL RESOURCES

Staff is working with California Department of Fish and Game (CDFG), U.S. Fish and Wildlife Service (FWS), Western and BLM to assess impacts to plant and animal habitat and species, and to determine appropriate mitigation. The federally- and state-listed desert tortoise is known to occur on the RSEP site. Staff anticipates some significant challenges to integrating all the necessary federal and state permits into the joint CEQA/NEPA environmental document based on the extent of data needed and the potential effects on schedule. To highlight these potential effects of outstanding biological data that will be needed by staff to complete its environmental assessment and determine appropriate mitigation, staff offers the following characterization of outstanding data:

1. Additional surveys/studies/project description including:
    a. Special–status plant species on the project site and adjacent properties that may be present and evident during the summer season;
    b. Those surveys necessary to support identification of potential relocation areas for the Draft Desert Tortoise Relocation/Translocation Plan based on the presence of suitable soils, vegetation, geomorphology, slope, existing and proposed future land uses, and existing or potential future threats to desert tortoise;
    c. Expanded analysis of site conditions and potential project impacts to wildlife movement;
    d. Delineation of desert washes and ephemeral drainages to include all the project area drainage features within active floodplains with a well-defined channel;
    e. Description of construction methods and potential ground disturbance including the extent and location of grading; and
    f. Description of operation and maintenance activity and potential ground disturbance and treatments which may affect plants and wildlife.

2. Consideration of design optimization to accomplish the following:
    a. To avoid or reduce impacts to the dry wash hydrologic, geomorphic, and ecological functions and values;
    b. Avoid the potential for mortality to desert tortoise that could result from the proposed project's stormwater diversion channel, to be constructed outside the perimeter/tortoise exclusion fence, which will alter and concentrate natural drainage patterns;
    c. Avoid or mitigate potential effects and mortality to birds that may be attracted to the proposed wastewater evaporation ponds; and
    d. Preparation of conceptual but more detailed grading and drainage plans to address the above concerns.

3. Preparation of draft biological resource protection plans including:
    a. Biological Assessment, to be submitted by BLM to USFWS, pursuant to Section 7 of the federal Endangered Species Act;
    b. Incidental Take Permit Application, pursuant to Section 2081 of the California Endangered Species Act;
    c. Draft Desert Tortoise Relocation/Translocation Plan, in support of the Biological Assessment;
    d. Raven Management and Control Plan in support of the Biological Assessment;
    e. Lake and Streambed Alteration Notification, pursuant to Section 1600 of the California Fish and Game Code;
    f. Revegetation Plan for Re-Routed Channels, in support of the Lake and Streambed Alteration Notification;
    g. Weed Management Plan, per BLM requirements; and
    h. Decommissioning Plan components, in support of Staff Assessment and NEPA impacts analysis.

4. Development of appropriate mitigation in coordination with CDFG, USFWS, Western and BLM for avoidance and minimizing impacts to wildlife and special-status plants;

Staff will continue to work closely with the agencies and the applicant to expedite the development of data and permit applications so that permit requirements can be integrated in the Staff Assessment/ Environmental Impact Statement (SA/EIS). With that goal in mind, staff plans to conduct frequent publically-noticed workshops to identify and quickly resolve biological resources issues that might otherwise delay preparation of permits and the SA/EIS. If desired by the applicant, staff will coordinate scheduling of a Data Request Workshop to answer applicant's questions regarding staff's Data Requests in a setting where the applicant's technical experts can speak directly with representatives from CDFG, USFWS, Western, BLM and the Energy Commission staff. Similar staff workshops will be scheduled as needed to quickly resolve biological resource issues as soon as they are identified. Even with a highly coordinated approach to issue resolution, and with continued close coordination and communication among the four agencies and the applicant, staff expects that it will be extremely challenging to avoid delays to the schedule for preparing the SA/EIS.

SOIL AND WATER RESOURCES

Staff is concerned with the potential for scour of the pylons for the heliostats that may be placed within dry washes of the project site. In the event that offsite stormwater is not routed around the site as currently proposed (due to ecological considerations or in response to staff's concern for containment structure breaches), the potential for scour may be more significant. Scouring effects from stormwater generated by significant storm events could destabilize the heliostats and cause failure and offsite discharge of mirror and other materials. Staff will work with the applicant to address this issue and avoid the potential degradation effects to the project and environment.

TRANSMISSION SYSTEM ENGINEERING

The RSEP plans to interconnect to Western's Parker-Blythe No. 1 - 161 kV line through a new 161/230 kV substation. Staff needs to determine the system reliability impacts of the project interconnection and to identify the interconnection facilities including downstream facilities needed to support the reliable interconnection of the proposed RSEP. The interconnection must comply with the Utility Reliability and Planning Criteria, North American Electric Reliability Council (NERC) Planning Standards, NERC/Western Electricity Coordinating Council (WECC) Planning Standards, California Independent System Operator (California ISO) Planning Standards and Western Area Power Administration (Western) Planning Standards. In addition the California Environmental Quality Act (CEQA) requires the identification and description of the "Direct and indirect significant effects of the project on the environment." For the compliance with planning and reliability standards and the identification of indirect or downstream transmission impacts, staff relies on the System Impact Study (SIS) and Facilities Study (FS) as well as review of these studies by the agencies responsible for insuring the interconnecting

grid meets reliability standards, in this case, Western according to their current Large Generator Interconnection Procedures (LGIP).

