

CALIFORNIA ENERGY COMMISSION

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



**STATE OF CALIFORNIA
 ENERGY RESOURCES CONSERVATION
 AND DEVELOPMENT COMMISSION**

California Energy Commission DOCKETED 09-AFC-8C
TN # 66682 AUG 15 2012

In the Matter of:)
)
Genesis Solar Energy Project) **Docket No. 09-AFC-8C**
)
) **Order No. 12-0809-5**
)
Genesis Solar, LLC) **ORDER APPROVING**
) **the Petition to Amend the Final Decision**
)
)

On April 7 2012, Genesis Solar, LLC (NextEra Energy) submitted a petition requesting approval of a rerouted gen-tie line, a rerouted natural gas line, construction of a new dedicated substation (and ring bus) adjacent to the Colorado River Substation, and for amended air quality conditions resulting from the use of new equipment. The modifications will allow the project owner to comply with unanticipated third-party agency requirements and terms of a new Large Generation Interconnect Agreement (LGIA). The project owner has requested approval of both Option A and Option B for both the gen-tie line and natural gas line and for approval of changes to Energy Commission Conditions of Certification that would facilitate the use of new equipment.

The air quality modifications were approved by the Mojave Desert Air Quality Management District’s (MDAQMD) Authority to Construct (ATC) Permit.

STAFF RECOMMENDATION

Energy Commission staff reviewed the petition and finds that it complies with the requirements of Title 20, Section 1769(a) of the California Code of Regulations and recommends approval of Genesis Solar LLC’s petition to modify the Genesis Solar Energy Project and to amend related Conditions of Certification.

ENERGY COMMISSION FINDINGS

Based on staff’s analysis, the Energy Commission concludes that the proposed changes will not result in any significant impact to public health and safety, or the environment. The Energy Commission finds that:

- The petition meets all the filing criteria of Title 20, section 1769(a) of the California Code of Regulations concerning post-certification project modifications;

- The modification will not change the findings in the Energy Commission's Final Decision pursuant to Title 20, section 1755;
- The project will remain in compliance with all applicable laws, ordinances, regulations, and standards, subject to the provisions of Public Resources Code section 25525;
- The Change will be beneficial to the public and the project owner because the Genesis Solar Energy Project will continue to operate in compliance with both the MDAQMD Permit and the Energy Commission Conditions of Certification.
- There has been a substantial change in circumstances since the Energy Commission certification justifying the change, and the change is based on information that was not available to the parties prior to Energy Commission certification because the changes require reconfiguring the routing of the gen-tie line and the natural gas line. The change(s) will also re-establish consistency between the Energy Commission conditions and the Authority to Construct Permit issued by the MDAQMD.

CONCLUSION AND ORDER

The California Energy Commission hereby adopts Staff's recommendations and approves the following changes to the Commission Decision for the Genesis Solar Energy Project. New language is shown as **bold and underlined**, and deleted language is shown in ~~strikeout~~.

CONDITIONS OF CERTIFICATION

AQ-SC9 The engines used during the commissioning phase shall be registered under the ARB Portable Equipment Registration Program. They shall be fueled with natural gas rather than diesel to the degree that site conditions allow.

Verification: Prior to engine use, the project owner shall provide the District and the CPM documentation of the portable equipment registration from the ARB.

AQ-SC10 The facility is allowed to use portable engines between the hours of 8 am and 5 pm (peak operating hours) as long as the hourly emissions from all portable engines combined do not exceed the following limits:

NOx: 86.95 lb/hr

PM10: 3.29 lb/hr

At all other times (non-peak operating hours) emissions shall be limited to the following:

NOx: 14.25 lb/hr

PM10: 0.84 lb/hr

In addition, from May through August, if power block unit 2 undergoes commissioning first while unit 1 is under construction, then peak

operating hours can be extended to begin at 7 am and conclude at 6 pm.

However, if power block unit 1 undergoes commissioning first while unit 2 is under construction, then the following maximum emission limits shall apply from May through August, between the hours of 7 am and 8 am, and 5 pm and 6 pm (between 8 am and 5pm the above mentioned limits for peak operating hours shall apply):

NOx: 82.84 lb/hr

PM10: 3.13 lb/hr

Verification: The project owner shall provide engine operating logs as part of the monthly compliance report as required by AQ-SC5. The engine operating logs shall include a table that shows the hours engine operation occurred, quantity of engines operated during each hour, type of engines (fuel type, engine size and Tier rating) operated during each hour, and total calculated emissions for each hour. Running total emissions shall be provided throughout the commissioning period. In each monthly compliance report, the project owner shall certify that the facility used either grid electricity, or natural gas fueled portable generators rather than diesel fueled portable generators to the maximum degree feasible.

AQ-SC11 The total mass emissions of nitrogen oxides that are emitted by all engines combined during the commissioning period shall not exceed the District's offset threshold of 25 tpy (District Rule 1303).

Verification: In each monthly compliance report, the project owner shall provide a running total of emissions for all engines. Compliance with this limit shall be based on a rolling 12-calendar month averaging period.

