

# Contact Filer Regarding Image Clarity

STATE OF NEVADA  
 PUBLIC UTILITIES COMMISSION OF NEVADA  
 1150 E. William Street  
 Carson City, Nevada 89701-3109

No. 43427

## RECEIPT

Received from

Date 10/8/2014

ROBERT G JOHNSTON ATTORNEY AT LAW  
 204 N MINNESOTA ST STE 1A  
 CARSON CITY, NV 89703

AMOUNT \$ 200.00

TWO HUNDRED ----- and 00/100 Dollars

How Paid	Cash <input type="checkbox"/>	Check 1094	Money Order	Draft
----------	----------------------------------	---------------	-------------	-------

Type of Receipt	Filing Fee <input checked="" type="checkbox"/>	TDD <input type="checkbox"/>	Copy Service <input type="checkbox"/>	UEC <input type="checkbox"/>	Mill or CMRS <input type="checkbox"/>	Other <input type="checkbox"/>
GL	3717		3818	3% to 3305 97% to LIHEA cc: Welfare	3920-3315 1038-3315	

Invoice#:

### Memo

UEPA-Copper Mountain Solar 4, LLC

Received by CJ

RECEIVED PUBLIC  
UTILITIES COMMISSION  
OF NEVADA - CARSON CITY  
2014 OCT -8 PM 3:38

**ROBERT G. JOHNSTON**  
**Attorney and Counselor at Law**  
**204 NORTH MINNESOTA STREET, SUITE 1-A**  
**CARSON CITY, NEVADA 89703-4151**

**775-461-3677**  
**rjohnston@pyramid.net**

October 8, 2014

Ms. Breanne Potter  
Assistant Commission Secretary  
Public Utilities Commission of Nevada  
1150 East William Street  
Carson City, NV 89701-3109

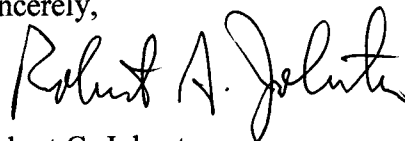
**RE: Application for UEPA Permit to Construct the Copper Mountain  
Solar 4 Project**

Dear Ms. Potter:

Copper Mountain Solar 4, LLC hereby transmits for filing its Application for a Permit to Construct Electric Utility Facilities under the Utility Environmental Protection Act, together with a Draft Notice as required by NAC 703.162. Our check for the filing fee in the amount of \$200.00 is enclosed.

Please contact me at (775) 461-3677 or by email at [rjohnston@pyramid.net](mailto:rjohnston@pyramid.net) should you have any questions or concerns regarding this filing.

Sincerely,



Robert G. Johnston

Attorney for Copper Mountain  
Solar 4, LLC

**PUBLIC UTILITIES COMMISSION OF NEVADA**  
**DRAFT NOTICE**  
**(Applications, Tariff Filings, Complaints, and Petitions)**

Pursuant to Nevada Administrative Code (“NAC”) 703.162, the Commission requires that a draft notice be included with all applications, tariff filings, complaints and petitions. Please complete and include **ONE COPY** of this form with your filing. (Completion of this form may require the use of more than one page.)

**A title that generally describes the relief requested (see NAC 703.160(5)(a)):**

Application for Permit to Construct Electric Utility Facilities pursuant to the Utility Environmental Protection Act.

**The name of the applicant, complainant, petitioner or the name of the agent for the applicant, complainant or petitioner (see NAC 703.160(4)(b)):**

Copper Mountain Solar 4, LLC

**A brief description of the purpose of the filing or proceeding, including, without limitation, a clear and concise introductory statement that summarizes the relief requested or the type of proceeding scheduled AND the effect of the relief or proceeding upon consumers (see NAC 703.160(4)(c)):**

Copper Mountain Solar 4, LLC (“CMS 4”) is filing application under the provisions of the Utility Environmental Protection Act (“UEPA”) for a permit to construct electric utility facilities in Clark County, Nevada to be known as the Copper Mountain Solar 4 Project (“CMS 4 Project”).