The System Impact Study (SIS) and the Facilities Study (FS) are not available for staff to review at this time. If the studies show the Rice Solar Energy Project would cause any transmission line overloads which might require transmission line reconductoring or other significant downstream upgrades, a general CEQA analysis will be required for the reconductoring as it is a downstream, indirect project impact. The applicant executed an agreement as of October 9, 2009 for Western to conduct the SIS, and is expecting Western to complete the SIS by late January/early February 2010. Should there be any delays in the availability of the SIS, the environmental analysis of potential upgrades could cause a delay in the licensing process for the RSEP. Staff has prepared Data Requests requesting the SIS.

VISUAL RESOURCES

Staff is concerned about significant effects on views from State Route 62, a state-eligible scenic highway where a number of Right-of-Way applications for renewable energy projects are being considered by BLM. Should staff conclude that the impact is significant, it is not likely that the impact could be mitigated considering that typical screening options for mitigation would be ineffective for the 653-foot high solar receiver tower and the array of solar heliostats. In addition, given the height of the tower and the fact that the top of the tower will glow with a sun-like intensity, this project is going to be visible from a large expanse of the surrounding desert. The remote location of the project will increase its visual impact. As the staff stated in its November 19, 2008 comments to the Renewable Energy Transmission Initiative (RETI) Stakeholder Steering Committee on the Proposed Competitive Renewable Energy Zone, there is a concern about developing remote and isolated areas of the desert and the impact such development will have on what is perceived by many viewers as previously undisturbed landscape.

PROJECT SCHEDULE

On the following page is staff's proposed schedule for the key events of the project. Meeting the proposed schedule will depend on: the applicant's timely response to staff's data requests; involvement and timely input by other local, state and federal agencies; the submittal of required applications and approval of permits by federal agencies; and other factors not yet known. The approval of applications and conditions of approval by other agencies will greatly affect the proposed schedule. This is particularly true of the Section 7 consultation by Western with the U.S. Fish and Wildlife Service regarding potential impacts to federally listed sensitive species, such as desert tortoise, and related mitigation options. Staff's proposed schedule would meet the applicant's objectives as stated in the AFC to be eligible to begin construction in spring 2011, subject to project approval by the Energy Commission, approval for electrical interconnection by Western and receipt of a Right-of-Way grant by BLM for the transmission line.

STAFF'S PROPOSED SCHEDULE – Rice Solar Energy Project (09-AFC-10)

ACTIVITY	DATE
Applicant files Application for Certification (AFC)	10/21/09
Commission's determination that AFC is complete	12/2/09
Staff files Issues Identification Report & Proposed Schedule	1/20/10
Informational Hearing and Site Visit	1/25/10
Staff/BLM/Western file Data Requests	1/28/10
NOI Published in the Federal Register (by Western)	TBD
Staff coordinates with agencies to obtain comments and permit requirements	1/29 – 2/27/10
Public Scoping Meeting (No earlier than 15 days after NOI publication)	TBD
Scoping Report Prepared/Published (30 Day period for public review) (30 days from NOI publication)	TBD
Applicant provides Data Responses	3/1/10
Data Response and Issue Resolution workshop	TBD (mid-March)
Status Report #1 (and thereafter every 6 weeks)	3/10/10
Local, state and federal agency draft determinations AQMD files PDOC	4/2/10
Administrative Staff Assessment/Draft Environmental Impact Statement (SA/DEIS)	4/15/10
Western/BLM internal review of Notice of Availability of SA/DEIS for Federal Register;	5/14/10
SA/DEIS published & 90-day comment period begins; BLM submits Biological Assessment (BA) to USFWS	5/28/10
Staff Assessment Workshop	6/17/10
Local, state and federal agency final determinations; AQMD files FDOC	6/18/10
BA determined adequate by FWS	6/26/10
Prehearing Conference*****	TBD – July?
Evidentiary hearings*****	TBD – July/Aug?
Close DEIS comment period	8/26/10
Prepare Response to DEIS comments; and Admin. Draft of Staff Assessment Errata/Final EIS	10/7/10
USFWS issues Biological Opinion	10/15/10
Staff Assessment Errata/FEIS distributed; NOA of SAE/FEIS in Federal Register (must be on a Friday)	11/5/10
Presiding Members Proposed Decision (PMPD)*****	TBD – Nov?

BLM Plan Amendment Protest Period ends; Expedited Governor's review period ends; see***	12/6/10
Committee Hearing on PMPD*	TBD – Dec?
Addendum/Revised PMPD*****	TBD – Jan. 2011?
BLM Record of Decision/Right of Way issued; Energy Commission Decision*****	TBD – Feb. 2011?

* The assigned Committee will determine this part of the schedule.

** BLM will make every attempt possible to publish its NOA concurrently with EPA NOA which always occurs on a Friday. EPA's NOA initiates the 90-day public comment period on the Draft PA/DEIS as well as the protest period on the Proposed PA/FEIS. Since the 90-day public review and comment period may never end on a Saturday, Sunday or Holiday, it would end on the first business day following.

*** Since the 30-day protest period may never end on a Saturday, Sunday or Holiday, it would end on the first business day following. Governor consistency review is 60-days by BLM Planning Regulations.

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
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APPLICATION FOR CERTIFICATION FOR THE *RICE SOLAR ENERGY POWER PLANT PROJECT*

Docket No. 09-AFC-10

PROOF OF SERVICE
(Revised 1/7/10)

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*indicates change

DECLARATION OF SERVICE

I, Hilarie Anderson , declare that on January 21, 2010, I served and filed copies of the attached, Issues ID Report. 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/ricesolar].**

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:

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

__x__ by personal delivery or by depositing in the United States mail at Sacramento, California 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:

__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-10
1516 Ninth Street, MS-4
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I declare under penalty of perjury that the foregoing is true and correct.

Original Signature in Dockets
Hilarie Anderson