

Memorandum

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Subject: HIDDEN HILLS SOLAR ELECTRIC GENERATING SYSTEM (11-AFC-2)
 STATUS REPORT #1

Per the November 16, 2011 Committee scheduling order, attached is Energy Commission staff's Status Report #1 for the Hidden Hills Solar Electric Generating System (HHSEGS). This status report will discuss and update issues that Energy Commission staff initially identified in its October 26, 2011 Issues Identification Report as requiring careful attention and consideration, including Alternatives, Biological Resources, Cultural Resources, Land Use, Socioeconomics, Water Resources, Transmission System Engineering and Visual Resources. This report will also provide a quick summary of other technical disciplines that have been an inherent part of HHSEGS discovery.

Based upon the issue discussions within Status Report #1, staff has proposed an updated schedule for the Committee's consideration, including a revised date for the publication of the Preliminary Staff Assessment.

cc: Proof of Service List
 Docket 11-AFC-2

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**HIDDEN HILLS SOLAR ELECTRIC
GENERATING SYSTEM**

(11-AFC-2)

STATUS REPORT #1

CALIFORNIA ENERGY COMMISSION

Siting, Transmission and Environmental Protection Division

**STATUS REPORT #1
HIDDEN HILLS SOLAR ELECTRIC
GENERATING SYSTEM**

(11-AFC-2)

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STATUS REPORT #1

Energy Commission Staff

OVERVIEW

This Status Report assumes that the reader has familiarity with the proposed Hidden Hills Solar Electric Generating System (HHSEGS) project description. For those who may need project description details, please review the Energy Commission webpage for HHSEGS here: <http://www.energy.ca.gov/sitingcases/hiddenhills/index.html>. Since the commencement of HHSEGS discovery on October 5, 2011, staff has actively engaged the applicant through a series of workshops and data requests. Specifically, publicly noticed workshops were conducted in Sacramento on October 21, November 18, December 1 and December 16, 2011, and on October 27, 2011 in Inyo County, with an additional Data Response / Issues Resolution Workshop planned for January 18, 2012 in Tecopa, CA (Inyo County). Staff has issued six rounds of data requests encompassing 146 questions for the following technical disciplines: Air Quality, Alternatives, Biological Resources, Cultural Resources, Efficiency, Land Use, Socioeconomics, Soils, Traffic and Transportation, Waste Management, Water Resources, Worker Safety/Fire Protection and Visual Resources.

ISSUES SUMMARY

In order to provide a thorough update on the HHSEGS proceeding, the following pages contain updates on the technical disciplines initially discussed by staff in the October 26, 2012 Issues Identification Report. In general, staff feels that the discovery phase of the proposed HHSEGS project review has proceeded in a positive and productive manner. However, the applicant and staff disagree on the appropriate level of review required under CEQA in some important issue areas, most notably Cultural Resources. Moreover, challenges exist in additional issue areas like Biological Resources, where despite ongoing coordination with other resource agencies, there still exists challenges in completing the project assessment within the Committee's current schedule.

The following technical issue updates were developed by contributions from the corresponding Energy Commission staff authoring the HHSEGS staff assessment:

ALTERNATIVES	Jeanine Hinde
BIOLOGICAL RESOURCES	Carol Watson/Joy Nishida
CULTURAL RESOURCES	Kathleen Forest/Mike McGuirt
LAND USE	Christina Snow
SOCIOECONOMICS	Lisa Worrall
TRANSMISSION SYSTEMS	Sudath Edirisuriya
WATER RESOURCES	Mike Conway/Marylou Taylor
VISUAL RESOURCES	Mellissa Mourkas

ALTERNATIVES

Off-site Alternatives

Subsection 6.2 of the HHSEGS AFC discusses eight alternative sites that were part of the screening analysis for off-site alternatives to the HHSEGS project:

- Centennial Flat
- Panamint Valley
- Chicago Valley
- Tecopa
- Sandy Valley
- Death Valley Junction
- Calvada South
- Trona

The project applicant carried forward the Calvada South and Trona sites for further analysis in the AFC. The remaining six were not retained by the project applicant for further analysis based on a limited review of the sites' characteristics compared to the applicant's screening criteria. Based partially on information provided by the applicant in the AFC, Energy Commission staff (staff) concurs with the project applicant's rejection of the Centennial Flat, Panamint Valley, Chicago Valley, Tecopa, and Death Valley Junction alternative sites.

Subsections 6.2.2 and 6.2.3 of the AFC provide discussions of the Calvada South and Trona sites and compare the potential environmental impacts of those alternatives to the HHSEGS project. Subsection 6.3, "Selection of the Proposed Site," of the AFC concludes that "no alternative site would feasibly attain most of the basic objectives of the project, avoid any potentially significant effects of the project and also avoid significant effects of its own." In characterizing the Calvada South alternative and comparing it to the proposed HHSEGS project, the applicant concludes that the alternative site "has greater desert tortoise densities and the greater potential to impact sensitive plant species."