CMS 3 states that the CMS 4 Project will include: (1) a nominal 94 MW solar PV electricity generating facility on an approximately 682 acre site in the City of Boulder City; (2) a nominal 230-kV generation-tie power line, consisting of a second circuit on some existing and some new pole structures, to deliver electricity to the Merchant Substation; and (3) a fiber-optic communications line constructed onto the generation-tie power line structures and a redundant communications path connecting the electricity generating facility to the Merchant Substation and CMS 1 for grid protection and control systems.

CMS 4 states that its amended application is filed pursuant to Nevada Revised Statutes (“NRS”) 704.870(2)(b) and Nevada Administrative Code (“NAC”) 703.423.

CMS 4 states that the Project will provide a clean, renewable source of energy and will not emit potentially harmful pollutants or greenhouse gases that could have an adverse impact on the public health, safety and welfare of Nevada residents.

**A statement indicating whether a consumer session is required to be held pursuant to Nevada Revised Statute (“NRS”) 704.069(1)<sup>1</sup>:**

A consumer session is not required by NRS 704.069.

**If the draft notice pertains to a tariff filing, please include the tariff number AND the section number(s) or schedule number(s) being revised.**

This draft notice does not pertain to a tariff filing.

---

<sup>1</sup> NRS 704.069 states in pertinent part:

1. The Commission shall conduct a consumer session to solicit comments from the public in any matter pending before the Commission pursuant to NRS 704.061 to 704.110 inclusive, in which:
  - (a) A public utility has filed a general rate application, an application to recover the increased cost of purchased fuel, purchased power, or natural gas purchased for resale or an application to clear its deferred accounts; and
  - (b) The changes proposed in the application will result in an increase in annual gross operating revenue, as certified by the applicant, in an amount that will exceed \$50,000 or 10 percent of the applicant’s annual gross operating revenue, whichever is less.

**BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA**

Application of COPPER MOUNTAIN SOLAR 4, )  
LLC for a permit under the Utility Environmental )  
Protection Act to construct the Copper Mountain )  
Solar 4 Project, consisting of a 94 MW solar energy ) Docket No. 14-  
generating facility, 230 kV generation tie-line and )  
associated facilities, to be located in Clark County, )  
Nevada. )  
\_\_\_\_\_ )

**APPLICATION FOR PERMIT TO CONSTRUCT  
ELECTRIC UTILITY FACILITIES**

Applicant COPPER MOUNTAIN SOLAR 4, LLC files its application with the Public Utilities Commission of Nevada ("Commission") for a permit to construct utility facilities to be known as the Copper Mountain Solar 4 Project ("CMS 4 Project" or "Project") pursuant to the requirements of the Utility Environmental Protection Act, NRS 704.820 et seq. ("UEPA"). This UEPA application is being filed pursuant to NRS 704.870(1) and NAC 703.423.

**1. Name and Address of Applicant and Applicant's Attorney**

Communications concerning this application should be directed to:

Robert G. Johnston, Esq.  
204 N. Minnesota Street, Ste. 1-A  
Carson City, NV 89703  
Phone: 775-461-3677  
Fax: 775-414-0991  
rjohnston@pyramid.net

Amy G. Nefouse  
Senior Environmental Counsel  
Sempra Energy  
101 Ash St., HQ 11B  
San Diego, CA 92101  
Phone: 619-699-5046  
Fax: 619-699-5150  
anefouse@Sempra.com

with a copy to:

Marilyn Burke  
Director, Commercial Development  
Sempra U.S. Gas & Power  
101 Ash Street  
San Diego, CA 92101  
Phone: 619-696-2681  
Fax: 619-696-2122  
MBurke@SempraUSGP.com

