The following outline identifies the minimum requirements for a Solar Energy Plan of Development (POD) to be submitted prior to initiation of NEPA analysis (including publication of a Notice of Intent to prepare an EIS) for a solar energy development project. These minimum requirements provide the basic information necessary to begin the NEPA analysis and review process. The specific outline format and title for each section of the POD does not have to be consistent with this template, however, the content of the POD needs to include these minimum requirements.

The Solar Energy POD is a dynamic document that may require additional information during the NEPA review and analysis process. The initial POD template is just that, initial. It may require different information from the applicant depending upon the solar technology, the environmental resources that may be impacted, the location of the proposed project, the timing of the project, etc. There may be information required from one applicant that is not required by another applicant, because of the issues or resources involved.

Supplementary Information: Additional Supplementary Information (attached) will be required, after publication of the Notice of Intent, to prepare and complete the NEPA process. Alternative designs, design features and mitigation measures developed in the NEPA analysis will be incorporated into a final POD. Additional environmental information and data (including wildlife surveys, sensitive plants and cultural resource surveys) will be required as part of the NEPA analysis process.

Solar Energy Plan of Development Outline:

- 1. Project Description
 - a. Introduction
 - Describe type of facility, planned uses, generation output
 - Applicants schedule for project, including anticipated timelines for permitting, construction and operation, and any phased development as appropriate
 - b. Proponents Purpose and Need for the Project
 - c. General Facility Description, Design and Operation
 - Project location, land ownership and jurisdiction
 - Legal land description of facility (federal and non-federal lands) pursuant to the BLM Specifications for Descriptions of Land 2015
 - Total acreage and general dimensions of all facilities and components
 - Power plant facilities, thermal conversion process
 - Energy storage facilities
 - Numbers and general dimensions of solar array, power generation units (wet or dry cooling), towers, substations, transmission lines, access roads, buildings, parking areas
 - Temporary construction workspace, yards, staging areas
 - Geotechnical studies and data needs, including solar insolation testing
 - Ancillary facilities (administrative and maintenance facilities and storage sites)
 - Water usage, amounts, sources (during construction and operations)
 - Erosion control and stormwater drainage
 - Vegetation treatment and weed management
 - Waste and hazardous materials management
 - Fire protection

- Site security and fencing (during construction and operations)
- Electrical components, new equipment and existing system upgrades
- Interconnection to electrical grid
- Spill prevention and containment for construction and operation of facility
- Health and safety program
- d. Alternatives Considered by Applicant
 - Alternative project site location considerations
 - Alternative technology considerations
 - Alternative project design/layout/phased development considerations
 - Alternatives considered but not carried forward
 - Comparative analysis of alternatives
- e. Other Federal, State and Local Agency Permit Requirements
 - Identify required permits (entire project area on both federal and non-federal lands)
 - Status of permits
- f. Financial and Technical Capability of Applicant
- 2. Construction of Facilities
 - a. Solar field design, layout, installation and construction processes including timetable and sequence of construction
 - b. Phased projects, describe approach to construction and operations
 - c. Access and transportation system, component delivery, worker access
 - d. Construction work force numbers, vehicles, equipment, timeframes
 - e. Site preparation, surveying and staking
 - f. Site preparation, vegetation removal and treatment
 - g. Site clearing, grading and excavation
 - h. Solar array assembly and construction
 - i. Power plant construction
 - j. Gravel, aggregate, concrete needs and sources
 - k. Electrical construction activities
 - 1. Aviation lighting (power towers, transmission)
 - m. Site stabilization, protection, and reclamation practices
- 3. Related Facilities and Systems
 - a. Transmission System Interconnect
 - Existing and proposed transmission system
 - Ancillary facilities and substations
 - Status of Power Purchase Agreements
 - Status of Interconnect Agreement
 - General design and construction standards
 - b. Gas Supply Systems (as appropriate)
 - Backup natural gas generation requirements
 - Pipeline routing considerations and construction standards
 - Metering stations
 - c. Other Related Systems

