

# Memorandum

Date: November 18, 2009  
Telephone: (916) 654-4894  
File: 09-AFC-8

To: Commissioner Julia Levin, Presiding Member  
Vice-Chair James D. Boyd, Associate Member  
Hearing Officer Ken Celli

From: California Energy Commission - Mike Monasmith  
1516 Ninth Street Siting Project Manager  
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<b>DOCKET</b>	
<b>09-AFC-8</b>	
DATE	<u>11/18/09</u>
RECD.	<u>11/18/09</u>

Subject: **GENESIS SOLAR ENERGY PROJECT (09-AFC-8)**  
**ISSUES IDENTIFICATION REPORT**

Attached is staff's Issues Identification Report for the Genesis Solar Energy Project. 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 December 10, 2009 Informational Hearing and Site Visit, to be 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 and California Energy Commission jurisdiction.

cc: Proof of Service List  
Docket 09-AFC-8

# **GENESIS SOLAR ENERGY PROJECT**

(09-AFC-8)

## **ISSUES IDENTIFICATION REPORT**

**CALIFORNIA ENERGY COMMISSION**

**Siting, Transmission and Environmental Protection Division**

# ISSUES IDENTIFICATION REPORT GENESIS SOLAR ENERGY PROJECT

(09-AFC-8)

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# **ISSUES IDENTIFICATION REPORT**

Energy Commission Staff Report

## **PURPOSE OF THE REPORT**

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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 Genesis Solar Energy Project Application for Certification (AFC) filed August 31, 2009 and AFC Supplemental material filed October 12, 26 and 29, 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**

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The proposed project site is located approximately twenty-five miles west of the city of Blythe in Riverside County, approximately halfway between Blythe and the community of Desert Center, four miles north of Interstate-10 (I-10).

Project Genesis would consist of two, independent solar electric generating facilities with a nominal net electrical output of 125 megawatts (MW) each, for a total net electrical output of 250 MW. The project would utilize solar parabolic trough technology to activate a heat transfer fluid (HTF). This HTF provides a high-temperature energy source which is used to generate steam. As this steam expands through the turbine generators, electrical power is produced. Natural-gas-fired auxiliary boilers will provide HTF freeze protection, as well as performing the function of a startup boiler.

## **TRANSMISSION**

A proposed new transmission line, along with a new access road and new natural gas pipeline will be co-located in one linear corridor to serve the main project facility. This 6.5-mile transmission line would cross I-10, and tie into the Blythe Energy Project Transmission Line (BEPTL), which is currently under construction. The transmission line would use the existing pole structures of the BEPTL to interconnect with Southern California Edison's proposed Colorado River Substation.

## **WATER USE AND DISCHARGE**

The project proposes to use a wet cooling tower for power plant cooling. Water for cooling tower makeup, process water makeup, and other industrial uses such as mirror washing would be supplied from onsite groundwater wells. The testing data provided in the AFC indicates that the on-site groundwater is brackish, with high levels of total

dissolved solids. Project cooling water blowdown will be piped to lined, onsite evaporation ponds. After used project water has gone through the evaporation process, the solids that settle at the bottom of the evaporation pond will be tested by the applicant and disposed of in an appropriate non-hazardous waste disposal facility. When completed, Project Genesis will require a total of approximately 1,644 acre-feet of ground water per year to operate.

If approved, construction of the generating facility, from site preparation and grading to commercial operation, is expected to take place from the fourth quarter of 2010 to the fourth quarter of 2012 (24 months total). If approved, the applicant anticipates that the project would be on line and in commercial service by the fourth quarter of 2012.

## **POTENTIAL MAJOR ISSUES**

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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 Genesis 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. At this time, staff does not see these potential issues as non-resolvable.

The table on the following page lists all the subject areas evaluated and notes that Biological, Cultural, and Soils and Water Resources, along with Transmission System Design have been identified as potentially 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	No	Project Overview
No	Yes	Alternatives	No	Yes	Public Health
Yes	Yes	Biological Resources	No	No	Reliability
Yes	Yes	Cultural Resources	No	No	Socioeconomics
No	No	Efficiency	Yes	Yes	Soils and Water Resources
No	No	Facility Design	No	No	Traffic and Transportation
No	Yes	Geological Hazards	No	No	Trans. Line Safety & Nuisance
No	Yes	Hazardous Materials Management	Yes	No	Transmission System Design
No	Yes	Land Use	No	Yes	Visual Resources
No	No	Noise	No	Yes	Waste Management
No	Yes	Paleontological Resources	No	Yes	Worker Safety

## BIOLOGICAL RESOURCES

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Staff is working with the California Department of Fish and Game (CDFG) to establish the extent of impacts to waters of the state associated with the applicant's proposal for re-routing the numerous ephemeral drainages on the project site. It has also been coordinating closely with the U.S. Fish and Wildlife Service (USFWS) and the U.S. Bureau of Land Management (BLM) to assess potential project impacts to sensitive habitats and species. Staff is encouraged by the level of participation and cooperation exhibited by all three agencies at this early stage in project review, but nevertheless anticipates significant challenges to integrating all the necessary federal and state permits into the joint CEQA/NEPA environmental document within the timeframe outlined by the Renewable Energy Action Team's (REAT's) permitting milestone guidance.

