



Smoky Valley Solar

Preliminary Plan of Development

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BLM Serial No. NVN 100223

Date April 29, 2021

Table of Contents

STANDARD ABBREVIATIONS..... 3

1 PROJECT DESCRIPTION 5

1.1 Introduction 5

 1.1.1 Facility Description, Planned Uses, and Generation Output 5

 1.1.2 Applicant’s Schedule for the Project 6

1.2 Proponents Purpose and Need for the Project 7

1.3 General Facility Description, Design, and Operation 7

 1.3.1 Project Location, Land Ownership, and Jurisdiction 8

 1.3.2 Legal Land Description of Facility 8

 1.3.3 Total Acreage and General Dimensions of Facilities and Components 8

 1.3.4 Power Plant Facility Information 9

 1.3.5 Studies and Data Needed 10

 1.3.6 Project Plans and Programs 10

 1.3.7 Environmental Protection Measures 11

1.4 Alternatives Considered by the Applicant 11

1.5 Other Federal, State and Local Agency Permit Requirements 11

1.6 Financial and Technical Capability 14

2 CONSTRUCTION PROCESS AND TIMETABLE..... 14

2.1 Site Preparation..... 15

2.2 Substation and Operations and Maintenance Building 15

2.3 Solar Array and Battery Storage..... 15

2.4 Gen-Tie Transmission Poles..... 16

2.5 Construction Workforce 16

2.6 Dust Control..... 16

2.7 Water Use 16

2.8 Access, Truck Trips and Deliveries..... 16

2.9 Health and Safety Program 17

2.10 Cleanup and Site Reclamation 17

3 RELATED FACILITIES AND SYSTEMS 17

3.1 Transmission System Interconnect 17

3.2 *Other Related Systems* 17

4 OPERATIONS AND MAINTENANCE 18

4.1 *Operations Workforce and Equipment*..... 18

4.2 *Operations and Maintenance Activities* 18

4.3 *Water Use and Waste Management*..... 18

4.4 *Termination and Reclamation*..... 18

5 ENVIRONMENTAL CONSIDERATIONS AND OTHER RESOURCES 19

5.1 *Site Characteristics and Potential Environmental Issues* 19

5.1.1 *Vegetation and Land Cover*..... 19

5.1.2 *Special Status and Other Sensitive Species and Habitats* 19

5.1.3 *Special Land Use Designations* 21

5.1.4 *Water Resources*..... 21

5.1.5 *Visual Resource Management (VRM) Designations* 21

5.1.6 *Cultural and Historic Resource Sites and Values*..... 22

5.1.7 *Native American Tribal Concerns*..... 22

5.1.8 *SocioEconomic Considerations* 22

5.1.9 *Noise*..... 22

5.1.10 *Air Quality* 22

5.2 *Other Uses on the Project Site* 23

5.2.1 *Grazing Permits*..... 23

5.2.2 *Other Authorized Uses*..... 23

5.2.3 *Recreational Access*..... 23

5.3 *Mitigation Measures* 23

6 RESOURCES 25

List of Figures

Figure 1 - Site Location Map 5

Figure 2 - Section 368 Corridor Map..... 6

Figure 3 - Solar Panel Layout..... 9

List of Tables

Table 1. Preliminary List of Applicable Project Permits 12

Table 2. ConnectGen Team Summary of Project Execution..... 14

List of Appendices

- APPENDIX A – Representative Photos of Potential Project Components
APPENDIX B – Representative Diagrams of Potential Project Components

STANDARD ABBREVIATIONS

AC	Alternating Current
BBCS	Bird and Bat Conservation Strategy
BMPs	Best Management Practices
CFR	Code of Federal Regulations
CWA	Clean Water Act
DC	Direct Current
EPA	Environmental Protection Agency
IPaC	Information, Planning and Consultation
MW	Megawatt
NAC	Nevada Administrative Code
NDEP	Nevada Division of Environmental Protection
NDOT	Nevada Department of Transportation
NDOW	Nevada Department of Wildlife
NEPA	National Environmental Policy Act
NRHP	National Register of Historic Places
NVCRIS	Nevada Cultural Resource Information System
O&M	Operations and Maintenance
OEM	Original Equipment Manufacturer
POD	Plan of Development
PV	Photovoltaic
SCADA	Supervisory Control and Data Acquisition
SHPO	State Historic Preservation Office
SR	State Route
SWReGAP	Southwest Regional Gap Analysis Project
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geologic Survey

VRM Visual Resource Management

1 PROJECT DESCRIPTION

1.1 Introduction

On January 21, 2021, CG Western Renewables III LLC (Applicant) filed an application for a Type II right-of-way (ROW) grant (NVN 100223) with the Bureau of Land Management (BLM) Tonopah Field Office. The original Type II ROW application was submitted to evaluate solar resource potential across approximately 3,200 acres in Big Smoky Valley, south of US Highway 6, approximately 14 miles northwest of Silver Peak in Esmeralda County, Nevada. Based on information obtained during the initial site evaluation process and after subsequent coordination with BLM, the Applicant amended the existing Type II ROW grant application, advancing to a Type III ROW grant application, and is submitting this Preliminary Plan of Development (POD) to the BLM to support the development, construction and operation of a solar energy generation facility. This Preliminary POD has been compiled with current information and will be modified as additional information becomes available and the project undergoes final engineering and design.

1.1.1 Facility Description, Planned Uses, and Generation Output

The Applicant proposes to construct, operate, maintain, and decommission an approximately 1,000-megawatt (MW) alternating current (AC) solar photovoltaic (PV) energy generation facility and an associated battery energy storage system. The Smoky Valley Solar Project (Project) would encompass approximately 5,128 acres of BLM land (reference Figure 1).

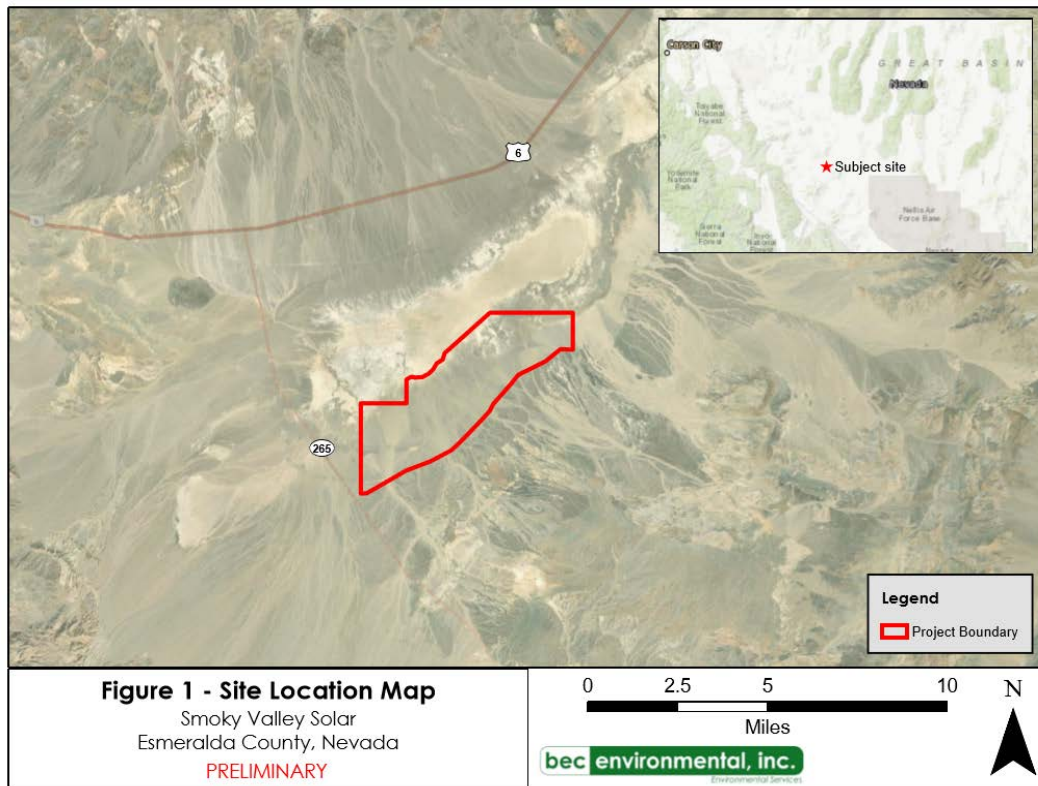


Figure 1 - Site Location Map

The Esmeralda County site has been selected for its potential to produce renewable solar energy with minimum siting constraints including BLM identified sensitivities or development exclusions. BLM land included in this application offers the most optimal solar resource in the region with the ability to interconnect to either existing electric facilities or the planned Greenlink West transmission project. The proposed Greenlink West transmission project, a 525kV AC overhead transmission line from Las Vegas, NV to Yerington, NV, crosses proximal to the southeast corner of the requested ROW and is located within the West-wide Energy Corridor (Section 368 Energy Corridor 18-224), identified in the Designation of Energy Corridors on Federal Land in the 11 Western States Programmatic Environmental Impact Statement (PEIS) and depicted in Figure 2.

