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## Environmental Checklist for Solar Photovoltaic Project(s)

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To ensure compliance with the President's Council on Environmental Quality (CEQ) guidance (40 C.F.R. Parts 1500-1508) and the Army's National Environmental Policy Act (NEPA) regulation (32 C.F.R. Part 651), the below checklist supports referencing of the *Programmatic Environmental Assessment for Construction and Operation of Solar Photovoltaic Renewable Energy Projects on Army Installations* and the associated Finding of No Significant Impact (FNSI) for site-specific projects on Army installations. The programmatic environmental assessment (PEA) addresses solar photovoltaic (PV) systems, to include associated energy storage, microgrid infrastructure, and infrastructure to connect to the grid. The environmental checklist facilitates the consideration of environmental effects for proposed site-specific projects and provides a framework for identifying site-specific NEPA requirements. If site-specific solar PV projects includes work outside the scope of the PEA, additional NEPA would be required.

"Installations" include active Army garrisons and installations, U.S. Army Reserve facilities, U.S. Army National Guard sites, and joint bases managed by the Department of the Army.

Use of the PEA assumes that installations are considering alternative renewable energy technologies and will analyze alternative technologies along with solar PV, or have determined that these alternative technologies are not feasible to meet that particular installation's need. Installations must carefully consider all reasonable alternatives, including other renewable energy technologies, to meet their particular needs.

Army installations tiering from the solar PV PEA and associated FNSI shall use this checklist to determine whether reliance on the PEA (and possibly other NEPA analyses and one or more Categorical Exclusions [CXs]) are appropriate, or whether additional NEPA analysis is needed for a specific proposed project.

If the installation can respond "no" to each of the statements in the checklist below, then no further NEPA analysis would appear to be required and the action likely qualifies for a Record of Environmental Consideration (REC).

When a project qualifies for a REC, the installation REC should cite 32 C.F.R. § 651.12(a)(2) ("action is adequately covered within an existing EA or EIS") and name the solar PV PEA and FNSI. If the REC is also based on other environmental analyses and/or CXs under 32 C.F.R. Part 651, the REC should name the other applicable analyses and associated FNSI or ROD and cite any applicable CX(s). The completed checklist should be attached to the installation's REC.

If the installation checks "yes" for one or more resources, it can reconsider both the sites and layout of the project, or other mitigations, to see if the effect on the resource can be avoided and the answer changed to "no".

If careful application of this checklist to the proposed project at an installation requires a "yes" or "maybe" response to any checklist item, then additional environmental analysis may be required as part of an installation-level, site-specific NEPA process. If, upon investigation of each "yes"

and “maybe” response on the checklist, the installation determines that no further environmental analysis is required and that a REC is appropriate, documentation of the results of the investigation should be maintained with the REC and completed checklist.

If the installation concludes that additional NEPA analysis is necessary, 32 C.F.R. Part 651 requires it be prepared before any irreversible and irretrievable commitments of resources occur for the Proposed Action. The site-specific NEPA process should be streamlined by tiering off of the solar PV PEA, with the tiered document focused only on those resource areas where site-specific considerations require additional NEPA analysis of potential impacts. Within the tiered analysis (e.g., within an appendix), as it relates to resource areas for which no further analysis was needed, documentation should be included regarding the completed checklist and those “yes” and “maybe” investigations which concluded that a resource area did not need further analysis as a result of the Proposed Action.

This checklist is to enable the identification of the documentation required to meet NEPA requirements. Requirements to comply with other federal and state environmental and/or energy laws and regulations are to be adhered to, as appropriate and applicable. These may include, for example, those requiring site-specific consultations with other federal, state, and Tribal governments and agencies (such as consultation under the Endangered Species Act or National Historic Preservation Act); completing NEPA-like requirements of the state, if any and if applicable; or complying with certain state requirements for systems proposed to be connected to an off-post power grid.

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# Environmental Checklist for Solar Photovoltaic Project

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This adopted checklist is a duplicate of the checklist contained in Appendix A of the *Programmatic Environmental Assessment for Construction and Operation of Solar Photovoltaic Renewable Energy Projects on Army Installation*.

## **a. Land Use**

1. Construction of the proposed project, to include associated infrastructure, if any, on the installation is in conflict with the real property master plan and/or range complex master plan. NO MAYBE YES

## **b. Air Quality**

2. Construction activities associated with the proposed project would contribute to a change in the air quality compliance status in the region (e.g., from attainment to nonattainment). NO MAYBE YES

## **c. Noise**

3. Noise generated during construction of the proposed project would have a significant negative impact on sensitive noise receptors (e.g., residential areas, hospitals, and schools) and/or sensitive wildlife populations, to include threatened and endangered species. NO MAYBE YES

## **d. Geological and Soil Resources**

4. Construction of the proposed project is anticipated to include construction activities on highly erodible soils. NO MAYBE YES

5. Construction of the proposed project is to be done on a closed landfill, Installation Restoration Program (IRP), Military Munitions Response Program (MMRP), or Compliance Cleanup (CC) site and would cause significant soil contamination or violate regulations. NO MAYBE YES

**e. Water Resources**

6. Construction, operation, or maintenance of the proposed project would result in unpermitted direct impacts to waters of the U.S., regulated recharge zones, and/or groundwater aquifers. NO MAYBE YES
7. Construction of the proposed project is anticipated to include construction activities on jurisdictional wetlands or require additional surveys to identify and delineate jurisdictional wetlands (same as Q14 below). NO MAYBE YES
8. Construction of the proposed project is anticipated to affect a coastal zone regulated by the Coastal Zone Management Act (CZMA), requiring a CZMA consistency evaluation that has not yet been completed. NO MAYBE YES
9. Construction of the proposed project, to include associated infrastructure, if any, would require substantial modification of the installation’s storm water discharge prevention plan. NO MAYBE YES
10. Potable water availability at the installation is dependent on groundwater that is currently stretched to or beyond its capacity, and brackish or salt water intrusion is currently a problem. NO MAYBE YES
11. Construction is proposed to be done on a closed landfill, IRP, MMRP, or CC site and would cause significant surface water or groundwater contamination or violate regulations. NO MAYBE YES

