

DOCKETED

Docket Number:	07-AFC-05C
Project Title:	Ivanpah Solar Electric Generating System (Compliance)
TN #:	203009
Document Title:	Paleontological Resources Report
Description:	Required by Condition of Certification PAL-7. End of Construction Paleo Resources Report
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Submission Date:	8/29/2014 12:05:41 PM
Docketed Date:	8/29/2014



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January 9, 2014

Joe Douglas
Compliance Project Manager
California Energy Commission
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Subject: PAL-7, Paleontological Resources Report for Ivanpah SEGS (07-AFC-5C)

Dear Joe:

On behalf of Solar Partners II, LLC, Solar Partners I, LLC, and Solar Partners XIII, LLC, we are submitting the Paleontological Resources Report as required by condition of certification (COC) PAL-7. The report does not contain sensitive information, so it is not being submitted under a request for confidentiality.

Please let me know if you have any questions on this report. We would appreciate a letter from you stating that this COC has been completed.

Sincerely,

CH2M HILL Engineers, Inc.

A handwritten signature in blue ink that reads "John L. Carrier".

John L. Carrier, J.D.
Program Manager

Paleontological Resources Report Ivanpah Solar Electric Generating System (07-AFC-5C)

Prepared for
California Energy Commission

January 9, 2014

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Paleontological Resources Report

1.0 Purpose & Background

This paleontological resources report (PRR) has been prepared to comply with Condition of Certification (COC) PAL-7 in the *Ivanpah Solar Electric Generating System Commission Decision (07-AFC-5)*. In this document by the California Energy Commission (CEC), COC PAL-7 states:

PAL-7 The project owner shall ensure preparation of a Paleontological Resources Report (PRR) by the designated PRS. The PRR shall be prepared following completion of the ground-disturbing activities. The PRR shall include an analysis of the collected fossil materials and related information, and submit it to the CPM for review and approval. The report shall include, but is not limited to, a description and inventory of recovered fossil materials; a map showing the location of paleontological resources encountered; determinations of sensitivity and significance; and a statement by the PRS that project impacts to paleontological resources have been mitigated below the level of significance.

Verification: Within 90 days after completion of ground-disturbing activities, including landscaping, the project owner shall submit the PRR under confidential cover to the BLM's Authorized Officer and the CPM.

No paleontologically significant materials were encountered during construction of the Ivanpah Solar Electric Generating System (Ivanpah SEGS). Therefore because this PRR contains no confidential information on the location of paleontological resources, it is not being filed under a confidential cover.

1.1 Applicable LORS

Because the ISEGS is being constructed on federal lands leased through the Bureau of Land Management (BLM), and also requires licenses from the CEC, both state and federal guidelines for paleontological resources management apply to this project. Laws, ordinances, regulations, and standards (LORS) governing paleontological resources are summarized in Table 1, and are discussed in greater detail in the *Paleontological Resources Monitoring and Mitigation Plan Ivanpah Solar Electric Generating System* (PRMMP; CH2M Hill, 2010) developed for this project.

TABLE 1
LORS Applicable to Paleontological Resources at Ivanpah SEGS

LORS	Remarks
Antiquities Act of 1906	Protects paleontological resources on federal lands; requires inventory, assessment of effects, and mitigation if appropriate.
National Environmental Policy Act of 1969	Requires an assessment of impacts resulting from the implementation of a federal action, or from a federally licensed or federally funded project.
Omnibus Public Land Management Act of 2009	Requires the Departments of The Interior and Agriculture to manage paleontological resources according to scientific principals, and criminalizes the destruction or removal of paleontological resources from public lands.
CEQA, Appendix G	Requires the assessment of project impacts to paleontological resources.
San Bernardino County General Plan	Requires CEQA review and assessment impacts to paleontological resources

1.2 Project Description and Location

Solar Partners I, LLC; Solar Partners II, LLC; and Solar Partners VIII, LLC, subsidiaries of BrightSource Energy, Inc. (Applicant) are constructing the Ivanpah SEGS solar energy project in southern California's Mojave Desert, near the Nevada border. The project is located on a site west of the Ivanpah Dry Lake, on land managed by the BLM. The project is being constructed in three phases: one 120-megawatt (MW) phase (Ivanpah 1) and two 125-MW phases (Ivanpah 2 and Ivanpah 3). The total area within the site boundary (i.e., the three plant sites and common area and facilities) is approximately 5.6 square miles. Additionally, a new substation and new paved access roads to access each site have been constructed. The project ties into the existing Kern River Gas Transmission Line about 0.5 mile north and into the Southern California Edison 115-kilovolt (kV) line that crosses between the Ivanpah 1 and 2 sites. The Construction Logistics Area is located between Ivanpah 1 and 2 and was used for construction parking, equipment laydown, heliostat fabrication, and other facilities, such as the administration/warehouse building. Ground disturbance associated with project construction that had the potential to affect paleontological resources included heliostat pylon installation, excavations for flood diversion, and trenching for utilities.

1.3 Paleontological Sensitivity and the PRMMP

In accordance with COC PAL-3 for this project, a PRMMP was developed (CH2M Hill, 2010), notwithstanding the fact that the project site rests entirely on Quaternary alluvium of low paleontological sensitivity. To accommodate this fact, the PRMMP's standing project protocol included the following:

The project area possesses low paleontological sensitivity. Therefore, this PRMMP will not be implemented unless and until the PRS determines that potentially fossiliferous sediments may be, or have been encountered by construction equipment, pursuant to the condition stipulated in COCs PAL-3 and PAL-4.

The exception to the above is the administration of the paleontological resources awareness module of the Worker Environmental Awareness Program training (WEAP; see immediately below), which will be provided at their indoctrination to all supervisory personnel and workers involved in construction-related excavations at the project site.

The paleontological resources module of the WEAP was provided to all construction personnel at the site for the duration of ground disturbing activities.

2.0 Results

During excavations of some of the deepest facilities, such as those for the flood-diversion facilities protecting the substation, the project paleontological resources specialist (PRS) inspected the exposed stratigraphy to confirm that only sediments with low paleontological sensitivity were affected. Therefore, and as expected, no paleontological resources were encountered during the construction of Ivanpah SEGS.

3.0 Conclusions

The preconstruction paleontological assessment of the project area led to the conclusion that its paleontological resources potential was low (CH2M HILL, 2010) and, as such, recommended mitigation measures were limited to worker education and designation of a PRS for the duration of ground-disturbing construction. Unnecessary costs for monitoring for a resource not present were therefore avoided.

No paleontologically significant materials were encountered during construction of the Ivanpah SEGS. Therefore, no map of paleontological resources is provided. Because it contains no information on the location of paleontological resources, this PRR is not filed under a confidential cover.

4.0 References

CH2M HILL, 2010. *Paleontological Resources Monitoring and Mitigation Plan Ivanpah Solar Electric Generating System, Revision 1*. Sacramento, CA. October 4.