

Record of Categorical Exclusion for

SoloPower, Inc.

Electrodeposition-based Solar Panel Manufacturing Facilities

Description of Proposed Action:

The Department of Energy's (DOE's) proposed action is to issue a loan guarantee to SoloPower, Inc. (SoloPower) for retooling and reequipping three existing facilities in Portland, Oregon and San Jose, California. The retooling and reequipping activities will take place at 1) an approximately 225,000 square foot facility at 6308-6310 N. Marine Drive, Portland, Oregon, which was formerly used for commercial warehousing purposes (Marine Drive facility); 2) an approximately 220,000 square foot facility located at 8929 N. Ramsey Boulevard, Portland, Oregon, which was formerly used for commercial warehousing purposes (Rivergate facility); and 3) SoloPower's existing manufacturing facility located at 5981 Optical Court, San Jose, California, which currently houses its demonstration line (Optical Court facility).

The Marine Drive and Rivergate facilities are both located in the Rivergate Industrial District in Portland, and the Optical Court facility is located in the Edenvale Redevelopment District in San Jose.

The Marine Drive and Rivergate facilities in Portland will each consist of two photovoltaic (PV) front-end cell manufacturing and back-end panel manufacturing lines capable of producing 150 megawatts of electrical capacity per year. Work to prepare the facilities for manufacturing operations will not involve external construction, except for fenced mechanical yards, liquid nitrogen tanks, trenches to bring in utilities, and staircases or elevators to access PV test sites on the buildings' rooftops. Some internal walls will be added. Factory machinery, support equipment, electrical and HVAC systems upgrades, compressed air, RO/DI water skid, chemical distribution and wastewater treatment will be inside of the buildings.

The Optical Court facility will house a 20-megawatt annual capacity automated back-end PV panel manufacturing line. Work needed to prepare the existing SoloPower San Jose facility will involve demolition of some internal walls, extension of electrical, HVAC, and compressed air services, and installing factory machinery and equipment to support the back end manufacturing operation. No external construction will be required, but the building roof will be penetrated to run electrical wiring and for exhaust fans.

SoloPower utilizes a roll-to-roll electrodeposition process for thin film copper indium gallium (di)selenide (CIGS) solar cell manufacturing. The front-end cell manufacturing processes involve electrodeposition of a precursor layer in a continuous manner on a roll of thin flexible metallic foil substrate with compositional control and repeatability. The electrodeposited precursor layer is then crystallized in a roll-to-roll fashion to form a solar

cell grade CIGS film using a high-throughput rapid thermal annealing process. The back-end manufacturing processes involve the cutting of the CIGS film rolls into cells, interconnecting the cells into modules, and laminating the modules. SoloPower has obtained certifications of its modules to the UL and IEC standards, and believes that its PV modules will produce electricity in the field for 25 years, displacing fossil fuels and their concomitant greenhouse gas emissions.

The proposed loan guarantee would be made pursuant to Title XVII of the Energy Policy Act of 2005 which authorized DOE to make loan guarantees for projects that "avoid, reduce, or sequester air pollutants or anthropogenic emissions of greenhouse gases; and employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued." The two principal goals of the Title XVII loan guarantee program are to encourage commercial use in the United States of new or significantly improved energy-related technologies and to achieve substantial environmental benefits.

Number and Title of Categorical Exclusion:

The actions that would be taken pursuant to the proposed loan guarantee for SoloPower, as described above, are consistent with and covered by categorical exclusion B1.31 for retooling and reequipping of the new PV panel manufacturing facilities in Portland, Oregon and the back-end manufacturing facility in San Jose, California. The full text of the categorical exclusion is as follows:

B1.31, as provided in 10 CFR § 1021, Appendix B to Subpart D, Relocation of machinery and equipment, such as analytical laboratory apparatus, electronic hardware, maintenance equipment, and health and safety equipment, including minor construction necessary for removal and installation, where uses of the relocated items will be similar to their former uses and consistent with the general missions of the receiving structure.

Regulatory Requirements defined in 10 CFR § 1021.410 (b):

The proposed loan guarantee and related actions described above were subjected to an environmental due diligence review by Loan Program Office (LPO) staff to ensure they are consistent with the specific category of actions (categorical exclusion) contained in Appendix B of 10 CFR Part 1021 and the conditions for applying categorical exclusions specified in Section 410 of Part 1021. To ensure that the requirements of Appendix B were met, numerous conference calls were held with SoloPower representatives to ensure that LPO staff understood the complete scope of SoloPower's proposed activities. In addition, a variety of source materials were reviewed by LPO staff including: the Environmental Report submitted with the loan guarantee application dated February 24, 2009; supplementary Independent Engineers Report "SoloPower Electrodeposition-based CIGS Photovoltaic Manufacturing Facility," dated June 24, 2011; Phase I Environmental Site Assessments for the Marine Drive and Rivergate facilities, each dated June 2011; Phase I Environmental Site Assessment Report for the Rivergate facility, dated December 2006; Supplemental Documentation to Support the Department of Energy's Categorical Exclusion Determination, dated August 2011; and supplementary material provided by SoloPower regarding the Portland and San Jose facilities. DOE's independent engineers conducted a site visit of the Portland facilities

on May 24, 2011, and the San Jose facility on June 15, 2011. The results of the environmental due diligence review produced the following findings:

- The proposed loan project does not threaten a violation of applicable statutory, regulatory or permit requirements for environmental, safety and health, including DOE and /or Executive Orders;
- The proposed loan project does not require siting, construction, or major expansion of waste storage, disposal, recovery, or treatment facilities;
- The proposed loan project does not disturb hazardous substance, pollutants, contaminants or CERCLA-excluding petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases;
- The proposed action is not a connected action as set forth in 40 CFR § 1508.25(a)(2)); and
- The proposed action is not part of a DOE proposal for which an EIS is being prepared and therefore a categorical exclusion is not precluded by 40 CFR § 1506.1 or 10 CFR § 1021.211.

The environmental due diligence review also determined that the proposed project associated with the loan guarantee does not adversely affect any environmentally sensitive resources, including the following:

- Property of historic, archaeological, or architectural significance designated by Federal, state, or local governments or property eligible for listing on the National Register of Historic Places;
- Federally-listed threatened or endangered species or their habitat (including critical habitat), Federally-proposed or candidate species or their habitat, or state-listed endangered species or their habitat;
- Wetlands regulated under the Clean Water Act (33 U.S.C. 1344) and floodplains; or
- Special sources of water (such as sole source aquifers, wellhead protection areas, and other water sources that are vital in a region).

The Comment section below is provided for any necessary clarifications concerning the findings listed above. Signature by SoloPower's designated representative in the Corporate Validation section is an indication of SoloPower's concurrence with the findings and determinations presented above.

Comment:


Corporate Validation

Name and Title (Print): Albert J. Boro, Jr., Senior Vice President Strategic Business Development, General Counsel & Secretary

Signature: Albert J Boro, Jr Date: August 11, 2011

Determination:

Based on my review of information conveyed to me and in my possession concerning the proposed action, as NEPA Compliance Officer (as prescribed by DOE Order 451.1B), I have determined that the proposed loan and associated actions involve no extraordinary circumstances (10 CFR 1021.410(b)) and fit within the specified category of actions in Appendix B of 10 CFR 1021 described above, and is hereby categorically excluded from further review under the National Environmental Policy Act (42 USC 4321, as amended).



Signature

Matthew McMillen
NEPA Compliance Officer
Office of Loan Programs



Date