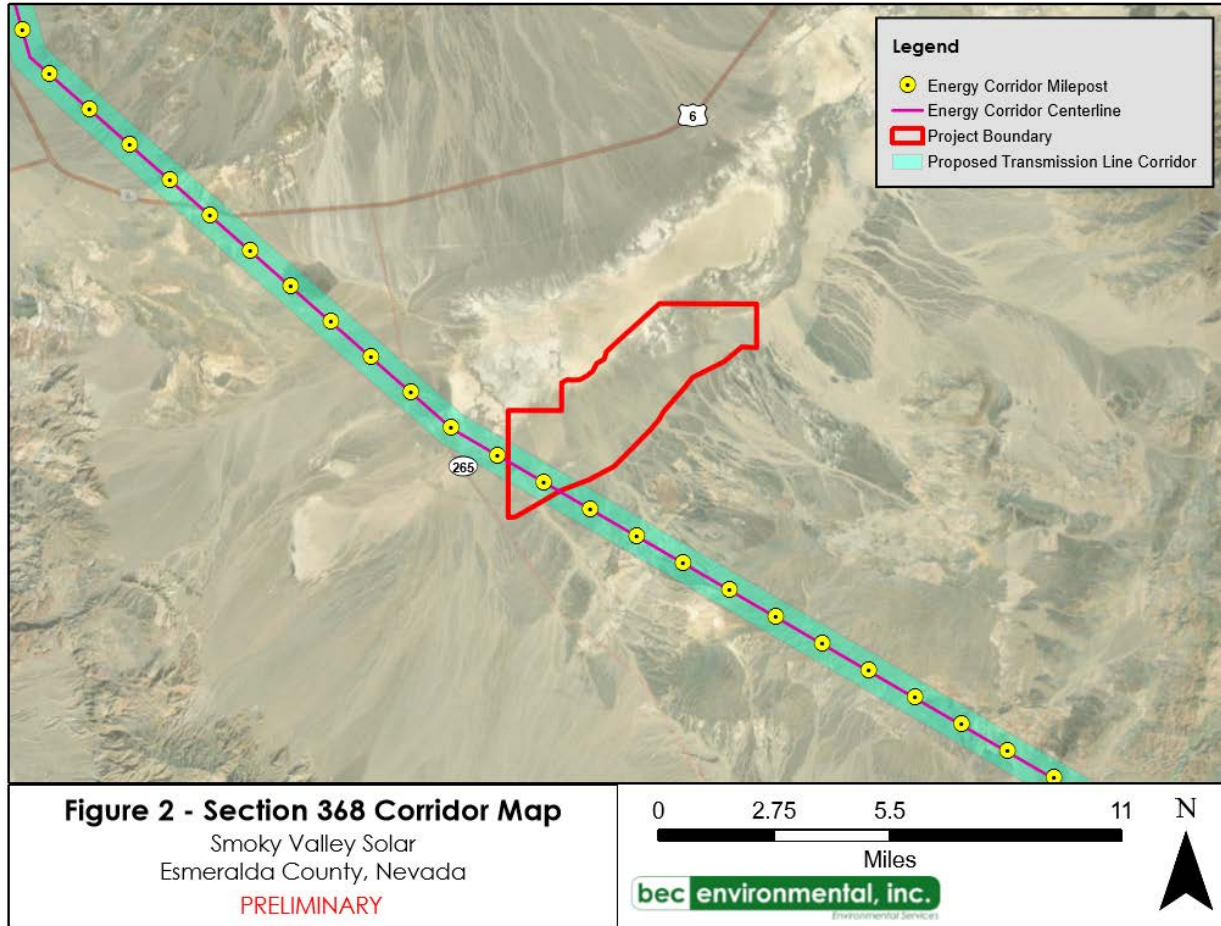


Figure 2 - Section 368 Corridor Map

1.1.2 Applicant's Schedule for the Project

The Applicant anticipates permitting will take approximately 24 months. Construction is anticipated to take approximately 24 months or more from permitting completion, weather and ground condition depending, with an additional 3 to 6 months of post construction restoration. The Applicant would coordinate with BLM to complete the appropriate studies and subsequent National Environmental Policy Act (NEPA) documentation by the end of the second quarter of 2023. Following submittal of a POD completed consistent with BLM requirements and accepted as such by BLM, the Applicant proposes to

begin construction during the third quarter of 2023 and anticipates construction to be completed by the end of 2025.

1.2 Proponents Purpose and Need for the Project

The proposed action (Right-of-Way Grant) would provide land access for the construction and operation of a 1,000 MW solar and battery energy storage facility and interconnection to the existing electrical grid. This project is needed to supply renewable electric energy (as an alternative to new fossil fuel generation resources) to serve the electrical load requirements in the southwestern U.S., including Nevada. The project would cost up to approximately \$1 Billion and generate approximately 1,000 MW of renewable solar PV energy.

The State of Nevada has demonstrated its commitment to investing in renewable energy resources through legislation enacted to increase its Renewable Portfolio Standard (RPS). Nevada's RPS was established in 1997 under Nevada Revised Statute (NRS) 704.7801 and has steadily increased since that date. In 2019, the Nevada Legislature passed Senate Bill (SB) 358, scheduled rates for the RPS to increase from 22 percent in 2020 to 50 percent in 2030 and each year thereafter. SB 358 also established a goal of 100 percent carbon-free electricity by 2050.

On July 20, 2020, NV Energy announced its intention to construct Greenlink West, 525kV AC overhead transmission line from Las Vegas to Yerington, Nevada. In addition to providing transmission linkage, improving reliability for communities in western Nevada, one of the main purposes of the new transmission is to allow future development of Nevada's renewable resources throughout the state. In their recommendation to the Commissioners for the March 23, 2021 hearing, PUCN staff acknowledged renewable energy goals cannot be achieved solely through importing, and construction of Greenlink West opens the majority of the State to development of available renewable resources.

On January 27, 2021, President Joseph Biden signed Executive Order (EO) 14008: Tackling the Climate Crisis at Home and Abroad. This EO placed the Climate Crisis at the center of National Security and US Foreign Policy, and took a government-wide approach to addressing climate change. Additionally, the Order directed the federal government to lead by example. Specifically, Section 207 directed the Secretary of the Interior to review opportunities to increase renewable energy production on public lands. This EO built on the Energy Policy Act of 2005, in which Section 203 specified the Federal Government must consume at least 7.5 percent of its electricity from renewable resources, where possible.

The Smoky Valley Solar Project is complimentary to both state and federal energy policy, and it's development would result in local and regional environmental and economic benefits. Potential public benefits of the proposed project include increased renewable energy generation critical to meeting Nevada's State-mandated RPS, low-carbon emission energy production, and developing resources consistent with the purpose and need for the Greenlink West project. Additional public benefits include tax revenues to support local and State government and new jobs associated with the project construction and operation.

1.3 General Facility Description, Design, and Operation

The following sections provide a preliminary description of the solar facility, including, but not limited to its general design, major equipment, buildings, and operation.

1.3.1 Project Location, Land Ownership, and Jurisdiction

The Project would be located south of US Highway 6, east of Nevada State Route 265, and approximately 14 miles north of Silver Peak, Esmeralda County, Nevada (Figure 1). The Project would be located on lands administered by the BLM.

