

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov



October 22, 2009

DOCKET
08-AFC-13

DATE	OCT 22 2009
RECD.	OCT 22 2009

Felicia Bellows
Vice President of Development
Tessera Solar
4800 North Scottsdale, Road, Suite 5500
Scottsdale, AZ 85251

RE: STIRLING ENERGY SYSTEMS SOLAR ONE PROJECT (08-AFC-13) - DATA REQUESTS SET 2, PART 1 (#s 128-141)

Dear Ms. Bellows:

Pursuant to Title 20, California Code of Regulations, Section 1716, the Bureau of Land Management (BLM) and California Energy Commission (Energy Commission) staff seek the information specified in the enclosed data requests. The information requested is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess potential mitigation measures.

Part 1 of this second set of data requests (#128-141) is being made in the areas of Air Quality (#128-131), Alternatives (#132-138), and Project Description (#139-141). In order to address these issues in the BLM and Energy Commission joint environmental document, written responses to the enclosed data requests are due to the BLM and Energy Commission staff on or before November 22, 2009, or at such later date as may be mutually agreeable. Part 2 of this set of data requests, including Cultural Resources, Land Use, Soil and Water Resources, and Visual Resources, will be filed by November 6, 2009.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, you must send a written notice to both the Committee and me within 20 days of receipt of this notice. The notification must contain the reasons for not providing the information, the need for additional time, and the grounds for any objections (see Title 20, California Code of Regulations, Section 1716 (f)).

If you have any questions, please call me at (916) 653-1639 or email me at cmeyer@energy.state.ca.us.

Sincerely,

Original signed by:
Christopher Meyer, Project Manager

Enclosure

cc: Docket (08-AFC-13)
Proof of Service List

PROOF OF SERVICE (CREATED 07/20/09) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 10/22/09

AA

Technical Area: Air Quality
Author: William Walters

BACKGROUND: UNPAVED ROAD STABILIZATION - GEOTEXTILES

The applicant's response to staff Data Request #15 discussed the proposed use of geotextiles in conjunction with the polymer based soil binder for unpaved road stabilization in heavily traveled areas. Staff needs more information regarding the properties and use of the proposed geotextiles.

DATA REQUESTS

128. Please provide information on the types and composition of the geotextiles that would be proposed for use at the site. Information should include referencing manufacturer websites as appropriate and available.
129. Please describe in greater detail the purpose and method of the geotextile use, the soil or road use conditions that favor its use, and the amount of geotextile that would be applied per unit area including the number of geotextile layers that might be used.
130. Please describe the assumed decommissioning required for the embedded geotextiles during project decommissioning. This should include information on the natural decomposition of the geotextiles if their removal would not be proposed during decommissioning.

BACKGROUND: UNPAVED ROAD STABILIZATION TIMING ASSUMPTIONS

The applicant's response to staff Data Request #23 was not clear regarding the timing of road treatment during construction. Staff needs additional information to assess the applicant's revised construction emission estimates.

DATA REQUEST

131. Please clearly describe the assumed/proposed timing of road stabilization during construction and the related emission control assumptions used for the on-site road travel fugitive dust emission calculations for construction. Specifically, discuss whether the unpaved roads be constructed and stabilized prior to initiating all other construction activities that would be accessed by these roads.

Technical Area: Alternatives
Author: Suzanne Phinney

BACKGROUND

In AFC Section 4.3, Alternative Sites Considered, five alternative site locations are identified. The discussion of environmental impacts associated with each site is very limited. Lack of railroad and major highway access, conflicts with off-highway vehicle (OHV) areas and the Twentynine Palms military base, and interference with desert tortoise critical habitat are provided (without further explanation) as reasons for not moving the sites forward for detailed evaluation. However, the environmental suitability of a site encompasses many more attributes, and other issue areas are not discussed or referenced.

The environmental community has recently developed renewable siting criteria to provide ecosystem level protection to the California Desert Conservation Area by giving preference to disturbed lands, steering development away from lands with high environmental values, and avoiding the deserts' undeveloped cores (TN52471 – SES Solar One Project Scoping Comments from Wildlands Conservancy with attached Renewable Siting Criteria for the California Desert Conservation Area memorandum, 07/07/09). Understanding how the project site and the alternative sites compare in terms of these criteria will help determine the appropriateness of both the proposed project site and the alternative site locations identified in Section 4.3.

DATA REQUEST

132. Please fill in the table below to compare the alternative sites with the proposed project using the criteria developed by the environmental community:

Environmental Criteria	Proposed Project Site	AS1: Camp Rock Rd	AS2: Upper Johnson Valley	AS3: West of Twentynine Palms	AS4: I-40 South	AS5: Broadwell Lake
Is site mechanically disturbed?						
Is site located adjacent to degraded and impacted private lands?						
Is site a Brownfield?						

Environmental Criteria	Proposed Project Site	AS1: Camp Rock Rd	AS2: Upper Johnson Valley	AS3: West of Twentynine Palms	AS4: I-40 South	AS5: Broadwell Lake
Is site located adjacent to urbanized areas (indicate distance)?						
Does site require the building of new roads (indicate length)?						
Could site be served by existing substations (indicate name and distance)?						
Is site located proximate to sources of municipal wastewater (indicate name and distance)?						
Is site located proximate to load centers (indicate name and distance?)						
Is site located adjacent to federally designated corridors with existing transmission lines?						