**2. Introduction**

Copper Mountain Solar 4, LLC (“CMS 4”) is a Delaware limited liability company registered to conduct business in the State of Nevada. CMS 4 is a wholly-owned subsidiary of Sempra Solar Holdings, LLC, which is a wholly-owned subsidiary of Sempra Renewables, LLC. Sempra Solar Holdings, through other wholly-owned subsidiaries, is the owner and operator of three existing solar photovoltaic (“PV”) generating stations currently under construction or operating in the Eldorado Valley near the location of the CMS 4 Project: Copper Mountain Solar 1 (“CMS 1”), Copper Mountain Solar 2 (“CMS 2”) and Copper Mountain Solar 3 (“CMS 3”).

The CMS 4 Project utility facilities will consist of three components: (1) a nominal 94-megawatt (“MW”) Alternating Current (“AC”) solar photovoltaic (“PV”) electricity generating facility on an approximately 682 acre site in the City of Boulder City; (2) a gen-tie line of nominal voltage at 230-kV, consisting of a second circuit on some new and some existing pole structures, to deliver electricity to the Merchant Substation; and (3) a fiber-optic communications line constructed on the gen-tie pole structures and redundant communications paths connecting the electricity generating facility to the Merchant Substation and CMS 1 for grid protection and control systems.

**3. Information Required by NAC 703.423**

The information required by NAC 703.423 is provided as follows.

**NAC 703.423(1). A description of the location of the proposed utility facility.**

**NAC 703.423(1)(a). A general description of the location of the proposed utility facility, including a regional map that identifies the location of the proposed utility facility.**

The CMS 4 project site is located in the City of Boulder City, in the Eldorado Valley, approximately 17 miles south of the city of Henderson. The Project is located approximately 12 miles south of the intersection of Highway 93 and Highway 95, to the west of Highway 95 in the City of Boulder City's Eldorado Valley Energy Zone. The Project site is bordered on the west by Desert Star Energy and CMS 1, on the northeast by Nevada Solar One, and on the east by CMS 2. A regional map identifying the location of the Project is attached as Exhibit B.

**(1) 94-MW Solar PV Electricity Generating Facility**

The solar facility will be sited on property owned by the City of Boulder City and leased by CMS 4. The proposed site is within the City of Boulder City's Energy Zone. Land within the Energy Zone may be used for the development of private and/or public solar and gas-fired electric generation facilities, electrical gen-tie and distribution facilities, ancillary facilities, and other similar uses. The site is currently vacant with the exceptions of: (a) Eldorado Valley Drive running east to west through the site; (b) a Southwest Gas Corporation natural gas pipeline and tap station; (c) electric gen-tie and transmission lines; (d) fiber optic and communications lines; and (e) a City of Boulder City water line.

**(2) 230-kV Merchant Gen-Tie Line**

The Project's substation will connect to the Merchant Substation via a 230-kV gen-tie line, approximately 0.5 miles in length. The gen-tie line primarily will be a new, second circuit on some of CMS 2's existing common gen-tie poles within the gen-tie easement corridor along Eldorado Valley Drive. Some additional 230 kV structures may be constructed: (1) on the CMS 4 site to bring the circuit from the solar substation north to the existing CMS 2 gen-tie structures: and (2) to bring the circuit south from the existing CMS 2 gen-tie structures into the Merchant switchyard.

**(3) Communication Lines**

The fiber optic communications line and redundant communication path will connect the solar electricity generating facility to the Merchant Substation. The fiber optic line will be installed on the same path as the gen-tie line, using some of CMS 2's gen-tie poles. The redundant communication path will either be buried fiber or wireless via microwave technology. The decision as to which option to use will be made during final engineering.

Facility communications will also connect the solar field and solar substation with CMS 1. This path will either be buried fiber or wireless via microwave technology. The decision as to which option to use will be made during final engineering.