1.3.2 Legal Land Description of Facility

The project is located in portions of Township 1 North, Range 38 East; portions of Township 1 North, Range 38.5 East; portions of Township 2 North, Range 38 East; and portions of Township 2 North, Range 38.5 East. The following is a list of the BLM lands requested to the quarter/quarter-section as identified in the filed ROW grant application:

T.1 N., R.38 E.,

- sec. 1, E ½, S ½ NW¼, and SW ¼;
- sec. 11, E ½, NW ¼, E ½ SW ¼, and NW ¼ SW ¼;
- sec. 12;
- sec. 13, N ½ NE ¼, and NW ¼;
- sec. 14, N ½, SW ¼, N ½ SE ¼, SW ¼ SE ¼.

T.1 N., R. 38.5 E.,

- sec. 5, NE ¼ NE ¼, W ½ NE ¼, NW ¼, and W ½ SE ¼;
- sec. 6;
- sec. 7, N ½ NE ¼, SW ¼ NE ¼, NW ¼, N ½ SW ¼, and SW ¼ SW ¼.

T.2.N. R.38.E.,

- sec. 36, SE ¼ SE ¼.

T.2.N. R. 38.5. E.,

- sec. 31, E ½, and SW ¼;
- sec. 32;
- sec. 33 N ½, SW ¼, and N ½, SE ¼.

1.3.3 Total Acreage and General Dimensions of Facilities and Components

The Project would encompass approximately 5,128 acres of BLM land. During construction, up to twelve temporary work areas would be needed, including two 10-acre project lay-down yards and up to ten 3-acre temporary staging areas would be located throughout the Project Area.

Access to the site is available via a well maintained 25-foot-wide dirt road that connects to State Route 265. The project access road may be improved with rock or gravel to reduce impacts related to dust during high traffic volumes. Permanent roads within the proposed ROW, approximately 20 feet wide with wider turning radii and turnouts to accommodate large vehicles would be needed, initially during construction to facilitate PV panel and equipment installation, and later to allow access for panel maintenance equipment during facility operation.

The solar facility would consist of: uniform rows of PV solar panels producing DC electricity mounted on either fixed-tilt or single-axis tracking structures, with a typical maximum height of 12 feet; inverters and medium voltage transformers co-located within panel arrays; and a medium voltage (34.5 kilovolts AC) collection system. The collection system would be connected to a new project substation approximately five to fifteen acres in size. Transmission structures connecting the Project to NV Energy's proposed Esmeralda Substation would be 65 to 110 feet tall.

An operations and maintenance area approximately five acres in size would be used for equipment parking and storage, and potentially would include a 5,000 to 6,000 square-foot building approximately 15 feet in height, for storage and operations. Perimeter fencing with a maximum height of 10 feet and gated entryways would surround the project area. preliminary depiction of the site layout is provided in Figure 3.

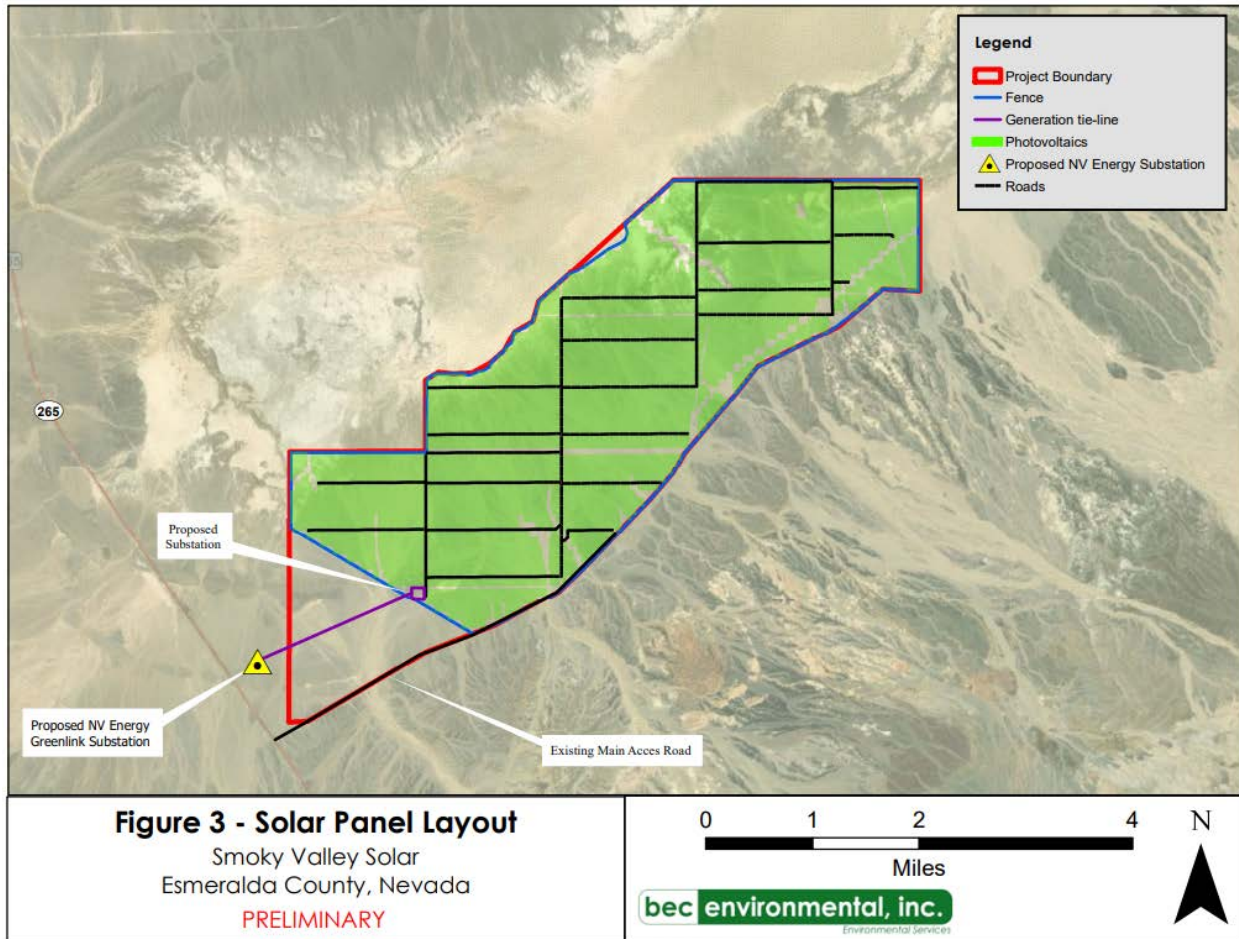


Figure 3 - Solar Panel Layout

1.3.4 Power Plant Facility Information

The constructed solar generation facilities would include: multiple parallel rows of solar PV panels with the capacity to produce up to 1,000 MW-AC of electricity and associated solar trackers or fixed support structures; direct current (DC) or AC collection cable and combiner or switch boxes; solar power inverters and medium-voltage transformers; and lithium-ion-based (or similar) energy storage batteries with capacity not exceeding the final solar project capacity. Electrical distribution lines on the site would be underground. A project substation that would include the main step-up transformer(s), control house, supervisory control and data acquisition (SCADA) system, and associated high voltage electrical equipment would be located adjacent to the transmission line running across the southeast portion of the requested ROW. New access roads; perimeter fencing; an administration/operations and maintenance

building with associated storage facility; temporary use areas for construction; and a new overhead electric transmission line (gen-tie line) to interconnect to the existing transmission grid or proposed Esmeralda Substation.

The proposed Project would be designed for year-round use for 50 years, with the possibility of renewal for longer operations. The O&M building would house administrative staff, maintenance facilities, and ancillary support systems such as component storage. The main control room housing the main SCADA system would be housed within the operation and maintenance building. A gravel parking lot would be constructed adjacent to the building, capable of holding up to 20 vehicles.

Utilities needed to support the Project during construction and operation, including communications / internet access, potable and non-potable water supplies, and wastewater (sewage) disposal would likely be provided by private vendors based in Tonopah, but these options are still under evaluation.

1.3.5 Studies and Data Needed

During the initial permitting and feasibility stage, the project would deploy two ground based solar data collection units to monitor meteorological conditions on the site. Existing access paths would be used to deploy and access the units. The units are temporary and would be removed prior to beginning construction of the project.