Environmental Criteria	Proposed Project Site	AS1: Camp Rock Rd	AS2: Upper Johnson Valley	AS3: West of Twentynine Palms	AS4: I-40 South	AS5: Broadwell Lake
Does site support sensitive biological resources, including federally designated and proposed critical habitat; significant populations of federal or state threatened and endangered species, significant populations of sensitive, rare and special status species and rare or unique plant communities?						
Is site within an Area of Critical Environmental Concern, Wildlife Habitat Management Area, proposed HCP and NCCP Conservation Reserves?						
Does site contain land purchased for conservation including those conveyed to BLM?						
Does site contain landscape-level biological linkage areas required for the continued functioning of biological and ecological processes?						

Environmental Criteria	Proposed Project Site	AS1: Camp Rock Rd	AS2: Upper Johnson Valley	AS3: West of Twentynine Palms	AS4: I-40 South	AS5: Broadwell Lake
Is the site within Proposed Wilderness Area, proposed National Monuments, and Citizens' Wilderness Inventory Areas						
Does the site contain wetlands and riparian areas, including the upland habitat and groundwater resources required to protect the integrity of seeps, springs, streams or wetlands?						
Is the site a National Historic Register eligible site and does it contain other known cultural resources?						
Is the site located directly adjacent to National or State Park units?						

BACKGROUND

AFC Figure 4-1 and Revised Figure 4-1 (Data Response #49) provide land management and transmission infrastructure data in relation to the five alternative sites identified in Section 4.3 of the AFC. Staff would like to view additional map layers in relation to each site.

DATA REQUEST

133. Please prepare separate maps at a scale of 1:36,000 for each of the five alternative sites. For each site, an aerial or topographic map should have overlays of the site boundary, township ranges, and property parcels. Label roads and other features.

BACKGROUND

Section 4.5 of the AFC discusses four alternative road access options for the proposed site.

DATA REQUEST

134. Please provide a map at a scale of 1:36,000 depicting all four of the alternative road access options.

BACKGROUND

The Wildlands Conservancy submitted scoping comments (dated July 7, 2009) that suggested starting with Phase 2 of the proposed project and making Phase 1 optional. In response, Staff would like to evaluate a phased alternative in which only Phase I or Phase II would initially be permitted, with the potential for the other phase to be constructed after CEC and BLM assessment of the potential impacts and engineering concerns associated with the first phase. In order to consider these options, a clear breakdown of environmental impacts from Phase I and II is needed.

DATA REQUEST

135. Please provide an analysis of cultural and biological impacts for Phase 1 only and for Phase 2 only. Provide this by giving us both a map illustrating distribution of resources on each phase and also a tabular list of resources on each phase.
136. Please provide an air quality criteria pollutant and GHG emission estimates for the construction and operation of Phase 1 only and for Phase 2 only.

BACKGROUND

Scoping comments on the proposed project from the Wildlands Conservancy and Defenders of Wildlife suggest moving the northeast edge of the project site to the west, to allow for a wildlife corridor along the interface of the environmentally-sensitive Cady Mountains. The lava flows and adjacent sandy soils also support rare plants (such as white-margined beardtongue) and endemic lizards. Furthermore, the Wilderness Society recommends an alternative that does not overlap with Catellus Lands; Revised Figure 4-1(data response #49) indicates that Phase 1 includes some Catellus Lands.

DATA REQUEST

137. Please provide an alternative configuration for Phase 1 of the proposed project that takes these concerns into account.

BACKGROUND

The analysis by staff resource specialists may identify specific areas within the proposed project boundaries where concentrations of resources exist. In order to protect some areas of valuable resources within the site, it may be necessary to consider eliminating SunCatcher dishes in specific areas.

DATA REQUEST

138. Please describe any possible engineering constraints that would limit or preclude the avoidance of high value resource areas within the proposed site boundaries.

Technical Area: Project Description
Author: Christopher Meyer

BACKGROUND:

The SES Solar One Project will utilize hydrogen, both to initially fill the Stirling engines, and to replenish hydrogen that leaks from the engines. The AFC refers to a local and/or distributed hydrogen system (AFC p. 3-15). Appendix K of the AFC outlines the use of k-bottles mounted on each SunCatcher unit with five weekly deliveries of hydrogen to sustain project operations described in the Traffic and Transportation section (AFC, 5.11-12). Staff needs to understand if the hydrogen system proposed in the AFC has changed and how any changes will impact the various technical sections.

DATA REQUEST

139. Please provide information on how the hydrogen for the SES Solar One Project will be produced and delivered to the individual SunCatcher units.
140. Please update any air quality modeling (if applicable) to account for changes to hydrogen delivery truck trips.
141. Please update any traffic and transportation impacts (if applicable) to account for changes to hydrogen delivery truck trips.



**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**

**APPLICATION FOR CERTIFICATION
For the SES SOLAR ONE PROJECT**

Docket No. 08-AFC-13

PROOF OF SERVICE

(Revised 7/20/09)

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DECLARATION OF SERVICE

I, April Albright, declare that on October 22, 2009, I served and filed copies of the attached, Stirling Solar Systems Solar one Project (08-AFC-13) – Data Requests Set 2, Part 1 (#s 128-141) dated October 22, 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:
[www.energy.ca.gov/sitingcases/solarone].

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, 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:

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-13
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.

Original signed by: _____
April Albright