Staff reviewed the information in the AFC and used other maps and resource data to characterize the Calvada South and Trona sites. Staff is not retaining the Calvada South site for further analysis based partially on the predicted high habitat values at the site. In addition, the screening level review of the site's characteristics has not resulted in identification of any potential environmental impacts that would be avoided or reduced at the Calvada South site compared to the proposed project.

Several issues and potential environmental impacts are identified at the Trona site indicating its infeasibility as an alternative to the proposed project:

- *Visual Resources* – probable high visual impacts due to the site's remote character and location relative to Death Valley National Park.

- *Water Supply* – uncertain water supply for the project given that potable water is piped from either Indian Wells Valley (as stated in the AFC) or Ridgecrest (as indicated by staff).
- *Biological Resources* – potential high biological resource values due to its location in the Mohave Ground Squirrel (*Spermophilus mohavensis*) Conservation Area, a high U.S. Geological Survey (USGS) desert tortoise (*Gopherus agassizii*) habitat index value, and the potential to impact critical habitat for the Inyo California towhee (*Pipilo crissalis eremophilus*).
- *Transmission Line Interconnection* – unknown feasibility of interconnecting at the Inyokern Substation near U.S. Route 395.
- *Location Relative to Military Lands* – predicted need for extensive coordination with the U.S. Department of Defense because of the site’s location near the China Lake Naval Air Weapons Station.

Staff reviewed the screening level information provided by the project applicant on the Sandy Valley site and determined that more information was needed to adequately evaluate the site. (See the attached figure that shows the location of the Sandy Valley alternative site relative to the proposed HHSEGS site.) On November 17, 2011, Data Requests Set 1C was submitted to the project applicant, which included requests for additional information on the applicant’s analysis of the Sandy Valley alternative site (Data Request #77a – #77n). Staff received responses to this data request on December 19, 2011. In those responses, the applicant submitted information originally provided to staff in the August 5, 2011 AFC, and stated that the Sandy Valley alternative site “was not carried forward due to the infeasibility of acquiring site control for the necessary acreage due to the vast number of private landowners.” Partial responses were provided for items #77b and #77d. However, no new information of substance was provided for the other items asked as part of Data Request #77. In fact, the applicant repeatedly stated in their responses that the “applicant does not possess this information because this alternative was not carried forward....”

The applicant’s responses to Data Request #77b include Figure DR77-1 (attached), which provides partial information on private land ownership in the Sandy Valley area. Public lands generally surround an area where eight landowners are identified. Ownership for many properties within the area is not provided. No acreage data is provided in the text or the figure. The information provided in Figure DR77-1 is incomplete and does not provide a sufficient basis for the applicant’s conclusion of infeasibility.

Alternatives Table 1 summarizes information provided by the applicant to date on the Sandy Valley site. The criteria listed in the table include the screening criteria used by the applicant to eliminate sites from detailed analysis.

Alternatives Table 1 Information from the Project Applicant on the Sandy Valley Alternative Site	
Criteria	Sandy Valley Alternative Site
Area and slope	Uncertain whether contiguous land of adequate size is available. No information on slope is provided.
Ability to obtain site control	Sufficient private land may be available, but many parcels are in agricultural use.
General plan and zoning	The Sandy Valley lands appear to be in the Agriculture (A) land use designation. The Inyo County zoning primarily appears to be Open Space with a minimum 40-acre parcel size (OS-40).
Transmission lines	Approximately 50 miles of new transmission line required.
Natural gas pipeline	The Kern River Gas Transmission pipeline is about 25 miles away.
Water supply	Individual wells supply water.
Desert tortoise	The site is among the alternatives with the highest ratings for tortoise habitat suitability; however, much of the land has already been disturbed by agricultural use (see staff's notes below).
Mohave ground squirrel	No information provided, but staff notes that the site is not within the range of Mohave ground squirrel.
Visual quality	No information provided.
Economic viability	"Medium" because the linears are long, but not as long as for other alternative sites (see staff's notes below).
<p>Notes: The U.S. Geological Survey desert tortoise habitat rating is 0.6, and the site is adjacent to areas with ratings of 0.5 and 0.6. These are mid-range index values on a scale that ranges from 0.0 (lowest value) to 1.0 (highest value) (Nussear et al. 2009). The linears for the Sandy Valley alternative are comparable to those proposed for the HHSEGS project. The proposed project would require either 39 miles or 67 miles of new transmission line, depending on the selected transmission option.</p>	

Alternative Solar Technologies

Subsection 6.7 of the alternatives analysis prepared by the applicant in the AFC discusses alternative technologies and restates the project goal to "produce solar energy using BrightSource's proprietary solar power tower (SPT) technology."

Subsection 6.7.1 of the applicant's alternatives analysis discusses alternative solar technologies, including a *central tower project with integral thermal storage*, a *parabolic trough alternative*, and a *solar photovoltaic (PV) alternative*. The introductory discussion includes the following general statement: "These alternative technologies are not as cost-effective as the SPT technology." For the discussion of each solar technology in

the AFC, the applicant briefly describes how the technology works and why it was not selected.