Staff will continue to work closely with CDFG, USFWS, BLM and the applicant to expedite the development of permits such as the CDFG Streambed Alteration Agreement and Incidental Take Permit, as well as the federal Section 7 consultation to address potential impacts to listed species. 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 Staff Assessment/Draft Environmental Impact Statement. The first such workshop is planned for November 19, 2009 and is intended 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 and BLM. Similar staff workshops will be scheduled as needed to quickly resolve biological resource issues as soon as they are identified. Even with this aggressive 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 meet the REAT permitting milestone schedule.

## **CULTURAL RESOURCES**

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Staff is working with the U.S. Bureau of Land Management (BLM) to establish the extent of resources of cultural and historical significance, and to assess potential project impacts upon these resources. Given the compressed schedule for the production of a Staff Assessment, and the need for coordination with the BLM, staff is developing two cultural resources review protocols that will enable it to meet schedule deadlines. One of these protocols includes the likely development of a Programmatic Agreement (MOA) with the California State Historic Preservation Office involving reasonably foreseeable impacts, inventory surveys, and justified levels of mitigation based on significance assumptions that will ultimately provide appropriate, and timely, discovery and analysis. Another issue is the impact on the schedule that may be caused with cultural resource considerations within the Alternatives analysis.

## **SOILS AND WATER RESOURCES**

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The applicant proposes pumping groundwater from the Chuckwalla Groundwater Basin for power plant cooling. Information presented by the applicant shows that groundwater that would be extracted from the basin is high in total dissolved solids and can be considered impaired for municipal, potable and agricultural uses. The use of impaired groundwater with Total Dissolved Solids (TDS) above 3,000 parts per million (ppm) is consistent with State Water Resources Control Board and Energy Commission water policies regarding use of freshwater as a last resort choice for power plant cooling. Furthermore, availability and sustainability of groundwater supplies for potable use have become an issue of statewide concern particularly given the current drought conditions and restrictions on Sacramento-San Joaquin Delta pumping. Impaired water supplies generally have limited potential for use as a municipal or potable water supply. In desert environments like the project site, however, the threshold for what would be considered an impaired water body or supply can be relatively high depending on the need and use for water in a given area.

Staff is concerned that groundwater pumping could potentially pose cumulative impacts at McCoy Springs or other seeps and springs within the Chuckwalla Valley Groundwater Basin. Based on preliminary review of groundwater modeling, staff also has questions and concerns regarding the adequacy of the characterization of potential impacts.

The Energy Commission staff will be working with the Mojave Water Agency, the Colorado River Regional Water Quality Control Board and the applicant to fully evaluate potential impacts, feasible mitigation measures, and alternative water sources and possibly alternative cooling technologies to resolve these issues.

## **TRANSMISSION SYSTEM ENGINEERING**

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Genesis Solar Energy Project proposes to interconnect to Southern California Edison's (SCE) planned Colorado River Substation. SCE has not received permitting approval for the Colorado River Substation but a decision on whether or not the substation is approved is expected by early 2010. If SCE does not receive timely approval for the Colorado River Substation the proposed Genesis interconnection may not be viable. Identification of a new interconnection point, if necessary, may affect the project's generator tie line and could delay staff's analysis.

## **PROJECT SCHEDULE**

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On the following page is staff's proposed 12-month 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 the Bureau of Land Management 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 – Genesis Solar Energy Project - (09-AFC-8)

ACTIVITY	DATE
Commission's determination that AFC is complete	11/4/09
Staff files Data Requests	11/13/09
Staff files Issues Identification Report	11/18/09
Data Request Workshop	11/23-11/24/09
Informational Hearing and Site Visit	12/10/09
Applicant provides Data Responses	12/14/09
Data Response and Issue Resolution workshop	TBD
Technical staff receive final comments and conditions from appropriate agencies	1/4/10-1/10/10
Administrative Staff Assessment/Draft EIS (SA/DEIS)	1/25/10
Local, state and federal agency draft determinations AQMD files PDOC	2/12/10
Notice of Availability of SA/DEIS in Federal Register; SA/DEIS filed and 90-day comment period begins; BLM submits Biological Assessment (BA) to USFWS	2/19/10
Staff Assessment (SA) published	3/3/10
Staff Assessment Workshop	3/17/10
BA determined adequate by USFWS	3/19/10
Local, state and federal agency final determinations AQMD files FDOC	4/9/10
Staff Assessment Addendum (SAA) prepared	4/30/10
Prehearing Conference*	TBD
Evidentiary hearings*	TBD
Close BLM comment period	5/20/10
Response to comments, prepare Staff Assessment Addendum(SAA)/FEIS	7/1/10
Administrative SAA/FEIS circulated for agency staff review	7/9/10
USFWS issues Biological Opinion	7/15/10
SAA/FEIS distributed; NOA of SA/FEIS in Federal Register	7/30/10
BLM Plan Amendment Protest Period ends; Expedited Governor's review period ends	8/30/10
Presiding Members Proposed Decision (PMPD)*	TBD
Committee Hearing on PMPD*	TBD
Addendum/Revised PMPD*	TBD
BLM Record of Decision/Right of Way (ROD/ROW) issued; Energy Commission Decision*	TBD

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



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

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

**Docket No. 09-AFC-8**

***PROOF OF SERVICE***  
(Est. 11/4/09)

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DECLARATION OF SERVICE

I, Maria Santourdjian, declare that on November 18, 2009, I served and filed copies of the attached Issues Identification Report for the Genesis Solar Energy Project (09AFC-8), dated November 18, 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/genesis\_solar].

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, CA 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-8  
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.

Original Signature in Dockets  
**Maria Santourdjian**