In order to determine soil and geologic characteristics, a geotechnical analysis would be needed prior to performing detailed engineering design for the project. Geotechnical investigations would be performed to identify subsurface conditions, which would dictate much of the design specifications of the roads, underground trenching, and electrical grounding systems. The specific geotechnical testing locations would be determined closer to final project engineering design.

1.3.6 Project Plans and Programs

Additional project plans and programs to be developed during the permitting process or prior to construction may include, but are not limited to:

- Erosion Control and Stormwater Drainage Plan. This plan will identify areas of potentially higher erodibility due to grading or ground disturbance and will define appropriate erosion control measures that may be implemented during and after construction. The plan will also identify any permanent stormwater design features to be maintained during operations
- Vegetation Treatment and Weed Management Plan. The plan will discuss anticipated vegetation management practices to be implemented during the operational phase as well as practices to manage noxious or unwanted weed species on the site.
- Waste and Hazardous Materials Management Plan. The plan will identify potential wastes or hazardous materials that may temporarily be stored on site, and the plans for disposal of such materials.
- Fugitive Dust Control Plan. The fugitive dust control plan will be prepared in compliance with NVDEP air quality regulations and will describe measures to minimize fugitive dust emissions during construction and operations.
- Fire Protection Plan. The Fire Protection Plan will identify measures to prevent fires during construction and operation, as well as the appropriate response procedures in the event a fire occurs.

- **Site Security Plan.** This plan will describe measures designed to avoid and/or minimize adverse effects associated with breaches in Project security during construction including terrorism, sabotage, vandalism, and theft. The plan will include provisions describing how the Project construction team will coordinate with state and local law enforcement agencies during construction to improve Project security and facilitate security incident response, if required.
- **Stormwater Pollution Prevention Plan (SWPPP).** This plan, consistent with federal and state regulations, will describe the practices, measures, and monitoring programs to control sedimentation, erosion, and runoff from disturbed areas.
- **Spill Prevention, Control and Countermeasure (SPCC) Plan.** This plan will describe the measures designed to prevent, control, and clean up spills of hazardous materials
- **Health and Safety Plan.** The Health and Safety Plan would describe specific safety measures enacted based on the activities and anticipated conditions that occur on site.
- **Emergency Response Plan.** This plan identifies local emergency services contacts and facility locations, and procedures for responding to an onsite emergency during construction or operations.
- **Decommissioning, Abandonment, and Site Reclamation Plan.** This plan describes the removal of project equipment and structures and the return of land to its previous condition.
- **Environmental Compliance Management Plan.** This plan would outline the compliance process for the project in accordance with BLM requirements for ROW compliance monitoring.

1.3.7 Environmental Protection Measures

The Applicant will develop and implement Environmental Protection Measures (EPMs) to avoid or minimize adverse effects to environmental resources from construction, operations and maintenance, and decommissioning of the Project. Additionally, the Applicant may designate certain areas as “environmentally sensitive” and take actions to avoid or minimize effects on these areas. Environmentally sensitive areas may include, for example, wetlands, certain water bodies, cultural resources, or wildlife habitat.

1.4 Alternatives Considered by the Applicant

Several areas throughout Nevada were identified as potential solar and battery storage development opportunities. However, these alternative sites did not have the attributes necessary to feasibly and economically develop, build, and operate utility scale solar and battery storage project. The alternative sites were eliminated from further consideration based on site screening criteria included (but not limited to): environmental constraints, solar resource, land use restrictions, topography constraints, and proximity to existing or planned electrical transmission infrastructure and substation. The sites either did not have sufficient solar irradiance to justify development, were not environmentally suitable, had complex topography, or were too far from the existing or planned transmission grid to justify development. Therefore, the Applicant saw no reasonable alternate locations for further study.

Other alternatives still under consideration include specific PV system technology and design layout, as advancements and improvements in these approaches occur frequently, and specific alternatives may be evaluated based on information obtained by the solar data collection units.

1.5 Other Federal, State and Local Agency Permit Requirements

The proposed action would comply with all relevant federal, state, and local plans, statutes, and regulations. Table 1 presents a preliminary list of federal, state, and local agency approvals, reviews, and

permitting requirements anticipated for the project. The project is located on federal land managed by the BLM and is required to go through environmental review in accordance with NEPA. Other federal, state, and local agency notification and involvement would be completed as part of the NEPA process. In addition, coordination with Esmeralda County would be undertaken when applicable.

Table 1. Preliminary List of Applicable Project Permits

Accepting Authority / Approving Agency	Permit/Approval or Review	Action Requiring Permit, Approval, or Review
Federal		
BLM	ROW Grant	SF299 – Application for new ROW
BLM	Environmental Assessment or Environmental Impact Statement	Lead Agency National Environmental Policy Act compliance to process ROW application
Nevada State Historic Preservation Office (SHPO)	Section 106 Consultation regarding Historic Resources	Federal agency compliance with Section 106 of National Historic Preservation Act;
U.S. Army Corps of Engineers	CWA Section 404 authorization under Nationwide Permits	Fill or Dredge activity within a Waters of the U.S>
US Department of Defense (Fallon Naval Air Station)	Recommended Project review and/or coordination for potentially military conflicts	Activities or infrastructure located in low-fly zones or for structures greater than 100 ft
US Fish and Wildlife Service	Biological Assessment / Biological Opinion (Section 7 ESA)	Endangered Species Act compliance

Accepting Authority / Approving Agency	Permit/Approval or Review	Action Requiring Permit, Approval, or Review
State		
Nevada Department of Transportation (NDOT)	Over Legal Size/Load Permit	Trucks: Exceed 80,000 pounds gross weight; or exceed 8 feet, 6 inches in width; or exceed 14 feet in height; or exceed 10 feet of front or rear overhang; or exceed 70 feet in length.
NDOT	ROW Occupancy Permit	Construction within an NDOT ROW
Nevada Division of Environmental Protection (NDEP).	Construction Stormwater General Permit NVR100000	Clean Water Act (CWA) Section 402 compliance associated with construction ground disturbance greater than one acre that will discharge into a municipal stormwater sewer system or into a waters of the U.S.
NDEP	Holding Tank General Permit: Temporary Holding Tank (GNEVTHT09) and Permanent Holding Tank (GNEVPHT09)	Onsite collection and temporary holding of domestic sewage from commercial operations.
NDEP	Surface Area Disturbance Permit	Nevada Administrative Code (NAC) 445B.22037 compliance associated with surface disturbance greater than five acres.
Nevada Division of Forestry	Rare and Endangered Plant Permit	Removal of critically endangered plants.
Nevada Division of Forestry	Native Cacti and Yucca Commercial Salvaging and Transportation Permit	Removal or possession of six or more protected cacti in any one calendar day, or of less than six for seven or more consecutive calendar days.

Nevada SHPO	NHPA Section 106 Determination of Effect Concurrence	Federal consultation, UEPA permit required, or human remains discovered.
Public Utilities Commission of Nevada	Utilities Environmental Protection Act – Permit to Construct	Greater than 70-megawatt (MW) renewable energy facility or greater than a 200-kilovolt (kV) transmission line.

1.6 Financial and Technical Capability

The Applicant is a wholly owned subsidiary of ConnectGen LLC (ConnectGen), which is an independent renewable energy company focused on the development of greenfield wind, solar and energy storage projects across the United States and Canada. ConnectGen is a portfolio company of Quantum Energy Partners. Founded in 1998, Quantum is a leading provider of private equity capital to the global energy industry, having managed together with its affiliates more than \$16 billion in equity commitments since inception.

ConnectGen is led by a group of highly regarded professionals in the energy industry who have successfully developed, financed, constructed, and operated many gigawatts of utility-scale renewable energy projects across the country. See below for a table that summarizes the team’s track record of project execution.

Table 2. ConnectGen Team Summary of Project Execution

Project Technology	Number of Projects	Aggregate Capacity (MW)
Wind	71	10,762 MW
Solar	10	642 MW
Standalone Battery Storage	2	20 MW

ConnectGen, is partners with EDP Renewables North America in a 50/50 joint venture which owns and operates a 278 MW solar portfolio consisting of three plants, located in Arizona, California, and Nevada, each of which became operational at the end of 2019. All three of these projects are under long-term PPA with Southern California Edison.