Central Tower with Integral Thermal Storage

The alternatives analysis in the AFC lists problems for a project with integral thermal storage, stating that it would:

- cost much more than a project without integral thermal storage,
- require a larger plant footprint to accommodate the thermal storage tanks,
- increase risks related to the fluid becoming solid, and
- include risks associated with the super-heated fluid.

Staff observes that several articles published on Web sites since the AFC was filed in August 2011 indicate that BrightSource Energy is proposing the addition of thermal energy storage capability to its solar thermal power plants planned at two sites in California referred to as Siberia and Sonoran West (EarthTechling 2011a and 2011b). A recent press release from BrightSource Energy describes how adding storage to its power tower projects will provide utilities with “cost-competitive, reliable, and dispatchable clean power that meets peak demand” (BrightSource Energy 2011). Other sources indicate that adding molten-salt storage at the facilities discussed in these articles may significantly improve energy production, require smaller site footprints, and use fewer materials (Bloomberg 2011, Forbes 2011).

Parabolic Trough

The alternatives analysis in the AFC briefly describes a parabolic trough system and concludes that the technology was not selected because of its lower efficiency, greater impacts to vegetation, higher storm water impacts, and greater impacts to worker safety. Staff notes that slope conditions at the HHSEGS site may meet the minimum slope requirement for a parabolic trough project; the preliminary geotechnical evaluation for the project states that elevations at the project site are 2,675 to 2,585 feet above mean sea level, and the site slopes gently to the west. The applicant’s analysis generally refers to impacts pertaining to “worker safety, fire protection, and environmental hazards associated with the thermal fluid.” No further details are provided.

Solar Photovoltaic

The alternatives analysis in the AFC briefly describes the solar PV power plant system and concludes that the technology was not selected because of its “inherent technical limitations, chiefly, intermittency, which at the desired scale poses significant challenges to grid system stability.”

Conclusions and current status

The applicant’s responses to Data Request #77 include statements on the infeasibility of an alternative at the Sandy Valley site based on the number of private property owners and the costs associated with consolidating sufficient land for a project at the alternative site. The applicant includes the following statement in the response to Data Request #77a: “Even assuming that the agricultural lands might be available for sale [at the Sandy Valley site], land consolidation and landowner cooperation is expected to be

too time consuming and costly to obtain site control within a reasonable time period and certainly not in time for planned commercial operations, targeted for the first/second quarter of 2015.” The applicant has not provided complete information on the number of private landowners at the conceptually identified Sandy Valley site. This information is necessary for an analysis of its feasibility as an alternative to the proposed project.

The applicant’s discussion of alternative solar technologies in Subsection 6.7 of the AFC does not include information sufficient to allow a meaningful comparison of a project using another solar technology to BrightSource’s proposed SPT project. The applicant states in the August 2011 AFC that the alternative technologies discussed in Subsection 6.7 are not as cost-effective as the SPT technology. Barely any information is provided on the potential environmental effects of projects using alternative solar technologies. No information is provided to allow a cost comparison of the alternatives to the proposed project.

Staff requires additional information to complete an analysis that complies with the requirements of the California Environmental Quality Act (CEQA), including Section 15126.6 of the CEQA Guidelines (State CEQA Guidelines). The discussion of alternatives to the proposed project must “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives” (14 Cal. Code Regs., § 15126.6[a]). The State CEQA Guidelines further require that the discussion shall be focused on alternatives “which are capable of avoiding or substantially lessening any significant effects of the project, *even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly*” [emphasis added] (14 Cal. Code Regs., § 15126.6[b]).

Inclusive responses to staff’s data requests on the project alternatives presented by the applicant in the AFC are necessary for staff to complete an analysis of the application (20 Cal. Code Regs., §§ 1716[a], 1716[b]). Without complete information from the applicant, progress on staff’s analysis will be affected.

On January 9, 2012, Data Requests Set 2A was submitted to the applicant, including Alternatives Data Requests #137 – #140. These data requests include re-packaged requests for information on the Sandy Valley site; topics include:

- possible site footprint
- number of private landowners
- land use
- adjacent public lands
- transmission line interconnection
- natural gas pipeline connection
- site access
- groundwater levels
- water supply and usage
- visual resources

- biological resources
- cultural resource sensitivity
- economic viability

Set 2A Data Requests (#'s 138-140) request information on the three alternative solar technologies discussed above. The requested information includes details that will allow comparative discussions on environmental effects, potential benefits (e.g., efficiency, reliability, and capacity), and the extent to which an alternative would satisfy the project objectives.

Energy Commission staff from the Environmental and Engineering offices will have an opportunity to briefly visit the Sandy Valley site during its planned trip to southeastern Inyo County for the publicly-noticed Data Response and Issues Resolution Workshop on January 18, 2011. Staff in attendance will include the primary author of the Alternatives analysis (in addition to staff from the water and soils, cultural resources, biological resources, and visual resources disciplines).