- Communications system requirements (microwave, fiber optics, hard wire, wireless) during construction and operation
- 4. Operations and Maintenance
 - a. Operation and facility maintenance needs
 - b. Maintenance activities, including mirror washing and road maintenance
 - c. Operations workforce and equipment
- 5. Environmental Considerations and Other Resources
 - a. General description of site characteristics and potential environmental issues (existing information)
 - Special or sensitive species and habitats
 - Special land use designations
 - Visual Resource Management (VRM) designations
 - Cultural and historic resource sites and values
 - Native American Tribal concerns
 - Other environmental considerations
 - b. Other uses on project site
 - Grazing permit (grazing use, range improvements including fences and water sources and distribution, access, proposed mitigation, and any agreements with permittee)
 - Other existing authorized uses (rights-of-way, leases and permits)
 - Public access and roads
 - Recreation and OHV conflicts
 - Aviation and/or military conflicts (as appropriate)
 - Mining claims
 - Other environmental considerations
 - c. Mitigation measures proposed by applicant and included in POD
- 6. Maps and Drawings
 - a. Maps with footprint of solar facility (7.5 min topographic maps or equivalent to include references to Public Land Survey system)
 - b. Initial design drawings of solar facility layout and installation, thermal power conversion facilities, electrical facilities and ancillary facilities. These initial design drawings will typically be a 30% Engineering and Civil Design package to adequately describe the proposed project and evaluate the design considerations for soils, drainage and watershed management.
 - c. Initial site grading plan
 - d. Maps with transmission facilities, substations, distribution, communications
 - e. Access and transportation maps
 - f. Preliminary visual resource evaluation and visual resource simulations (as appropriate)

SUPPLEMENTARY INFORMATION

Additional Supplementary Information will be required from the applicant in order to prepare the NEPA analysis and complete the review process, but is not required to be submitted with the initial POD. This information may be filed after the publication of a Notice of Intent to prepare an EIS, but is required before the BLM can complete the environmental analysis. This information is developed as further data is gathered on-site and as alternative designs and mitigation measures are incorporated into a final POD. Other environmental data and inventory information (including but not limited to cultural resources, sensitive species and other biological data) will also be required to be collected by the applicant in order to prepare the NEPA analysis.

- 7. Engineering and Civil Design
 - a. Facility survey and design drawing standards
 - b. Supplemental engineering and civil design packages may be required based on modifications to the initial POD during preparation of the NEPA analysis. Final engineering and civil design packages will be required prior to approval of the Notice to Proceed for all solar facilities, thermal power conversion facilities, electrical facilities and ancillary facilities that incorporate all mitigation measures developed in the final NEPA analysis and incorporated into the final approved POD. Final as-built drawings will be required for all facilities after completion of construction.
 - c. Watershed and drainage analysis and calculations
 - d. Watershed protection and erosion control design drawings
 - e. Supplemental site grading plans may be required based on modifications to the initial POD during preparation of the NEPA analysis. Final site grading plans will be required prior to approval of the Notice to Proceed that incorporate all mitigation measures developed in the final NEPA analysis and incorporated into the final approved POD.
- 8. Alternatives Considered by the Applicant
 - a. Alternative engineering design considerations
 - b. Alternatives considered but not carried forward by proponent
 - c. Comparative analysis of design alternatives
- 9. Facility Management Plans (as appendices in the POD)
 - a. Design Criteria (Applicant Mitigation Measures)
 - b. Health and Safety Plan (including)
 - Emergency Action Plan
 - Waste and Hazardous Materials Management Plan
 - Fire Protection and Prevention Plan
 - Structure and hazmat fire
 - Wildland fire
 - Fuels management
 - Wildfires as a result of human or project activities that could threaten adjacent lands and wildfires burning on adjacent lands that could threaten project safety and infrastructure.
 - Wildfire history in the vicinity of the project
 - c. Cultural and Human Remains Discovery Plan
 - d. Traffic and Transportation Plan
 - e. Dust Control and Air Quality Plan

- f. Blasting Plan
- g. Bird and Bat Conservation Strategy, including Eagle Management Plan
- h. Stormwater Pollution Prevention Plan
- i. Spill Prevention Control and Countermeasure Plan
- j. Environmental Construction Compliance Monitoring Program
 - Compliance monitoring and mitigation personnel
 - Communication workflows
 - Reporting and documentation
 - Variance process
 - Worker Environmental Awareness Program (WEAP)
- k. Integrated Restoration Plan
 - Restoration standards
 - Habitat restoration standards
- 1. Weed Management Plan
- m. Integrated Pest Management Plan

Note: All pesticide use must be authorized through a Pesticide Use Proposal (PUP). PUPs are subject to NEPA analysis and environmental compliance requirements for pesticide use on BLM managed public lands. This includes herbicides, insecticides, rodenticides, fungicides, etc.

- n. Decommissioning Plan Site Plans
- o. Flagging, Fencing and Signage Plan
- p. Historic Properties Treatment Plan
- q. Paleontological Mitigation and Monitoring Plan
- r. Paleontological Discovery Plan
- 10. Facility Decommissioning
 - a. Reclamation and site stabilization planning
 - b. Temporary reclamation of disturbed areas
 - c. Removal of power generation and substation facilities
 - d. Removal of heliostats/panels
 - e. Removal of other ancillary facilities