Programmatic Design Features To Ensure Health and Safety

The following design features have been identified to avoid, minimize, and/or mitigate potential health and safety impacts from solar energy development identified and discussed in Sections 5.21.1 and 5.22.2 of the Draft and Final Solar PEIS.

General

HS1-1 Project developers shall coordinate with the BLM and other Federal, state, and local agencies early in the planning process to identify project health and safety risks and methods to minimize those risks.

(a) Assessing project health and safety risks shall include, but is not limited to, the following:

- Identifying and establishing Federal and state occupational health and safety standards, such as the Occupational Health and Safety Administration's (OSHA's) Occupational Health and Safety Standards, 29 CFR Parts 1910 and 1926, respectively, for all phases of the project.

- Identifying safety zones or setbacks for solar facilities and associated transmission lines from residences and occupied buildings, roads, ROWs, and other public access areas that are sufficient to prevent accidents resulting from various hazards during all phases of development.

(b) Methods to minimize project health and safety risks may include, but are not limited to, the following:

- Identifying and accounting for general project injury prevention within the POD and the Health and Safety Plan, such as established PPE requirements, respiratory protection, hearing conservation measures, electrical safety considerations, hazardous materials safety and communication, housekeeping and waste handling, confined space identification, and rescue response and emergency medical support, including on-site first-aid capability.

- Implementing training and awareness measures for workers and the general public to minimize and address standard practices (such as OSHA's) for the safe use of explosives and blasting agents; occupational electric and magnetic field (EMF) exposures; fire safety and evacuation procedures; and safety performance standards (e.g., electrical system standards and lighting protection standards). Consider further training for

additional health and safety risks from the solar energy project and its ancillary facilities.

- Establishing measures to document training activities and reporting of serious accidents to appropriate agencies.

- Assessing cancer and noncancer risks to workers and the general public from exposure to facility emission sources that exceed threshold levels.

- Considering implementation of measures to reduce site emissions and the cancer and noncancer from exposure to facility emissions.

- Implementing a reporting structure for accidental release of hazardous substances to the environment where project developers shall document the event, including a root cause analysis, a description of appropriate corrective actions taken, and a characterization of the resulting environmental or health and safety impacts. Documentation of the event shall be provided to the permitting agencies and other Federal and state agencies within 30 days.

- Considering manufacturer requirements, and Federal and state standards, when establishing safety zones or setbacks for solar facilities and associated transmission lines.

- Project developers coordinating with the BLM and appropriate agencies (e.g., the DOE and Transportation Security Administration [TSA]) to address critical infrastructure and key resource vulnerabilities at solar facilities in order to minimize and plan for potential risks from natural events, sabotage, and terrorism.

Site Characterization, Siting and Design, Construction

HS1-1 Solar facilities shall be characterized, sited and designed, and constructed to minimize risk to health and safety.

(a) Methods to minimize risk to health and safety may include, but are not limited to, the following:

- Designing electrical systems to meet all applicable safety standards (e.g., National Electrical Code [NEC]) and to comply with the interconnection requirements of the transmission system operator.

- Complying with applicable FAA regulations, including lighting requirements, to avoid or minimize potential safety issues associated with proximity to airports, military bases or training areas, or landing strips.
- Considering temporary fencing and other measures for staging areas, storage yards, and excavations during construction or decommissioning activities to limit public access to health and safety risks.

- Planning for traffic management of site access to ensure that traffic flow would not be unnecessarily affected and that specific issues of concern (e.g., the locations of school bus routes and stops) are identified and addressed. Planning may include measures such as informational signs and temporary lane configurations. Planning shall be coordinated with local planning authorities.

- Considering use of alternative dielectric fluids that do not contain sulfur hexafluoride (SF_6) to reduce the global warming potential.

- Considering measures to reduce occupational EMF exposures, such as backing electrical generators with iron to block the EMF, shutting down generators when work is being done near them, and otherwise limiting exposure time and proximity while generators are running.

Operations and Maintenance

HS3-1 Compliance with the terms and conditions for health and safety shall be monitored by the project developer. Consultation with the BLM shall be maintained through operations and maintenance of the project, employing an adaptive management strategy and modifications, as necessary and approved by the BLM.