BIOLOGICAL RESOURCES

To date, staff has conducted public workshops to discuss biological resource issues with wildlife agency staff and the applicant on October 21, November 18, December 1, December 6, and December 16, 2011.

Staff and the applicant are working to resolve the following biological resource issues; however resolution of certain of these issues may take additional time and could affect the project schedule:

- suitable compensatory mitigation for loss of desert tortoise habitat and individuals may be difficult to identify and later approve within the project region since staff believes that compensation land options may be limited (in Inyo County). It is always preferable that compensation lands be close to the project site and of similar or better habitat value;
- staff continues its resource agency collaborations with CDFG and the USFWS regarding appropriate desert tortoise habitat compensation ratios and other conservation measures for the proposed project (including the identification of tortoise translocation sites, and an agency-approved translocation plan that could be challenging to craft given jurisdiction and state border issues);
- staff continues to investigate the potential loss of habitat and is collaboratively determining appropriate mitigation for species with special protections located onsite, including desert kit fox, burrowing owl, and American badger;
- staff seeks information on potential effects of the power tower technology on raptors and birds (migratory and resident) as well as bat species in the project area, and is working towards the development of associated mitigation plans. Specifically, staff needs to better understand modeled solar flux zones at collector towers and effects on birds and raptors and potential hazards of reflected light energy to birds flying near the collector towers;

- staff continues to seek and accumulate information on golden eagle use and territories within a 10-mile radius of the project, including breeding and non-breeding use of the site; eagle nests are believed to be located primarily in Nevada, along the proposed transmission line corridor, however historic nests may occur within the vicinity of the proposed HHSEGS power plant site;
- staff currently lacks a specific jurisdictional delineation of state waters, per Section 1600 of California Fish and Game Code, in order to develop appropriate recommended mitigation and impact minimization measures;
- staff is currently coordinating with the Lahontan Water District to incorporate details of the federal Section 401 Certification (Clean Water Act) into the Preliminary Staff Assessment;
- staff will continue to work toward specific discussions with the applicant (and all interested parties) on how to best mitigate impacts to ten special-status plant species identified on-site during focused botanical surveys. Some plants occur in very large densities throughout the project site, including the recent California Native Plant Society-listed gravel milk-vetch and Nye milk-vetch, which are very rare in California and were not known to exist around the project site until they were discovered during special-status plant surveys completed for the proposed project; and,
- staff continues its work internally and with other parties to determine whether or not the project's groundwater pumping could impact phreatophytic (deep-rooted plants that rely upon available groundwater supply) vegetation and, if necessary, develop an appropriate monitoring program and associated mitigation measures.

Status of Needed Reports:

1. 1st Quarterly *Anabat* Report (*Anabat* device has been installed and is operating and the first preliminary bat survey results may be provided in spring 2012)
2. Phase III Burrowing Owl Survey report (surveys will be performed beginning February 1, 2012)
3. Draft State Water Delineation Report (surveys concluded) expected soon
4. Golden Eagle Fall Helicopter Survey Report (surveys performed late 2011)
5. Golden Eagle Pedestrian Survey Report (expected June 2012)
6. Offsite Botanical Survey Reports (surveys completed fall 2011) – applicant has indicated that these reports are likely to be provide mid-January 2012
7. Reports from ongoing Songbird Point Counts (performed every other week throughout the year) and eagle/raptor observations – staff anticipates updated survey data in February, 2012

CULTURAL RESOURCES

Preparation of the cultural resources analysis continues to proceed; however, staff has encountered a number of challenges in efforts to gain adequate information regarding the potential cultural resources in the project vicinity. These challenges have come in the form of objections to a number of the cultural resources Data Requests. Data Request Set 1D included data requests from cultural resources staff designed to further clarify the significance of the resources present on or in proximity to the project site, and the potential impacts to those resources. Staff further clarified the objectives of the Data

Requests during the December 16, 2011, workshop with the applicant. Subsequently, the applicant objected to four of staff's data requests; partially objected to seven; and requested additional time to respond to five. Responses to the remaining 18 data requests were received on January 6, 2012. Of those, six included information sufficient for staff to proceed with the analysis of those items.

Staff requested, as part of Data Request Set 1D, three additional studies of the project site and vicinity in order to ensure full consideration of any potential historical resources that may be affected by the proposed project. The applicant has objected, partially or in full, to all three studies. The applicant has fully objected to Data Requests 105 and 106, which request that the applicant design and execute an investigation of the paleohydrology and paleoecology of the portion of the step fault zone just east of the project site. The cultural resources unit is considering subcontracting out this study rather than requiring the applicant to complete this work. Staff has also determined that Data Requests 113, 123, 125, and 129-32 will be addressed internally, either by staff or consultants. Data Request 104 was objected to by the applicant; however, they also requested additional time to provide a response and staff looks forward to receiving that information.