2 CONSTRUCTION PROCESS AND TIMETABLE

The Applicant anticipates permitting will take approximately 24 months. Construction would take approximately 24 months from permitting completion, weather and ground condition depending, with an additional 3 to 6 months of post construction restoration. The Applicant plans to complete the appropriate National Environmental Policy Act (NEPA) documentation by the end of the second quarter of 2023. Following submittal of a POD completed consistent with BLM requirements and accepted as such by

BLM, the Applicant proposes to begin construction during the third quarter of 2023 and anticipates construction to be completed by the end of 2025.

2.1 Site Preparation

Construction would initiate with staking and flagging of the perimeter fence and then installation of a security fence up to ten feet tall and grading of perimeter roads. If necessary, a biological and/or cultural resource monitor may be present during initial grading and excavation if pre-construction studies identify nearby sensitivities, such as natural and cultural resources. After completion of perimeter fence and boundary road, activities would commence to prepare the laydown areas, Operation and Maintenance area, parking, and project substation. These areas would be cleared and grubbed of vegetation. Construction entrance and exit gates would be established.

The Applicant will apply its experience performing vegetation management on its existing NV solar energy project, along with baseline vegetation surveys on the site to determine methods of vegetation management. Factors including soil erosion, weed management, fire potential, and water requirements are being considered to adapt the most environmentally sustainable option available as of the date proposed for construction. Cacti and yucca, if on site, may be relocated from impacted areas prior to construction in accordance with BLM requirements.

2.2 Substation and Operations and Maintenance Building

After clearing, grubbing and grading, the substation area (approximately five acres in size) would be constructed to include the main step-up transformer(s), control house, supervisory control and data acquisition ("SCADA") system, and associated high voltage electrical equipment, new access roads, perimeter fencing, an administration / operations and maintenance building with associated storage facility, temporary use areas for construction, and a new overhead electric transmission line ("gen-tie line") to interconnect to the existing transmission grid.

2.3 Solar Array and Battery Storage

The solar PV generation facility would consist of parallel rows of PV solar panels producing DC electricity mounted on either fixed-tilt or single-axis tracking structures, with a typical maximum height of 12 feet; inverters and medium voltage transformers would be co-located within panel arrays; a medium voltage (34.5 kilovolts AC) collection system would collect and transmit the produced electricity from the PV solar arrays to the new substation.

The battery energy storage system configuration would depend on the nature of the system and the type of battery ultimately selected based on storage capacity, durability, and performance.

If a DC system is used, a shallow foundation would be placed next to as many inverters as are needed to achieve the required battery storage capacity. The battery containers would be delivered directly to the inverter locations and placed on the foundation. The battery containers would then be connected to the inverters by installing DC cables, AC auxiliary power, and fiber optics.

If an AC system is used, the collector substation area would be expanded by up to 50 acres to incorporate the additional space required for the battery storage system and additional inverters. The ground would be graded, and level concrete pads would be poured for battery containers. The battery containers would be placed and connected to the grounding grid. Underground conduit would be installed to connect the batteries and inverters to the control house inside the substation. Medium-voltage conductors from the inverters would be connected to the substation medium-voltage busbar.

2.4 Gen-Tie Transmission Poles

All structures for the gen-tie line will be 65 to 110-foot poles constructed of either galvanized or weathered steel poles or lattice steel towers similar to structures existing in the area. The final finish of the structures would be determined as part of the detailed design process. Foundations would be determined based on the selected structure type and additional geotechnical investigations.

2.5 Construction Workforce

The on-site construction workforce would consist of scientists, laborers, craftsmen, supervisory personnel, and construction management personnel. Anticipated new jobs associated with the project include up to 600 full-time-equivalent jobs over the course of construction. There could be up to 300 workers on-site during the peak of construction activities.

Construction will occur five or more days a week for an estimated 10 to 12 hours per day, for approximately 24 months. Additional hours may be necessary to make up for schedule and weather delays. Due to extreme heat during summer months, cement crews (for example), may need to work during nighttime hours to avoid extreme heat that would complicate curing and drying of cement.

2.6 Dust Control

The construction phase of the proposed project would temporarily cause fugitive dust related to grading, vehicle traffic, drilling bore holes, and other construction activities. Dust control measures, to be outlined in a Surface Area Disturbance Permit Dust Control Plan, would comply with NDEP requirements. The following Best Management Practices (BMPs) would be incorporated to minimize fugitive dust and wind erosion:

- Minimize grading and vegetation removal.
- In areas where vegetation removal and/or grading is required, delay the process of vegetation removal until critical for module installation.
- Limit vehicle speed on access road and on solar facility roads to 15 miles per hour.
- Apply water to disturbed soil areas using water trucks to control dust and maintain proper moisture levels for soil compaction. Minimize over-application of water to prevent runoff and ponding.
- Suspend excavation and grading during periods of high wind.
- Cover all trucks hauling soil or other loose material in and out of the proposed project site.
- Gravel or aggregate would be used where access roads meet paved roads to limit offsite disturbance and prevent mud and dirt track-out.

2.7 Water Use

The construction phase of the proposed project would utilize approximately 4,600 acre-feet during construction to support dust control, soil compaction, and other activities. The estimated volume will be refined as project design continues. The source of water is being evaluated, but the applicant anticipates construction and operation water will be purchased from local vendors who hold existing water rights. Potable water for the workers also will be obtained from commercial sources.

2.8 Access, Truck Trips and Deliveries

During peak construction, an average of 75 truck trips per day would be required to supply concrete, construction materials, proposed project components, and equipment to the site. An additional estimated 100 passenger vehicles would also make a round trip to the site. The use of carpooling or private bus

service be investigated to reduce daily round trips of construction worker vehicles. Concrete for PV module foundations, if required, would be procured using an on-site ready-mix operation depending on the amount of concrete needed for the project, otherwise concrete would be provided by an off-site ready-mix plant. Construction materials such as pipe, PV modules, solar module assemblies, wire and cable, fuels, reinforcing steel, transformers and inverters, and small tools and consumables would also be delivered to the site by truck.

2.9 Health and Safety Program

Project implementation is not anticipated to pose substantial health or safety risks. Project contractors would evaluate construction and operational risks and mitigate the situation as needed. A Health and Safety Plan would be implemented during construction and would include written safety programs and procedures, a hearing conservation program, a respiratory protection program, fall protection procedures, hot work procedures, heavy equipment procedures, and others. The site operation and maintenance building would be equipped with a comprehensive, on-site fire suppression and protection system. Hazardous materials are not anticipated to be present on the project site outside of vehicle fluids (e.g., oil, hydraulic fluid, etc.). All equipment will be in good working order to avoid hazardous materials release. The construction crew would manually remove contaminated soils should an oil or hydraulic leak occur. BLM would be contacted immediately in the event that a substantial release occurs. Prior to commencement of construction, a site Health and Safety Plan and a Spill Prevention and Emergency Response Plan would be drafted and submitted to the BLM for approval.

2.10 Cleanup and Site Reclamation

Construction sites, material storage yards, and access roads would be kept in an orderly condition throughout the entirety of the construction period. Approved enclosed refuse containers would be used throughout the project area. Disturbances to vegetation and soils would be carefully planned and minimized during construction. The post-construction ROW would be restored in accordance with BLM requirements. All practical means would be made to restore the land to its original natural contours. Post-construction restoration efforts are expected to last three to six months.

3 RELATED FACILITIES AND SYSTEMS

3.1 Transmission System Interconnect

Nearly all of the power produced by the project would be delivered to the grid. Any power needed at the site for plant auxiliaries, such as control systems and general facility loads, including lighting and heating, ventilation, and air conditioning, would be provided from external sources through the new proposed facilities, and not from the generation on-site.