EQUIPMENT DESCRIPTION:

Two ~~72~~-cell cooling towers with drift eliminator rate of 0.0005% and water circulation rate of ~~94,623~~3,450 gpm.

AQ-20 The drift rate shall not exceed 0.0005 percent with a maximum circulation rate of ~~94,623~~3,450 gallons per minute. The maximum hourly PM10 emission rate shall not exceed ~~2.36~~0.043 pounds per hour, as calculated per the written District-approved protocol.

Verification: The manufacturer guarantee data for the drift eliminator, showing compliance with this condition, shall be provided to the CPM and the District 30 days prior to cooling tower operation. As part of the Annual Compliance Report the project owner shall include information on operating emission rates to demonstrate compliance with this condition.

~~**AQ-23** This equipment shall not be operated for more than 3,200 hours per rolling twelve month period and more than 15 hours per calendar day.~~

~~**Verification:** The project owner shall submit to the CPM the cooling tower operating data demonstrating compliance with this condition as part of the Annual Operation Report.~~

EQUIPMENT DESCRIPTIONS:

Two, ~~1,341~~1,474 HP diesel fueled emergency generator engines, each driving a generator.

~~Two~~One, ~~345~~327 HP diesel fueled emergency fire pump engines, each driving a fire suppression water pump.

~~AMERICAN BADGER AND DESERT KIT FOX IMPACT AVOIDANCE AND MINIMIZATION MEASURES~~ **MITIGATION AND MONITORING PLAN**

BIO-17 The project owner shall develop and implement an American Badger and Desert Kit Fox Mitigation and Monitoring Plan (plan). The objective of the plan shall be to avoid direct impacts to the American badger and desert kit fox as a result of construction of the power plant and linear facilities, as well as during project operation and decommissioning of the Genesis Solar Energy Project. The draft plan submitted by the project owner shall provide the basis for the final plan, subject to review and comment by Bureau of Land Management (BLM) and revision and approval by the Compliance Project Manager (CPM), in consultation with California Department of Fish and Game (CDFG). The final plan shall include, but is not limited to, the following procedures and impact avoidance measures:

~~To avoid direct impacts to American Badgers and desert kit fox, preconstruction surveys shall be conducted for these species concurrent with the desert tortoise surveys. Surveys shall be conducted as described below:~~

1. **Complete pre-construction den surveys for any new construction activity.** Biological Monitors shall perform pre-construction surveys for badgers and kit fox dens in the Project area, including areas within ~~90~~ **100** feet of all Project facilities, utility corridors, and access roads. Surveys may be concurrent with desert tortoise surveys. If dens are detected, each den shall be classified as inactive **non-natal, inactive natal**, potentially active, or definitely active **non-natal, or active natal den.**
 - a. **Inactive non-natal and inactive natal dens.** Inactive **non-natal and inactive natal** dens that would be directly impacted by construction activities shall be excavated by hand and backfilled to prevent reuse by badgers or kit fox.
 - b. **Potentially active and definitely active non-natal dens.** Potentially and definitely active **non-natal** dens that would be directly impacted by construction activities shall be monitored by the Biological Monitor for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) and/or infrared camera stations at the entrance. If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den shall be excavated and backfilled by hand.

If tracks are observed, and especially if high or low ambient temperatures could potentially result in harm to kit fox or badger from burrow exclusion, various passive hazing methods may be used to discourage occupants from continued use. **A detailed description of the types and methods of passive hazing to be used must be included in the plan; however, approval must be granted by the CPM, in consultation with CDFG prior to implementation.** After verification that the den is unoccupied, it shall then be excavated by hand and backfilled to ensure that, no badgers or kit fox are trapped in the den.

- c. **Active natal dens. During denning season (American badger – March to August, and desert kit fox – February to June), any active natal dens that are detected in the pre-construction surveys shall have a buffer zone of 300 feet, pending approval from the CPM, in consultation with CDFG, to 500 feet surrounding the den and monitoring measures shall be implemented. Discovery of an active natal den that could be impacted by the project shall be reported to the CPM and CDFG within 24-hours of the discovery. A detailed description outlining the types and methods of monitoring must be included in the plan. The den location shall be mapped and submitted along with a report stating the survey results to the CPM and CDFG. The Designated Biologist shall monitor the natal den until he or she determines that the pups have dispersed. No disturbance will be allowed for any animal associated with a natal den and any activities that might disturb denning activities shall be prohibited within the buffer zone. Once the pups have dispersed, various passive hazing methods may be used to discourage den reuse. A detailed description of the types of passive hazing to be used must be included in the plan; however, approval must be granted by the CPM, in consultation with CDFG prior to implementation. After verification that the den is unoccupied, it shall then be excavated by hand and backfilled to ensure that, no badgers or kit fox are trapped in the den.**
- d. **Exception for American badger.** In the event that passive relocation techniques fail for badgers, the Applicant **project owner** will contact **the CPM and** CDFG to explore other relocation options

Additional protection measures to be included in the plan and implemented. The Designated Biologist shall make certain that all pipes within the project disturbance area must be capped and/or covered every evening or when not in use to prevent desert kit fox or other animals from accessing any pipes. All water sources shall be covered when not in use to prevent drowning.