**NAC 703.423(1)(b). A legal description of the site of the proposed utility facility, with the exception of electric lines, gas transmission lines, and water and wastewater lines, for which only a detailed description of the site is required.**

**(1) 94 MW Solar PV Electric Generating Facility**

Portions of Section 6, Section 7 and Section 8 in Township 25 South, Range 63 East, M.D.B&M.



**(2) 230-kV Merchant Gen-Tie Line and Communication Lines**

Portions of Section 12 in Township 25 South, Range 62 East, M.D.B.&M, and Section 7 in Township 25 South, Range 63 East, M.D.B.&M.

**NAC 703.423(1)(c). Appropriately scaled site plan drawings of the proposed utility facility, vicinity maps and routing maps.**

Site plan drawings, vicinity maps, and routing maps are included as Exhibit C.

**NAC 703.423(2). A description of the proposed utility facility.**

**NAC 703.423(2)(a). The size and nature of the proposed utility facility.**

**(1) 94-MW AC Solar PV Electricity Generating Facility and Substation**

The generating facility will be an approximately 94 MW AC solar PV electricity generating facility, located entirely on approximately 682 acres of land leased by CMS 4 from the City of Boulder City. This acreage includes the solar field, driveways, fencing, substation, and other related infrastructure.

The solar generating facility will consist of: (a) a solar field of PV panels; (b) an electrical collection system that aggregates the output from the PV panels and converts the electricity from DC to AC; and (c) a solar substation where all of the facility output is combined and transformed to a voltage of 230 kV.

The CMS 4 project will utilize PV panel technology to collect solar radiation, which will be sent to an electrical collection system that will convert generated power from direct current to alternating current. The PV panels will be mounted on single axis tracking steel structures. The assembled PV panels will have a height of up to 10 feet. The PV panels will be arranged in rows aligned north to south and the PV panels will pivot, tracking the sun from east to west. Combiner boxes will be used to collect the power from multiple panels.

The panels and combiner boxes will be organized into electrical groups referred to as “arrays,” with the size of each array depending upon the selected size of the inverter.

Conductors will be suspended under the PV panels and will extend underground to feed DC power to the inverters. The inverters convert the DC power to AC power and the AC output voltage is boosted to 34.5 kV through a Medium Voltage (“MV”) Step-up Transformer. The inverter and MV transformer are together referred to as an Inverter Skid Assembly (“ISA”). From each such ISA, electricity will be conveyed via an overhead or underground 34.5 kV collector circuit to the 34.5 kV bus within the solar substation. Such collector circuits originating in the northern portion of the site will cross Eldorado Valley Drive. Each circuit coming into the solar substation will deliver between 20 MW and 50 MW of output capacity from the solar field to the electrical grid.

The solar substation will be a central hub for the 34.5-kV collector circuits and will step up the electrical voltage from 34.5 kV to nominally 230 kV. The CMS 4 substation site will be located within the Project site on the south side of Eldorado Valley Drive. The solar substation will include the following major components:

- 34.5 kV bus and associated switching devices
- 230 kV bus and associated switching devices
- 34.5/230 kV transformer
- 34.5 kV capacitors (as required)
- 230 kV metering equipment
- Grounding grid
- Prefabricated modular control building (unoccupied except during inspection and maintenance)

- Perimeter security fence
- Lighting

During daylight hours, power for plant auxiliaries will be provided by the Project's electrical generation. During non-daylight hours, the Project will require small amounts of power to keep transformers energized, and for plant lighting and security. This auxiliary power will be provided by back-feed from the electrical grid. Auxiliary power will be stepped down to an appropriate voltage to support plant auxiliaries and will be connected to the station service power switchgear.

Access to the Project will be from the existing paved Eldorado Valley Drive, which crosses through the Project. The access driveways to the site from Eldorado Valley Drive will be controlled-access (authorized personnel only) by employing swinging or rolling chain link gates.

Water service to the Project will be provided from an existing City of Boulder City water line along Eldorado Valley Drive.