3.2 Other Related Systems

The proposed project requires a SCADA system to keep track of the plant, control production, respond to demands on the grid, and be able to take the plant off-line quickly if required for grid operation or safety reasons. SCADA refers to a system that collects data from various sensors throughout the plant then sends the data to a central computer, which then manages and controls the data. It also refers to that part of the system that communicates with the rest of the grid. To comply with the grid interconnect requirements, the project must provide redundant communications to the plant. Technology is changing rapidly in the field of plant control communications, but for the purposes of this POD, the Applicant is evaluating the use of a physical connection installed overhead on the proposed gen-tie line as a possible option. Wireless

communications via satellite or a communications tower may address the redundancy requirement for communications, but again, communication alternatives are still being evaluated.

4 OPERATIONS AND MAINTENANCE

4.1 Operations Workforce and Equipment

The operation and maintenance of the proposed project would employ up to ten full-time employees. Maintenance and administrative staff would typically work an eight-hour day, Monday through Friday. During times of major repair, the maintenance workforce would typically work longer hours and/or weekends and holidays, as necessary. This workforce would be stationed at the proposed operations and maintenance building.

4.2 Operations and Maintenance Activities

Maintenance would consist of dust control and grounds upkeep, cleaning and repair of modules, repair and upkeep of all transformers, inverters and wiring collection systems, control systems upkeep, building maintenance, and permanent stormwater controls and maintenance (if applicable).

Maintenance and equipment inspections would be completed in accordance with the recommendations of major equipment manufacturer requirements. Routine Preventative Maintenance activities would be scheduled in accordance with equipment manufacturer specifications. Operation and maintenance would require the use of vehicles and equipment including but not limited to welding, re-fueling, lubricating, panel washing equipment, forklifts, manlifts, and chemical sprayers for weed abatement (if approved). Pick-up trucks as well as utility vehicles would be used daily at the facility and on-site.

4.3 Water Use and Waste Management

The PV technology proposed for the project does not require water for the generation of electricity. During operations, water use would be limited primarily to PV array washing, with the potential for periodic dust control and maintenance applications. The amount of water required to maintain the solar facility, including cleaning the PV modules two times per year, is estimated to be up to 120 acre-feet per year. Depending on site events and conditions, the cleaning frequency may be less. The water used for module cleaning is not anticipated to require disposal due to the extremely high evaporation rate at the site. Water to be used for panel cleaning would be supplied by a commercially permitted supplier. Water would be trucked in on an as-needed basis; no storage is anticipated to be needed.

Drinking (potable) water and non-potable water used by employees on-site for washing or rinsing equipment, hand washing, and other non-toilet uses is estimated to be approximately 4 acre-feet per year, varying seasonally and by work activities. Water used during operational activities would be supplied by a commercially permitted supplier. Potable water would be stored in the proximity of the operation and maintenance building, in an approximately 1,000-gallon aboveground tank.

4.4 Termination and Reclamation

The project would have a useful life of approximately 50 years. The Applicant would be required to post a reclamation bond as a condition of authorization issuance. The value of this bond would be determined subject to BLM policy, and remains to be determined. A Decommissioning, Abandonment, and Site Reclamation Plan would be submitted to the BLM prior to a Notice to Proceed with construction and would be updated and approved by BLM prior to any decommissioning activities. At the end of the useful life of the facility and the termination of the ROW grant, the Applicant would remove all improvements.

During improvement removal, the site would remain fenced and gated. Materials that could be reused or recycled would be hauled away from the site and sold. Materials that could not be reused or recycled would be dismantled and hauled to the nearest approved landfill. Hazardous materials that could not be reused or recycled would be disposed of at approved facilities.

The gen-tie line and towers may be removed. Some structures and equipment may be required to remain in place based on final interconnection agreements. Conductors and tower steel would be sold for reuse or recycling. The project substation, including all structures and fencing, would be removed. Foundations for the towers and substation facilities would be removed and contours would be restored.

It is not possible to predict the conditions and management objectives that would exist at the time of decommissioning. Therefore, decommissioning details would be developed and provided to the BLM when the time for permanent closure is closer and more information is available. The BLM would require the Applicant to submit a Decommissioning, Abandonment, and Site Reclamation Plan that would be reviewed and revised as needed. The plan would include all activities required to dispose of or store all hazardous and toxic materials and chemicals associated with the project. This plan would discuss all currently applicable laws, ordinances, regulations, and standards associated with the safe storage or disposal of these materials. The plan would also include a description of procedures for notification of regulatory agencies. The BLM would review and approve the plan.

5 ENVIRONMENTAL CONSIDERATIONS AND OTHER RESOURCES

5.1 Site Characteristics and Potential Environmental Issues

The project is located in the Big Smokey Valley on alluvial fans between the northwest side of the Weepah Hills and a dry lake. The elevation generally ranges between 4700 to 4850 feet above mean seal level. The topography is relatively flat, bisected by ephemeral washes.

5.1.1 Vegetation and Land Cover

The project is located within a point of transition between the Great Basin Desert and Mojave Desert, making the diversity of species potentially present in the area reflective of both deserts. Four land cover types, as defined by Southwest Regional Gap Analysis Project (SWReGAP), are mapped as being present within the project area (U.S. Geological Survey [USGS] 2016). The dominant land cover types present within the area include Inter-Mountain Basins Mixed Salt Desert Scrub, covering approximately 60% of the project area; Inter-Mountain Basins Greasewood Flat at approximately 25%, and Inter-Mountain Basins Playa at approximately 15%. Two discrete areas at the north end of the project area were mapped as Inter-Mountain Basins Active and Stabilized Dune, which constitute less than 1% of the project area at approximately two acres. Generally, these landcover types are not unique or rare within the Great Basin or Mojave Deserts, but dunes offer habitat potentially suitable for rare and often protected species.

5.1.2 Special Status and Other Sensitive Species and Habitats

Construction and operation of the proposed project could result in potential long-term and short-term effects to plants and wildlife currently utilizing the area. Potential effects may result from displacement and/or habitat fragmentation from project infrastructure siting, avoidance due to construction and operation disturbance and activity, or collision with project infrastructure. A number of species considered rare and/or designated as protected by State or Federal laws and regulations may be present in the area and could be directly or indirectly affected by the project.

Federally Threatened or Endangered Species: A query of the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) (USFWS 2021) identified no species listed as threatened or endangered under the Endangered Species Act, or critical habitat for such species, within the vicinity of the project area; a candidate for listing, the monarch butterfly (*Danaus plexippus*) was listed as potentially occurring in the area. No critical habitats, refuge lands, or fish hatcheries were identified within the project area.

Avian Species: The IPaC review did not identify any birds of potential conservation concern expected to be within the vicinity of the project area, however a variety of birds are present in the area and may be affected by the project. Most birds are protected under the Migratory Bird Treaty Act, and others are protected by other laws or regulations such as the Bald and Golden Eagle Protection Act and the State of Nevada Revised Statutes or Administrative Code. Golden eagles (*Aquila chrysaetos*) are likely present in the region, and development of the project area may result in a loss of foraging habitat. Numerous other migratory birds are present in the area, and the primary impact to these species would be the temporary or permanent loss of habitat, though the incidental death or injury of avian species may occur during the course of construction and operation of the facility.

Potential impacts to golden eagles, migratory birds, and particular species identified by agencies as sensitive would be addressed as necessary in a project-specific Bird and Bat Conservation Strategy (BBCS) Plan which would include measures to avoid, minimize, and mitigate impacts, as well as to monitor these impacts and adapt as needed to further reduce the impacts.

BLM Sensitive Species: A number of plants and wildlife species recognized as sensitive by the Bureau of Land Management (BLM), known or with the potential to occur in the Battle Mountain District, Tonopah Field Office area (BLM 2017). The pale kangaroo mouse (*Microdipodops pallidus*) is known to occur within the general region of the project and is associated with wind-blown sand and dune habitat, such as is found in a small portion of the project area. The dark kangaroo mouse (*Microdipodops megacephalus*) is known to occur in areas of ancient pluvial lakes across the region, within which the project area occurs. Rocky outcrops provide nesting and roosting substrate for a variety of species such as bats and birds. Nearly all bats are considered sensitive in Nevada but are not expected to be directly affected by the project based on habitat within the project location. Multiple species of perching or songbirds such as Brewer's sparrow (*Spizella breweri*) recognized as Sensitive are also likely to occur within the area and may be impacted by the project. Greater and bi-state populations of sage-grouse (*Centrocercus urophasianus*) are not expected to occur within 20 miles of the project area. Reptiles such as desert horned lizard (*Phrynosoma platyrhinos*) and long-nosed leopard lizard (*Gambelia wislizenii*) are likely to occur within the Project area. The IPaC query resulted in no federally listed plant species. However, the project area may provide suitable habitat for BLM sensitive plant species such as Nye pincushion (*Sclerocactus nyensis*).