**f. Biological Resources (including Threatened and Endangered Species)**

12. Construction, operation, or maintenance of the proposed project is likely to result in an unauthorized “take” of a protected species (e.g., under the Endangered Species Act, Migratory Bird Treaty Act, Marine Mammal Protection Act, or Bald and Golden Eagle Protection Act) and/or construction activity is anticipated to effect critical habitat, as designated by the U.S. Fish and Wildlife Service under the Endangered Species Act. (Note: All required USFWS or NMFS informal or formal consultation must be completed prior to commencing with the proposed project.) NO MAYBE YES
13. Construction, operation, or maintenance of the proposed project is likely to result in an unauthorized “take” of a state-protected species and the installation is required to comply with the associated legal and regulatory requirements of the state. NO MAYBE YES

14. Construction of the proposed project is anticipated to include construction activities on jurisdictional wetlands or require additional surveys to identify and delineate jurisdictional wetlands (same as Q7 above). NO MAYBE YES
15. Construction of the proposed project is located in whole or in part within a floodplain and must undergo the process outlined in Executive Order 11988, as amended by Executive Order 13690, possibly resulting in a Finding of No Practicable Alternative. NO MAYBE YES
16. Construction of the proposed project is anticipated to include construction activities in biological sensitive areas other than those mentioned above. NO MAYBE YES
17. All or part of the proposed construction area needs to be surveyed for one or more protected species, such as threatened or endangered species protected under the Endangered Species Act (a YES means that the appropriate biological resource survey does not exist for all or part of the construction area). NO MAYBE YES
18. Construction of the proposed project would cause a substantial decrease in the relative percentage of any one vegetation type (native to the region) within the installation, particularly if the vegetation type in the region is already highly fragmented as a result of human activity. NO MAYBE YES

**g. Cultural Resources**

19. All or part of the proposed construction area needs to be surveyed for cultural resources (a YES means that a cultural resources survey does not exist for all or part of the construction area). NO MAYBE YES
20. Construction of the proposed project is anticipated to have adverse effects on National Historic Preservation Act (NRHP)-listed and/or -eligible historic properties and those effects are unlikely to be able to be avoided or mitigated. (Note: All required NHPA Section 106 consultation with SHPO, ACHP, Tribes, and other interested parties must be completed prior to commencing with the proposed project.) NO MAYBE YES
21. Construction, operation, or maintenance of the proposed project will prevent the traditional use of sacred or ceremonial sites or resources by Federally-recognized Native Americans, Alaska Natives, or Native Hawaiians. (Note: All required NHPA Section 106 consultation with SHPO, ACHP, Tribes, and other interested parties must be completed prior to commencing with the proposed project.) NO MAYBE YES

***h. Socioeconomics***

22. Construction of the proposed project is anticipated to result in substantial loss or displacement of recreational opportunities and resources (e.g., hunting and fishing) relative to the baseline. NO MAYBE YES
23. Only one or two of all the residential areas bordering the installation are primarily occupied by low income and/or minority populations, and the site of the proposed project is adjacent or in close proximity to that low income / minority population area. NO MAYBE YES

***i. Transportation and Traffic***

24. Construction of the proposed project would require large construction and delivery vehicles to traverse poorly rated roads (e.g., Level of Service E or F) and intersections during peak usage times, or would degrade existing roads to Level of Service E or F. NO MAYBE YES

***j. Airspace***

25. The glint/glare report on the proposed project indicates a likely significantly negative impact on air operations at or near the installation. NO MAYBE YES

***k. Utilities***

26. The proposed project is designed so that it is not compatible with the existing nearby electrical grid system or is located such that there is no use for the generated electricity. NO MAYBE YES
27. Construction of the proposed project would sever the provision of utilities (electricity, natural gas, water, telecommunication service, wastewater management services, solid waste management service (non-hazardous), and other essentials), to local communities, homes, and businesses for durations that would affect health, welfare, and economic viability. NO MAYBE YES

***l. Hazardous and Toxic Material and Waste***

28. Construction is proposed on a closed landfill, Installation Restoration Program, Military Munitions Response Program or Compliance Cleanup site and would cause contamination or violate a Federal Facility Agreement, permit, and/or regulation. NO MAYBE YES
29. The installation would need to build, or significantly modify, facilities necessary to store waste petroleum, oil, and lubricant products associated with the construction, operation, and maintenance of the proposed project, in accordance with local/state/federal regulations. NO MAYBE YES

30. Construction of the proposed project would require substantial modification for the installation's Spill Prevention, Control and Countermeasures Plan.

NO      MAYBE      YES

***m. Human Health and Safety***

31. Construction, operation, or maintenance of the proposed solar PV project would require substantial modification of the installation's health and safety plan.

NO      MAYBE      YES

32. The addition of roof-top mounted solar PV modules requires substantial structure re-design to enable the structure to safely support the additional load.

NO      MAYBE      YES

***n. General***

33. The installation (e.g., some ARNG installations) or the solar PV system operator is required to comply with state-level NEPA-like requirements and those requirements include analysis of topics not addressed in the PEA.

NO      MAYBE      YES

***o. Cumulative Effects***

34. Other actions are underway, or proposed, that when combined with the potential effects of construction, operation, and maintenance of the proposed project, could have a significant cumulative effect on human health or the environment.

NO      MAYBE      YES