A temporary construction workspace located adjacent to the solar field area will include a parking area, a construction office, and a laydown area. All of these facilities will be removed once Project construction is completed.

The perimeter of the Project site will be enclosed by a 7-foot high chain link fence, which may be topped with barbed wire, with an unpaved road extending around the perimeter inside of the fence.

## **(2) 230 kV Merchant Gen-Tie Line**

The 230-kV Merchant gen-tie line will be a new, second circuit on some of CMS 2's existing common gen-tie poles within the gen-tie easement corridor along Eldorado Valley

Drive. The gen-tie line will run approximately 0.5 miles from the solar substation to the Merchant Substation. The common poles are monopole structures no more than 120 feet high on concrete pier foundations. The span between supporting structures ranges between 200 and 700 feet. Some additional 230 kV structures may be constructed on the CMS 4 site to bring the circuit from the solar substation north to the existing CMS 2 gen-tie structures, and to bring the circuit south from the existing CMS 2 gen-tie structures into the Merchant switchyard.

### **(3) Communication Lines**

A fiber optic cable will be installed on the same poles as the gen-tie line to connect the solar electricity generating facility with the Merchant Substation. Redundant communication paths using either buried fiber or wireless via microwave technology will also be installed.

### **NAC 703.423(2)(b). The natural resources that will be used during the construction and operation of the proposed utility facility.**

Natural resources anticipated for construction and operation include materials used for construction, such as steel for supports, structures, reinforcing rod and fencing; silicon, copper, and other metals used in the manufacturing of the PV modules; cable and electronic equipment; cement and aggregate for concrete for foundations; gravel and aggregate for roadways and mineral oil for transformers. Water will be required during construction for dust suppression, soil compaction and concrete fabrication. Very little water will be required during operations. Water will be supplied from an existing City of Boulder City water line that serves the Eldorado Valley.

**NAC 703.423(2)(c). Layout diagrams of the proposed utility facility and its associated equipment.**

Layout diagrams are provided in Exhibit D.

**NAC 703.423(2)(d). Scaled diagrams of the structures at the proposed utility facility.**

Scaled diagrams are provided in Exhibit E.

**NAC 703.423(2)(e). A statement concerning whether the proposed utility facility is an electric generating plant or the associated facilities of an electric generating plant that uses renewable energy as its primary source of energy to generate electricity.**

The proposed utility facility is an electric generating plant that uses renewable energy as its primary source of energy to generate electricity.

**NAC 703.423(3). A copy and summary of any studies which have been made of the environmental impact of the proposed utility facility as required by subsection 1 of NRS 704.870.**

An Environmental Statement for the CMS 4 Project by NewFields is attached as Exhibit A.

The Environmental Statement describes the existing environment of the Project site, and analyzes the environmental impacts of the Project and proposed mitigation measures for the following resources:

- Geology, Soils, Mineral Resources & Paleontology
- Water Resources
- Air Quality and Climate
- Biological Resources

- Cultural Resources
- Land Use
- Transportation
- Visual Resources
- Noise
- Waste Management and Hazardous Materials
- Socioeconomics

**NAC 703.423(4). A description of any reasonable alternate locations for the proposed utility facility, a description of the comparative merits or detriments of each location submitted, and a statement of the reasons why the location is best suited for the proposed utility facility, as required by subsection 1 of NRS 704.870.**

CMS 4 considered the following criteria in determining to locate the Project in the City of Boulder City’s Eldorado Valley Energy Zone:

- Adequate solar irradiation
- Close proximity to a high capacity substation with access to multiple energy markets
- Adequate transmission capacity to convey the electrical output of the Project
- Minimal environmental concerns
- Relatively flat site to minimize the need for site grading
- Existing access to accommodate construction workforce needs
- Land parcel large enough to accommodate a utility scale facility
- Usable land parcel without large areas in a flood zone
- Access to nearby workforce sufficient to support Project construction