State of Nevada Protected and Managed Species: The Nevada Department of Wildlife (NDOW) manages a variety of wildlife including big game, fur-bearing mammals, upland game birds, fish, raptors, and species designated as Protected by State law and regulations, managed by by NDOW. Game/furbearing species that could occur within the project area according to NDOW include pronghorn (*Antilocapra americana*), mule deer (*Odocoileus hemionus*), coyote (*Canis latrans*), and American badger (*Taxidea taxus*). Raptors reported by NDOW to potentially occur within and adjacent to the project area include golden eagle (*Aquila chrysaetos*), red-tailed hawk (*Buteo jamaicensis*), prairie falcon (*Falco mexicanus*), burrowing owl (*Athene cunicularia*), and ferruginous hawk (*Buteo regalis*). Reptiles, small mammals, and insects would also occur within the project area.

5.1.3 Special Land Use Designations

The area does not include areas designated as Areas of Critical Environmental Concerns, Wilderness Areas, Wilderness Study Areas, or other protections or uses.

5.1.4 Water Resources

The U.S. Army Corps of Engineers has jurisdiction over waters of the U.S., including wetlands and ephemeral channels under Section 404 of the Clean Water Act. For an area to be classified as a wetland, it must satisfy three criteria relating to vegetation (dominated by hydrophytic vegetation), hydrology (visual evidence of water), and hydric soil, but most importantly, the wash must convey flow to designated Waters of the U.S. or provide commerce, such as crossing state lines. Ephemeral channels, which drain to the playa within the valley floor, are present in the project area. The drainages and playa within the project area are not likely to be jurisdictional waters because they are located within a hydrographically isolated basin. The State of Nevada may have jurisdiction over drainages in compliance with Section 401 of the Clean Water Act. Construction activities within ephemeral channels and other water features would be minimized to the extent feasible to minimize erosion or impacts to drainage patterns.

The proposed project is not anticipated to affect groundwater quality. Water would be used during construction as a dust suppressant and would come from a commercial vendor.

5.1.5 Visual Resource Management (VRM) Designations

BLM's Visual Resource Management System entails classifying the scenic value of an area based on the qualities of its topography, hydrology, botany, human-developed (roads, buildings, structures, etc.) features, and similar characteristics. Color, texture, and overall form of the landscape is assigned value, often based on the complexity of the scenery or other elements that make a location unique in terms of visual quality. The BLM assigns value to this visual quality through their Visual Resource Management classification system. The project occurs within two classifications: VRM Class III and VRM Class IV, which run east/west through the project area. Class III occurs along the northern boundary of the project area, while Class IV, covering a majority of the project area, occurs from the middle of the project area to the southern boundary.

VRM Class III Objective: To partially retain the existing character of the landscape. **Allowed Level of Change:** The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

VRM Class IV Objective: To provide for management activities which require major modification of the existing character of the landscape. **Allowed Level of Change:** The level of change to the characteristic landscape can be high. Management activities may dominate the view and may be the major focus of viewer attention. However, the impact of these activities should be minimized through careful siting, minimal disturbance, and repeating the basic elements of form, line, color, and texture within the existing setting.

Construction and operation of the proposed 1,000 MW-AC solar PV project may result in long-term visual effects as the project would result in new above ground infrastructure in a currently undeveloped location. The proposed PV solar arrays would be visible from SR 265, and possibly from U.S. Route 6 which is north of the project area.

5.1.6 Cultural and Historic Resource Sites and Values

Cultural resource studies and agency coordination will be performed to identify archaeological sites known to exist within the Project Area and measures would be taken to avoid direct impacts to National Register of Historic Places (NRHP) eligible sites.

Based on a preliminary review of cultural resources records conducted through the State Historic Preservation Office's (SHPO's) Nevada Cultural Resource Information System (NVCRIS), only a small portion of the southwest end of the project area has been previously inventoried for cultural resources. The Applicant will perform further coordination with the SHPO to determine whether a cultural resource inventory may be needed to identify potential resources associated with the site.

5.1.7 Native American Tribal Concerns

A tribal resource is defined as a site, feature, place, cultural landscape, sacred place, or object with cultural value to a Native American Tribe. Federally recognized Native American Tribes are sovereign nations exercising government-to-government relations with the U.S. Government. The presence and location of potential Tribal resources would be determined through the cultural resource records search and through consultations between Tribes and the BLM Field Office manager throughout the NEPA and Section 106 NHPA process.

As discussed above in Section 5.1.6, a Class III Cultural Resources Inventory may be completed on behalf of the project. This inventory would be used by the BLM, in conjunction with Tribal consultations, to determine whether Tribal resources are identified within the project area. If Tribal resources are identified within the project area, construction activities would be designed to avoid those areas to the extent feasible, with the plan of resulting in no impacts. In the event Tribal resources cannot be avoided, mitigation may be required. Mitigation may include the presence of an authorized cultural resources monitor on-site during activities conducted within areas of known cultural resources.

5.1.8 SocioEconomic Considerations

The proposed project would result in tax and economic benefits to Esmeralda and Nye County. Anticipated new jobs associated with the project include up to 600 Full-Time-Equivalent jobs over the course of construction, and up to ten long term jobs during project operations. The proposed project is sited away from residential developments and is not anticipated to adversely impact the rural lifestyle of the area.

5.1.9 Noise

Increased noise levels associated with construction activities are anticipated; however, operational noise levels will be consistent with industry standards for operating photovoltaic sites and are not anticipated to result in significantly elevated levels. Additionally, no noise sensitive receptors have been identified in the vicinity of the site.

5.1.10 Air Quality

Air quality is determined primarily by the type and quantity of contaminants emitted into the atmosphere, the size and topography of the air basin, and meteorological conditions. The U.S. Environmental Protection Agency has developed the National Ambient Air Quality Standards for six criteria pollutants: nitrogen dioxide, sulfur dioxide, carbon monoxide, lead, ozone, and particulate matter.

During construction there would be dust and tailpipe emissions resulting from vehicular traffic. All vehicles and equipment would be maintained to minimize exhaust emissions and reduce noise, particularly exhaust and noise associated with commercial vehicles.

5.2 Other Uses on the Project Site

5.2.1 Grazing Permits

The project site is located within the Sheep Mountain, Monte Cristo, and Silver Peak grazing allotments.

5.2.2 Other Authorized Uses

Potentially impacted Authorized and Pending Rights of Way (ROW) include:

- NVN 086594 (Authorized), water facility, Ormat Nevada Inc.
- NVN 099863 (Pending), power transmission, NV Energy
- NVN 100222 (Pending), solar development, US Solar Assets LLC
- NVN 100223 (Pending), solar development, CG Western Renewables III LLC (Applicant)
- NVN 100358 (Pending), solar development, Nivloc Solar Energy LLC
- NVN 100361 (Pending), solar development, Boulevard Associates LLC

There is also a well and corral structure within the project site, T1N, R38E, Sect. 12, NE ¼ of the SE ¼, which is likely associated with existing grazing activities within the Project Area.

The project site is not within or part of any wild horse and burro herd management unit.

5.2.3 Recreational Access

The proposed project is not anticipated to result in impacts to recreational resources in the project area. Recreation in the project area is limited primarily to scenic driving, off-road vehicle use, and hiking associated with Tonopah and the Fish Lake Valley hot springs. Project boundaries are not located directly on or near any recreational access routes or within areas designated for specific recreational activities. There are no wilderness areas or wild and scenic rivers in the project area.

5.3 Mitigation Measures

The project has been planned and would be designed to avoid or minimize potential impacts to environmental resources to the extent feasible. Project design features will be developed to address potential environmental concerns in coordination with the BLM and would be based on proven industry standards, best available science, site-specific evaluations, and BLM guidance and policy. Design features would be analyzed in detail within the project Environmental Assessment or Environmental Impact Statement through the NEPA process. It is anticipated that implementation of project design features would successfully mitigate potentially significant impacts; however, if additional impacts are identified during the NEPA analysis process, the Application may implement additional mitigation measures as necessary.