The applicant has also partially objected to Data Requests 127 and 128, in which staff requested Phase II archaeological evaluation of nine of the fourteen sites within the project site and buffer area, to determine whether these sites would be historical resources for the purposes of CEQA. The applicant has agreed to perform the requested work on the two sites that their consultant has recommended as potentially eligible. However, staff does not have sufficient data regarding the remaining seven sites to determine their eligibility and feels strongly that this work needs to be completed prior to reaching conclusions on the impact of the proposed project to potential historical resources or proposing possible mitigation. Staff may need to request a motion to compel if the applicant continues to refuse to provide this information in a timely manner.

Additionally, staff continues to work with representatives of the local Native American communities and the Nevada BLM, and met with those representatives on December 2, 2011 to discuss the impacts of the project to cultural and visual resources. A third meeting with the local Native American representatives is scheduled for January 19, 2012; the potential for ethnographic resource conflicts arising later in the licensing process remains, which could impact the schedule. These potential resources are also the subject of Data Requests 129-132, discussed above. The Tecopa Chapter of the Old Spanish Trail Association (OSTA) is also interested in the potential impacts of the project and cultural and visual staff has met with their representatives as well. Staff is continuing to work with OSTA to identify any potential cultural resources and impacts as a result of the proposed project.

The Committee's consideration of a motion to compel for the applicant to complete the work outlined in Data Requests 127 and 128 and the resulting field investigations is likely to have a significant impact on the project schedule. The reticence of the applicant to provide the information will, unfortunately, further impact the schedule.

LAND USE

In April 2011, the Inyo County Board of Supervisors adopted a Renewable Solar and Wind Energy General Plan Amendment (REGPA) that established several "Renewable Energy Land Use Designation Overlay Zones," including a renewable zone (Charleston View) encompassing the site of the proposed HHSEGS project. The REGPA provided the basis for approvals of solar or wind renewable energy facilities and established policies to encourage development of renewable energy in overlay zones in any zoning district under Title 18 Zoning code, subject to Title 21 of the Inyo County Code.

On September 6, 2011, the Inyo County Board of Supervisors rescinded the County's REGPA because of a legal challenge from the Sierra Club and the Center for Biological Diversity. The County's action effectively eliminated the overlay zone and caused the proposed HHSEGS project to be inconsistent with Inyo County's land use designation and zoning district for the project site (General plan designation of Open Space and Recreation, Open Space 40-acre minimum zoning).

The following is an update on steps taken to remedy the inconsistencies with regard to land use:

- On November 4, 2011, staff docketed and submitted Data Requests Set 1B, to the applicant (BrightSource Energy, Inc). Land Use Data Requests 74 and 75 requested additional information pertaining to updated mapping and discussion on how the applicant would proceed given the inconsistency with land use designations and zoning.
- On December 6, 2011, the project manager, Mike Monasmith, received a letter from the County of Inyo Board of Supervisors (dated November 29, 2011). The letter identified pertinent LORS that the Energy Commission should take into account when analyzing the proposed HHSEGS project. These included the County Renewable Energy Ordinance (Title 21), the Inyo County general plan and the zoning ordinance (Title 18).
- On December 5, 2011, the applicant submitted a response to Land Use Data Requests 74 and 75, indicating that they would discuss the land use issues with Inyo County and provide additional information to the Energy Commission in their Data Responses being prepared for Data Request Set 1C (93 and 94 submitted to the applicant on November 17, 2011).
- The applicant indicated that although they would discuss the potential for a general plan amendment (GPA) with Inyo County, they stated this action should not be necessary prior to the Energy Commission's final decision. Additionally, the applicant stated that the HHSEGS project was not subject to the zoning ordinance OS-40 zone requirements, but instead was subject to Inyo County's Renewable Energy Ordinance (Title 21).

- On December 19, 2011, the applicant submitted their responses to Land Use Data Requests 93 and 94. The applicant indicated that they had not submitted a GPA and that they were still in discussions with Inyo County. The applicant did not submit an updated map depicting the project location and general plan designation as requested on November 4, 2011. Staff is currently working with the Energy Commission Cartography Unit to develop one using GIS data obtained from the County.

Staff has had numerous conversations with Inyo County, read the applicable LORS related to land use and made the determination that the proposed HHSEGS project is inconsistent with Inyo County's general plan designation and zoning code. The REGPA was the applicable general plan land use designation that would have allowed the applicant to submit the proposed project consistent with the general plan in any zone under Title 18 pursuant to further requirements under Title 21.

Title 21 remains in effect and provides Inyo County options to implement necessary development standards and mitigation measures and identifies a process where a renewable energy project can be consistent with applicable LORS regardless of the zone district under Title 18. Under Title 21 the project must also be consistent with the county general plan before an applicant can either obtain a Renewable Energy Permit from or enter into a Renewable Energy Development Agreement (Section 21.08.100) with the County prior to commencing construction of the proposed project. For projects not subject to the Permit, the Planning Commission issues a Renewable Energy Impact Determination.