No reasonable alternate locations for the Project outside of the Energy Zone meeting these criteria were identified. Within the Energy Zone, the proposed Project site was the only suitable property that met CMS 4's key requirements that: (1) the length of the gen-tie line interconnection to the grid be less than 5 miles to minimize gen-tie line losses and costs; (2) the necessary gen-tie line Right-of-Way ("ROW") could be acquired; and (3) the land parcel does not contain areas in flood zones. The Project site meets these criteria by providing gen-tie access over an approximately 0.5 mile route to the Merchant Substation using existing CMS 2 gen-tie poles and because of its distance from the Eldorado Valley Dry Lake bed.

No alternative gen-tie routes were considered for the Project. Because an existing gen-tie power line runs through the Project site, the existing poles can be used for the gen-tie with minimal environmental impacts and minimal costs, and no alternative route could offer these advantages.

**NAC 703.423(5). A copy of the public notice of the application or amended application and proof of the publication of the public notice, as required by subsection 4 of NRS 704.870.**

A copy of the public notice of this application is attached as Exhibit F.

Proof of publication of the public notice of this application in Clark County, Nevada is attached as Exhibit G.

**NAC 703.423(6). Proof that a copy of the application or amended application has been submitted to the Nevada State Clearinghouse within the Department of Conservation and Natural Resources to enable agency review and comment.**

Proof of submission of this application to the Nevada State Clearinghouse to enable

agency review and comment, and proof of service on local governments in the area in which the facilities are to be located, is attached as Exhibit H.

**NAC 703.423(7). An explanation of the nature of the probable effect on the environment.**

**NAC 703.423(7)(a). A reference to any studies described in subsection 3, if applicable.**

Analysis of the proposed solar field is contained in the Environmental Statement, attached as Exhibit A.

**NAC 703.423(7)(b). An environmental statement that includes:**

**(1) The name, qualifications, professions and contact information of each person with primary responsibility for the preparation of the environmental statement.**

A list of preparers and reviewers of the Environmental Statement can be found in Exhibit A, Section 4 at page 68. The following is the contact information for each person with primary responsibility for the preparation of the Environmental Statement:

<b>Name</b>	<b>Profession</b>	<b>Contact Information</b>
<b><i>NewFields Environmental and Engineering, 8250 W. Charleston Blvd., Ste 100, Las Vegas, NV 89117</i></b>		
<b>Ken MacDonald</b>	Partner	(702) 952-2072 kmacdonald@newfields.com
<b>Anne DuBarton</b>	Project Manager, Cultural Resource Specialist	(702) 952-2072 adubarton@newfields.com
<b>Stephanie Locke</b>	Project Manager, Biologist	(702) 952-2072 slocke@newfields.com
<b>Justin Romanowitz</b>	Environmental Scientist	(480) 231-3539



**(2) The name, qualifications, professions and contact information of each person who has provided comments or input in the preparation of the environmental statement.**

Name	Title	Contact Information
<b><i>Copper Mountain Solar 4, LLC – c/o Sempra U.S. Gas &amp; Power - 101 Ash Street, San Diego, California 92101</i></b>		
<b>Marilyn Burke</b>	Director, Commercial Development	619-696-2681 mburke@semprausgp.com
<b>Mike End CSP, CIH</b>	Environmental Permitting and Safety	619-696-2078 Mend@SempraUSGP.com
<b>Travis Jones</b>	Project Engineer	(619) 696-4871 tjones@SempraUSGP.com

**(3) A bibliography of materials used in the preparation of the environmental statement.**

A complete bibliography of reference materials used in preparation of the Environmental Statement can be found in Exhibit A, Section 6 at pages 71-77.