Design features would include management plans and programs to be implemented during construction and/or operation of the project in accordance with BLM requirements and approval. An Environmental Compliance Management Plan would outline the compliance process for the project in accordance with BLM requirements for ROW compliance monitoring. A Worker Environmental Awareness Program

would be developed, if necessary, to educate workers on implementation of design features and impact avoidance and minimization measures.

Additional field studies will be performed to identify the presence of sensitive species or their habitats, such as burrows, burrows, vegetation including cactus, sand dunes, and rock outcrops. The Project would seek to avoid or minimize potential adverse effects to sensitive species through siting/design, or the development of species-specific conservation measures to be applied during construction and/or operation.

All NRHP eligible cultural resources in the area would be reviewed for potential Project effects, and appropriate avoidance, minimization, or mitigation treatments would be developed as part of the Section 106 consultation. Any unanticipated discoveries of cultural and/or paleontological resources discovered during installation would immediately be reported to the BLM. Project activities would be suspended in the area until an evaluation is completed to prevent the loss of cultural or scientific values.

6 RESOURCES

BLM 2017. BLM Nevada Sensitive and Status Species List, current as of 10/01/2017.

Tonopah Resource Management Plan and Record of Decision, Battle Mountain District, Tonopah Field Station, October 1997.

USFWS 2021. U.S. Fish and Wildlife Service IPaC Report, Consultation Code 08ENV00-2021-SLI-0242, April 14, 2021.

APPENDIX A

Representative Photos of Potential Project
Components



Figure 1 – Driven Post Installation



Figure 2 – Single-axis Tracker Panel Strings



Figure 3 – Collection System



Figure 4 – Solar Inverter



Figure 5 – Substation

APPENDIX B

Representative Diagrams of Potential Project
Components

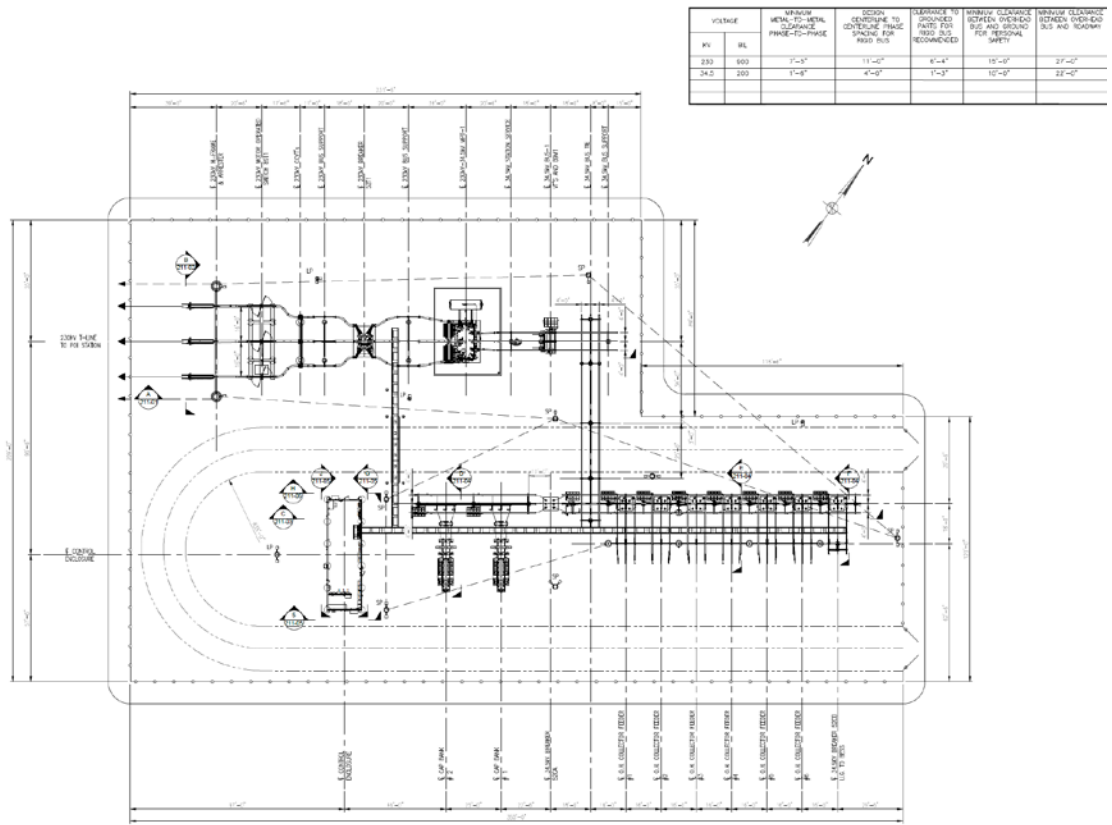


Figure 1 – Substation Design Example

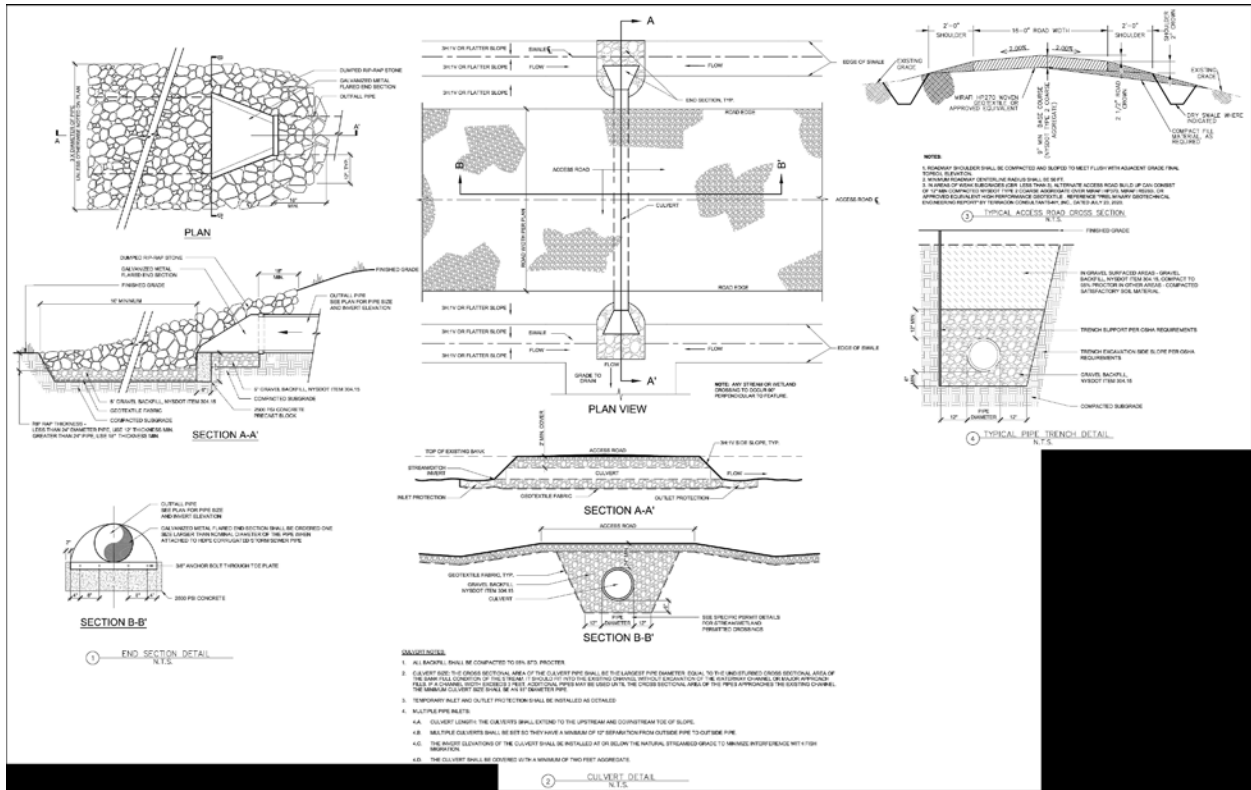


Figure 2 – Road Design Example