Staff has requested that the applicant provide Inyo County applications as necessary for consistency with LORS and to work with Inyo County so that staff can consider pertinent county input when developing proposed conditions of certification. Inyo County has indicated that the applicant has submitted a "Renewable Energy Development Application" although Inyo County states that this is not the proper submittal to remedy the land use inconsistency. Inyo County has determined the appropriate applications would be a GPA and either a Renewable Energy Development Agreement or a Zone Change and Renewable Energy Permit.

Staff's Preliminary Staff Assessment (PSA) for land use will indicate HHSEGS's inconsistency with the Inyo County general plan and zoning ordinance. This inconsistency could result in a significant impact determination for Land Use (Appendix G checklist in the CEQA Guidelines). Staff has received input from Inyo County with regard to what requirements the County would have imposed on the HHSEGS project were they the permitting agency and this information will be discussed in the PSA.

SOCIOECONOMICS

During a meeting between Energy Commission staff and Inyo County staff on December 16, 2011, Inyo County informed Energy Commission staff that they are generating a letter to provide feedback from each county department on the expected economic fiscal impacts from the project. The Sheriff's Department is part of Inyo

County and their feedback will be included in the letter, however, the Southern Inyo Fire Protection District (SIFPD) is a separate entity from the county so will not be included. This letter is being generated with assistance from Inyo County's economic consultant, Gruen & Gruen + Associates. To date, Energy Commission staff has not received this letter.

Socioeconomics staff contacted Larry Levy, acting Chief with SIFPD, on December 23, 2011 to learn what movement has occurred with respect to their assessment of project impacts to emergency medical response services. Energy Commission staff anticipates receiving feedback from the District in a month. The Inyo County Sheriff's Department and SIFPD are responding to staff's letter and needs assessment form that was sent to them on September 30, 2011.

TRANSMISSION SYSTEM ENGINEERING

Work performed by the California Independent System Operator (CAISO) regarding the transmission system impact analysis that will describe reinforcement work or system additions that would be required by the HHSEGS project has yet been reported to staff. Accordingly, until this analysis is performed, or such impacts are otherwise identified, as was indicated in the Issues Identification Report, staff cannot determine the extent of HHSEGS' transmission impacts, nor analyze any resulting environmental consequences or potential mitigation.

WATER RESOURCES

The applicant proposes to meet Hidden Hills Solar Energy Generating Station (HHSEGS) project needs with groundwater from the Pahrump Valley groundwater basin. The project would require up to 288 acre-feet per year (AFY) for project construction and 140 AFY for operation. The Pahrump Valley groundwater basin is currently in severe overdraft. Absent project effects, basin water levels directly beneath the proposed site could fall approximately 20 feet over the next 30 years from existing agricultural and domestic uses. Superimposed project pumping could result in a potential water level drop of up to 50 feet of total drawdown at the project site over the next 30 years.

Preliminary review of the AFC and supporting documentation indicates the additional proposed project pumping could also result in significant impacts to other users in the basin. The impacts would occur in the form of local drawdown effects on adjacent well owners and an ongoing reduction in basin storage.

Both California and Nevada residents share the Pahrump Valley groundwater basin. Settlement and water use in the basin has occurred primarily on the Nevada side of the basin. Many of the water rights in the Nevada side of the basin were established prior to implementation of Nevada's statewide groundwater water rights system, which now stipulates land owners acquire water use permits prior to pumping. Domestic users do

not require water rights and therefore, total basin demand is not accurately described by quantified water rights. Furthermore, a significant portion of the water rights in the Pahrump Valley are not currently being exercised. Nevada has established a safe yield for the Pahrump groundwater basin of about 12,000 AFY. The current pumping of the basin far exceeds this safe yield.

California generally does not regulate the use of underground water. In California, with exceptions that do not apply here, overlying landowners have the right to install wells and pump groundwater for reasonable and beneficial uses. Preliminary review of available information shows there is little to no groundwater data available for the California side of the basin, in comparison to data from the Nevada portion of the basin.

To mitigate impacts, the Hidden Hills project owner proposes to secure water rights of up to 400 AFY for the life of the project through purchase from existing water rights holders in Nevada. The availability of water rights that could be retired and thus be used to offset project water use is unclear. The terms of the water rights purchases and how much water use they would actually retire may also be difficult to resolve and could put in question the viability of the proposed mitigation. Opportunities to offset project water use and reduce the project's contribution to overdraft may exist on either side of the state line. Potential groundwater monitoring and mitigation measures are being explored, which are still far more likely to be available in Nevada given its current higher water usage and system of water rights and a lack of groundwater management in California. Agricultural land-use retirement may also be a source of water use mitigation in both California and Nevada.

Data for characterization of the Pahrump Valley groundwater basin is limited. Staff continues its research and collaboration with BLM Nevada and other stakeholders on the availability of groundwater water and its current use. Water unit staff continues to raise concerns about the viability of the proposed water supply. However, the applicant has yet to provide staff with data that gives confidence that the groundwater basin can furnish enough water for the project. Instead the applicant provided data about a recent pump test that failed due to declining water levels.