2. **Notify the CPM and CDFG if injured, sick, or dead American badger and desert kit fox are found. If an injured, sick, or dead animal is detected on any area associated with the Genesis project site or**

associated linear facilities, the CPM and the Ontario CDFG Office shall be notified immediately by phone. Written follow-up notification via FAX or electronic communication shall be submitted to the CPM and CDFG within 24 hours of the incident and shall include the following information as appropriate:

- a. Injured animals. If an American badger or desert kit fox is injured because of any project-related activities, the Designated Biologist or approved Biological Monitor shall immediately notify the CPM and CDFG personnel regarding the capture and transport of the animal to CDFG-approved wildlife rehabilitation and/or veterinarian clinic. Following the phone notification, the CPM and CDFG shall determine the final disposition of the injured animal, if it recovers. A written notification of the incident shall be sent to the CPM and CDFG containing, at a minimum, the date, time, location, and circumstances of the incident.
- b. Sick animals. If an American badger or desert kit fox is found sick and incapacitated on any area associated with the Genesis project site or associated linear facilities, the Designated Biologist or approved Biological Monitor shall immediately notify the CPM and CDFG personnel for immediate capture and transport of the animal to a CDFG-approved wildlife rehabilitation and/or veterinarian clinic. Following the phone notification, the CPM and CDFG shall determine the final disposition of the sick animal, if it recovers. If the animal dies, a necropsy shall be performed by a CDFG-approved facility to determine the cause of death. The project owner shall pay to have the animal transported and a necropsy performed. A written notification of the incident shall be sent to the CPM and CDFG and contain, at a minimum, the date, time, location, and circumstances of the incident.
- c. Fatalities. If an American badger or desert kit fox is killed because of any project-related activities during construction, operation, decommission or is found dead on the project site or along associated linear facilities, the Designated Biologist or approved Biological Monitor shall immediately refrigerate the carcass and notify the CPM and CDFG personnel within 24 hours of the discovery to receive further instructions on the handling of the animal. If the animal is suspected of dying of unknown causes, a necropsy shall be performed by a CDFG-approved facility to determine the cause of death. The project owner shall pay to have the animal transported and a necropsy performed.

The California Department of Fish and Game Veterinarian's guidance regarding impact avoidance measures and what should be done to

prevent disease spread should be incorporated into the final plan and implemented.

The plan must also include measures to reduce traffic impacts to wildlife if the project owner anticipates night-time construction. The plan must also include a discussion of what information will be provided to all night-time workers, including truck drivers, to educate them about the threats to kit fox, what they need to do to avoid impacts to kit fox, and what to report if they see a live, injured, or dead kit fox.

Verification: No fewer than 30 days prior to the start of any construction-related ground disturbance activities associated with the new project related facilities, the project owner shall provide the CPM, BLM, and CDFG with a draft American Badger and Desert Kit Fox Mitigation and Monitoring Plan for review and comment.

No fewer than 10 days prior to start of any ground disturbance activities associated with the new project related facilities, the project owner shall provide an electronic copy of the CPM -approved final plan to the CPM and CDFG and implement the plan.

The Project owner shall submit a report to the CPM and CDFG within 30 days of completion of any badger and kit fox surveys. The report shall describe survey methods, results, impact avoidance and minimization measures implemented, and the results of those measures.

No later than 2 days following a phone notification of an injured, sick, or dead American badger or desert kit fox, the project owner shall provide to the CPM and CDFG, via FAX or electronic communication, a written report from the Designated Biologist describing the incident of sickness, injury, or death of an American badger or desert kit fox, when the incident occurred, and who else was notified.

Beginning with the first month after start of construction and continuing every month until construction is completed, the Designated Biologist shall include a summary of events regarding the American badger and desert kit fox in each Monthly Compliance Report.

No later than 45 days after initiation of project operation, the Designated Biologist shall provide the CPM a final American Badger and Desert Kit Fox Mitigation and Monitoring Plan that includes: 1) a discussion of all mitigation measures that were and currently are being implemented; 2) all information about project-related kit fox and badger injuries and/or deaths; 3) all information regarding sick kit fox and badger found within the project site and along related linear facilities; and 4) recommendations on how mitigation measures might be changed to more effectively minimize and mitigate the impacts of future projects on the American badger and desert kit fox.

IT IS SO ORDERED.

CERTIFICATION

The undersigned Secretariat to the Commission does hereby certify that the foregoing is a full, true, and correct copy of an Order duly and regularly adopted at a meeting of the California Energy Commission held on August 9, 2012.

AYE: Weisenmiller, McAllister, Peterman

NAY: None

ABSENT: Douglas

ABSTAIN: None

*Harriet Kallemeyn,
Secretariat*