

Record of Categorical Exclusion for

Transform Solar Manufacturing Project

Transform Holdings, Inc

Description of Proposed Action:

The Department of Energy's (DOE's) proposed action is to issue a loan guarantee to Transform Holdings, Inc (hereinafter Transform) to expand Transform's SLIVER cell and subassembly manufacturing at two existing facilities from [REDACTED]

[REDACTED] is not part of the Loan Guarantee application. The plant would utilize semiconductor tooling and advanced manufacturing techniques for the conversion of mono crystalline wafers to SLIVER solar cells. SLIVER cell manufacturing through [REDACTED] would be performed in existing semiconductor manufacturing facilities at 8000 South Federal Way, Boise, Idaho. Similarly, subassembly production would be performed in existing manufacturing facilities at 900 East Karcher Road, Nampa, Idaho, that were designed and previously used for computer assembly and semiconductor recovery operations. The project is expected to create [REDACTED]. Transform Holdings, Inc. and its affiliates (together, "Transform Solar") are a Joint Venture between Micron Technology, Inc., a semiconductor manufacturer, and Origin Energy Ltd, an integrated energy company. Transform will house its entire manufacturing operation in three facilities in the Boise, Idaho area. SLIVER cells will be produced at Fab 1A and Fab 1B in Boise, while subassemblies and modules will be produced in nearby Nampa. The Boise site consists of two locations within an industrial park, Fab 1A consists of four independent buildings totaling approximately [REDACTED] and Fab 1B consists of one building totaling [REDACTED]. In Fab 1A and 1B, there would be some internal remodeling. There is existing adequate parking. No clearing or excavation is anticipated. The Boise site has fully operational infrastructure (mechanical, electrical, chemical, and utilities), waste management and treatment and pollution controls in place. The fabrication process involves the following steps: [REDACTED]

[REDACTED]. Both Fabs, 1A and 1B, have full clean room infrastructure that will serve the SLIVER process retrofit. Both also contain a significant number of [REDACTED] for the SLIVER manufacturing process. The applicant is working to optimize the operational flow within Fab 1A so that the largest tools can be retrofitted and left in their current locations. Other tools will be moved and procured as necessary to reach the proposed production levels. Tools in Fab 1B will either be relocated to Fab 1A to support the initial scale-up or left installed in their present location depending on cost estimates to be received.

The Nampa facility at 900 East Karcher Road, where subassembly and module assembly would be conducted, has a total of [REDACTED] being manufacturing space, about 69,000 square feet devoted to offices, and the remainder unallocated. There is existing adequate parking. No clearing or excavation is anticipated. Adequate transportation and utility infrastructure exists. There is sufficient manufacturing space at Nampa for it to process Fab1A's full wafer capacity into subassemblies [REDACTED]. The subassembly line involves the following processes: [REDACTED]

[REDACTED]

The Boise and Nampa sites have most major licenses, permits and approvals in-hand from required agencies. These include an Indirect Discharge Permit, Multi-Sector General Permit for Stormwater Discharges, EPA Hazardous Waste ID number and a Water Rights Transfer Number. The State of Idaho Department of Environmental Quality issued an Air Permit to Micron Technology, Inc that covers all facilities located at 8000 South Federal Way, including Fab 1A and Fab 1B and expires on February 26, 2013. Permits that still need to be obtained include City building permits that are required for internal remodeling, and an air permit and indirect waste water discharge permit for Phase 2 at the Nampa site. Transform Solar will prepare and apply for an air construction permit. It is expected that the air and water permits would be issued in 90 days.

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 by Transform as a result of receiving a loan guarantee are consistent with and are covered by categorical exclusion B1.31 for the retooling and reequipping the Boise and Nampa facilities as described above. The full text of B1.31 as provided in 10 CFR § 1021, Appendix B to Subpart D, 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 DOE Loan Programs 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, LPO staff reviewed a Comprehensive Environmental Report submitted on July 19, 2010, by Transform as part of their loan guarantee application. LPO staff met with Transform management on November 18, 2010, to discuss the proposed action and its potential for involving extraordinary circumstances. In addition, on December 8, 2010, Transform responded to an LPO data request

and provided additional documentation regarding floodplains and effluent emissions, which supported the review of extraordinary circumstances. The results of the due diligence review produced the following conclusions:

X The proposed loan guarantee project does not threaten a violation of applicable statutory, regulatory or permit requirements for environmental, safety and health, including DOE and /or Executive Orders.

X The proposed loan guarantee project does not require siting, construction, or major expansion of waste storage, disposal, recovery, or treatment facilities.

X The proposed loan guarantee 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.

X There are no extraordinary circumstances related to the proposed project that may affect its environmental significance.

X The proposed action is not a connected action as set forth in 40 CFR § 1508.25(a)(1)).

X The proposed action is not part of a DOE proposal for which an EIS is being prepared and therefore a CE is not precluded by 40 CFR § 1506.1 or 10 CFR § 1021.211.

The proposed loan guarantee project does not adversely affect any environmentally sensitive resources, including the following:

X 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;

X Federal-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; or

X Wetlands regulated under the Clean Water Act (33 U.S.C. 1344) and floodplains.

Comment:

Corporate Validation:

Point of Contact: Robert Carstensen

Date: 12/16/2010

Title: Co-Executive Manager

Signature: Robert Carstensen

Determination:

Based on my review of information conveyed to me and in my possession, as NEPA Compliance Officer (as prescribed by DOE Order 451.1B), I have determined that the proposed loan guarantee 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 are hereby categorically excluded from further review under the National Environmental Policy Act (42 USC 4321, as amended).

Matthew McMillen

Signature
Matthew McMillen
NEPA Compliance Officer
Loan Programs Office

12-21-10
Date