**(4) A description of:**

**(I) The environmental characteristics of the project area existing at the time the application or amended application is filed with the Commission.**

The proposed Project site is in the Eldorado Valley in Clark County, Nevada. Eldorado Valley is a closed drainage basin bounded by the McCullough Range to the west, the River Mountains to the north, and the Eldorado Mountains and Opal Mountains to the east. The Project site is located on alluvial soils in an area dominated by creosote bush and burro bush vegetation. Surrounding land is characterized primarily by power generation facilities, energy transmission infrastructure, transportation infrastructure, and open space.

Section 3 of the Environmental Statement attached as Exhibit A describes the existing setting and environmental characteristics with respect to each of the resources studied.

**(II) The environmental impacts that the construction and operation of the proposed utility facility will have on the project area before mitigation.**

The Environmental Statement analyzed potential impacts on a suite of resources and did not identify any significant environmental impacts that would occur during construction, operation and maintenance of the Project. (Exhibit A, Section 3) A summary of the analyses in the Environmental Statement, including impacts and mitigation measures, is presented in the following list:

- **Geology, Minerals, Soils and Paleontology:** Potential impacts to the Project from earthquakes are minor. No important mineral deposits are known near the Project, and therefore no impacts to mining operations are expected. There are no known paleontological resources or fossils that are sensitive or legally protected in the Project area. A limited potential for erosion by wind and water exists from soils disturbed by grading, excavation and construction, but the applicant will obtain a dust control permit from Clark County, and design features for the solar field will address proper drainage controls. The Project will use best management practices (“BMP”) to minimize the contribution to cumulative impacts.
- **Water Resources:** Water for construction and operation of the Project will be provided by the City of Boulder City from an existing water line in the Eldorado Valley. There will be no adverse impacts on surface water or groundwater resources in the area, with the exception that the possibility of increased erosion from soil disturbance during construction could potentially result in increased levels of sedimentation to the Eldorado Dry

Lake. These potential impacts will be mitigated by preparation and implementation of a Storm Water Pollution Prevention Plan (“SWPPP”) and use of BMPs to control on-site surface flows and avoid off-site impacts during construction.

- **Air Quality:** Construction and operation will require compliance with all federal, state, and local air quality laws and regulations. Air emissions associated with the Project are expected to occur primarily during construction and will be chiefly associated with fugitive dust from ground-disturbing activities. Once operating, the facility will generate relatively few air emissions from on-road travel of vehicles associated with worker commutes for maintenance activities, and these *de minimis* emissions would result in no long-term impact on the existing ambient air quality. BMPs for fugitive dust and wind erosion control will be followed during construction. Water will be used to control dust in construction, and areas of high erosion or poor soils, outside of desert tortoise habitat, may require application of a palliative dust reducing agent.
- **Vegetation:** About 665 acres of the site will be graded during construction causing direct removal of vegetation and wildlife habitat. To reduce construction impacts on vegetation and wildlife habitat, all construction vehicle movement will be restricted to the Project area, pre-designated access roads and public roads, and contractors will avoid creating soil conditions that promote weed germination and establishment. (Biological Report, Exhibit A, Appendix D)

- **Wildlife:** There will be a direct loss of habitat and could be mortality to various wildlife species from clearing the solar field. Fencing will be installed to help exclude wildlife after construction. The Project will use BMPs/mitigation measures adapted from the Clark County Multiple Species Habitat Conservation Plan and Environmental Impact Statement (Clark County 2002) to aid in preserving the quality of adjacent habitat and to lessen impacts on wildlife. (Biological Report, Exhibit A, Appendix D)
- **Special Status Wildlife Species: Desert Tortoise:** The entire Project site is within desert tortoise habitat, although no live tortoise sign was found in the Project site during surveys conducted in May 2014. The following BMPs/mitigation measures will be implemented to reduce effects on desert tortoise and other species during construction: (1) a preconstruction clearance survey to find and relocate desert tortoise prior to site grubbing and grading activities; (2) a Worker Environmental Awareness Program to educate all personnel on site during construction on the desert tortoise, its legal status, and reporting and procedures to be implemented if tortoises are encountered; (3) a trash and litter control program to reduce the attractiveness of the site to opportunistic predators such as ravens, coyotes and fox; and (4) payment of a one-time habitat loss compensation fee in the amount of \$550/acre of surface disturbance under Clark County MSHCP Section 10.