Staff also has serious concerns about the applicant's proposal to deepen neighboring wells to mitigate for project-induced water level declines. Staff has yet uncover enough data to indicate that these wells could even be deepened to supply more water, should declining water levels due to HHSEGS pumping occur. Staff raised these issues in its most-recent water questions couched in Data Requests Set 2A.

In a January 12, 2012 phone meeting with BLM and USGS of Nevada, staff learned that Stump Springs is an Area of Critical Environmental Concern (ACEC). BLM has a significance trigger (35 feet below ground surface (bgs)) for declining water levels at the spring. The water level at the spring is currently at 30 feet bgs and is expected to decline to a level near the 35 foot trigger. The aquifer performance test requested of the applicant by staff (in Data Requests Set 2A) may further help determine the potential impact to this ACEC.

VISUAL RESOURCES

Staff is concerned about potentially significant visual effects on views of the greater Pahrump Valley. These concerns are from the perspective of motorists, Native Americans, recreationists and local residents. The primary impact would be from the two 750-foot Solar Power Towers and Solar Receiver Steam Generators and their dominance in the landscape. While there are no scenic highways or byways identified in the project vicinity, views from the Nopah Range and Pahrump Valley Wilderness Areas would be affected, as would views from the Historic Old Spanish Trail, which are all located in California. In Nevada, it is not clear if views from the Spring Mountains National Recreation Area or from the Mount Charleston Wilderness Area would be affected due to topography. Views of Mount Charleston from various vista points in California may also be significantly impacted by the project. The potential significant and potentially adverse visual impact of the project is unmitigable due to the height of the proposed towers.

Staff has issued one set of Data Requests (Set 1A) and received data responses in November, 2011. The applicant provided staff with an additional KOP as requested (KOP-7) for the Old Spanish Trail (OST), a National Historic Trail. However, research conducted by the applicant seems to be incomplete, as the members of the Old Spanish Trail Association (OSTA) have reviewed the selected KOP-7 location and indicate that it is not actually located on the Old Spanish Trail trace, but it is located on the Mormon Trail. Cultural and Visual Resources staff has obtained survey maps from OSTA and have shared them with the applicant.

In addition, staff prepared a data request for a KOP-8 (Data Request #33) to reflect the concerns of the Native American Tribal members after consultation with the tribes. At the initial tribal consultation outreach meeting on August 2, 2011, at least one member of the Pahrump Paiute had indicated interest in a KOP-8 taken from the foothills of the Nopah Wilderness. The applicant filed a letter in response on November 7, 2011, which indicated a deep reluctance on their part to pursue KOP-8. Visual and Cultural Resources staff are currently in the process of determining the need for the KOP-8 in consultation with the Native American Community and hope to determine the need for the additional KOP at our upcoming meeting on January 19, 2012. If needed, staff will conduct its own assessment of KOP-8.

Concerns have been identified by owners of the Tecopa Hot Springs Resort that the proposed facility would have the potential to impact their resort as a destination for dark sky advocates and tourists. Staff has concerns that the project's security and operational lighting, even with lighting controls as mitigation, combined with the cumulative effects of nighttime lighting as the Pahrump Valley develops, could cause an unmitigable effect on dark skies and dark sky tourism in the region.

Visual Resources staff has to date had only one conversation regarding nighttime lighting with the owner of Cynthia's Ranch in Tecopa who indicated that the primary and dominant source of nighttime lighting is from Las Vegas to the southeast and that there

is virtually no spillover of light from the Pahrump Valley to Tecopa. The concern was initially raised In October, 2011, by the Tecopa Hot Springs Resort management to the Public Adviser's Office staff. Staff has the opportunity to investigate this further on an upcoming overnight field visit to Tecopa on January 18-19, 2012.

Staff also has concerns as to the accuracy of several of the KOP simulations as submitted by the applicant and has retained a consultant to review the simulations for their accuracy. Visual Resources and Traffic and Transportation staff have concerns about the glint and glare impacts of the project. A glint and glare consultant has been retained to evaluate the impacts as presented by the applicant and independently assess the impacts for both technical sections.

The applicant provided an updated Figure DR 37-1 depicting the potential visibility of the heliostats through the valley and surrounding ranges. Staff is satisfied with this response. Staff also requested through a data request to include the on-site transmission poles in KOP-3 (Set 1A). The applicant responded that the transmission poles are outside the field of view of KOP-3.

Lastly, staff is concerned that there are no KOPs which include the transmission poles and that this may limit the ability of staff to fully analyze the visual impacts of the proposed project's structures. Staff is preparing additional Data Requests it plans to file in the first of February, 2012 regarding the following areas: glint and glare, visibility of reflected dust particles, transmission poles, plans and elevations of the heliostat structures and wilderness area visitation counts.

OTHER ISSUES SUMMARY

The Hidden Hills SEGS Preliminary (and Final) Staff Assessment will be comprised of 21 distinct, technical discussions. Air Quality staff have issued a number of data requests, including the latest (Set 2B) questions posed to the applicant on projected emissions associated with mirror washing, and an inquiry as to whether or not the air impacts analysis should include project commissioning because those values shown for commissioning are higher than those for a cold start (if not, the applicants should justify why they did not include these values in their modeling). Previous Air Quality questions related to Greenhouse Gas (GHG) factors associated with project construction and operation are still under review, and Energy Commission staff continue to work closely with the Great Basin Air Quality Management District as they develop their first ever Preliminary (and Final) Determination of Compliance for an Energy Commission jurisdiction project.

Staff is also working diligently to conclude their initial investigations and discovery on issues related to Waste Management (both hazardous and non-hazardous for construction and operation); and, Worker Safety / Fire Protection inquiries (awaiting results of a Fire Risk Assessment and a Fire Protection Needs Assessment asked of the applicant in Data Request #96).

PROJECT SCHEDULE

As was indicated in our Issues Identification Report, meeting the proposed schedule depends upon a number of factors, including: 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 or expected, like project changes. And while the over-all tone of applicant-staff cooperation has been good, staff has not received completely thorough and adequate data responses from the applicant in key technical disciplines, including Alternatives, Biological Resources, Cultural Resources, Land Use and Visual Resources. And while critical input and collaboration from other local, state and federal agencies is ongoing, it has not progressed at the rate staff had initially hoped and planned. Accordingly, staff is now estimating an additional six weeks in order to publish a *complete* Preliminary Staff Assessment, as the following "revised" staff schedule indicates.

STAFF'S REVISED SCHEDULE – Hidden Hills SEGS - (11-AFC-2)

ACTIVITY	DATE
AFC filed	08-05-11
AFC Data Adequacy determination at Commission Business Meeting	10-05-11
Staff files Data Requests (Set 1A)	10-17-11
Data Request Workshop (Sacramento) – Sacramento	10-21-11
Field Visit + Data Request Workshop – Tecopa	10-27-11
Information hearing and site visit (Tecopa)	11-03-11
Staff files Data Requests (Set 1B)	11-04-11
Applicant files Data Responses (Set 1A)	11-16-11
Staff files Data Requests (Set 1C)	11-17-11
Data Request / Data Response Workshop – Sacramento	11-18-11
Data Request / Data Response Workshop – Sacramento	12-01-11
Staff files Data Requests (Set 1D)	12-06-11
Applicant files Data Responses (Set 1B)	12-07-11
Data Request / Data Response Workshop – Sacramento	12-16-11
Applicant files Data Responses (Set 1C)	12-17-11
Applicant files Supplement Data Responses Set 1A	12-30-11
Staff files Data Requests (Set 2A)	01-06-12
Status Report #1	01-17-12
Data Response / Issues Resolution Workshop – Tecopa	01-18-12
Committee Status Conference	01-24-12
Data Response / Issues Resolution Workshop – Sacramento	01-25-12
Status Report #2	02-15-12
Committee Status Conference	02-28-12
Status Report #3	03-15-12
Committee Status Conference	04-03-12
Preliminary Staff Assessment filed	04-13-12



**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
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**APPLICATION FOR CERTIFICATION
FOR THE *HIDDEN HILLS SOLAR ELECTRIC
GENERATING SYSTEM***

DOCKET NO. 11-AFC-2
PROOF OF SERVICE
(Revised 12/22/2011)

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DECLARATION OF SERVICE

I, Elizabeth Stewart, declare that on, January 17, 2012, I served and filed copies of the attached Energy Commission Staff Status Report #1, dated January 17, 2012. This document is accompanied by the most recent Proof of Service list, located on the web page for this project at: [www.energy.ca.gov/sitingcases/hiddenhills/index.html].

The document has been sent to the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit or Chief Counsel, as appropriate, in the following manner:

(Check all that Apply)

For service to all other parties:

- Served electronically to all e-mail addresses on the Proof of Service list;
- Served by delivering on this date, either personally, or for mailing with the U.S. 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 "e-mail preferred."

AND

For filing with the Docket Unit at the Energy Commission:

- by sending an electronic copy to the e-mail address below (preferred method); **OR**
- by depositing an original and 12 paper copies in the mail with the U.S. Postal Service with first class postage thereon fully prepaid, as follows:

CALIFORNIA ENERGY COMMISSION – DOCKET UNIT

Attn: Docket No. 11-AFC-2
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

OR, if filing a Petition for Reconsideration of Decision or Order pursuant to Title 20, § 1720:

- Served by delivering on this date one electronic copy by e-mail, and an original paper copy to the Chief Counsel at the following address, either personally, or for mailing with the U.S. Postal Service with first class postage thereon fully prepaid:

California Energy Commission
Michael J. Levy, Chief Counsel
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I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

Originally Signed by
Elizabeth Stewart