- Special Status Wildlife Species: Migratory Birds and Western Burrowing Owl: Migratory birds could be killed or injured during construction or operation of the facility. BMPs/mitigation measures will be implemented to reduce effects on migratory birds and Western burrowing owls during construction. In compliance with the Migratory Bird Act of 1918, habitat-altering portions of the Project would be scheduled outside bird breeding season whenever possible. For work occurring during the nesting period, a qualified biologist will conduct a pre-construction survey to identify any active nests and establish no-construction buffer zones that would be maintained until the young birds fledge and have left the nest. To reduce impacts to burrowing owls, the Project will implement the protocols in the USFWS's pamphlet *Protecting Burrowing Owls at Construction Sites in Nevada's Mojave Desert Region*. (Exhibit A, Appendix B.)
- Special Status Wildlife Species: Gila Monster: Gila monsters may be injured or killed during construction activities. The following BMPs/implementation measures will be implemented to reduce effects on the Gila monster, in accordance with the Nevada Departments of Wildlife's protocols issued September 7, 2012 (Exhibit A, Appendix C): (1) Gila monsters found during the desert tortoise clearance survey will be relocated offsite; (2) an injured Gila monster will be transferred to a qualified veterinarian for evaluation of appropriate treatment; (3) NDOW will be immediately notified of any injury to a Gila monster and the veterinarian providing care; and (4) any Gila monster killed or found dead

will be immediately frozen and transferred to NDOW with a complete written description of the circumstances, date, time, habitat and mapped location.

- Cultural Resources: An archeological survey of the Project site was conducted in accordance with the Nevada BLM *Guidelines and Standards for Archaeological Inventory* (BLM 2012). (Cultural Resources Overview and Archaeological Investigations, Exhibit A, Appendix E) The survey found one historic site and five isolates that will be disturbed by the Project. However, because none of the artifacts found are eligible for listing in the NRHP, the cultural impacts are not expected to be extensive and are considered acceptable. If potential cultural resources are found during construction, work will be halted immediately and a professional archaeologist will be mobilized to the site to evaluate the find and determine appropriate further steps and mitigation measures as necessary. Work will not proceed until a notice to proceed has been issued from the appropriate authority.
- Land Use: Development of the Project falls into the appropriate zoning designations, will not impact or conflict with any current or future authorized land uses, and is consistent with other development activities occurring in the surrounding area. Because development of the Project will not impact current or future land use activities in the area, no mitigation measures are necessary.

- **Transportation:** During peak construction, there will be an estimated average of approximately 350 daily trips for arriving/departing construction workers, and 30 truck trips per day to supply concrete, construction materials and equipment to the Project site. Because this transportation will represent a negligible incremental increase to traffic on the area highways, no mitigation is required.
- **Visual Resources:** Construction of the Project's additional solar facilities next to existing solar facilities will result in little change to the existing landscape and its planned use as an energy zone. No mitigation measures are warranted.
- **Noise:** Construction of the Project will result in temporary increases in ambient noise levels for approximately 1.5 years, while operational noise from the tracking motors and electrical equipment will be negligible. Typical construction schedules are expected to be from 7:00 A.M. to 5:00 P.M, Monday through Friday, which will comply with the local noise ordinance restrictions for construction activity of 7:00 A.M. to 7:00 P.M., except Sundays and federal holidays. However, because there are no nearby noise sensitive receptors (i.e., schools, hospitals, churches, libraries, homes, parks, wilderness areas), extended construction hours may be acceptable.
- **Waste Management and Hazardous Materials:** The construction and operation of the Project is not expected to require the transportation, use or generation of hazardous materials or hazardous wastes that could create a

