

To: Office of Planning and Research
 PO Box 3044
 1400 Tenth Street, Room 113
 Sacramento, CA 95812-3044

From: California Energy Commission
 715 P Street
 Sacramento, CA 95814

Project Applicant: Swift Solar Inc.

Project Title: Scaling Solar Cell to Module Conversion for High Efficiency Perovskite Tandems

Project Location – Specific: San Francisco Bay Area

Project Location – City: San Francisco Bay Area **Project Location – County:** San Francisco Bay Area

Description of Nature, Purpose and Beneficiaries of Project:

This project will advance high-efficiency perovskite tandem photovoltaic (PV) technology from pilot-scale prototyping to low-rate initial production (LRIP). In this project, Swift Solar Inc. (Swift Solar) will implement a cell-to-module conversion line that closes the gap to LRIP by leveraging the tandem cell prototyping line developed in previous projects. Swift Solar will scale up back-end manufacturing processes for converting cells into strings and modules, using equipment suitable for high-rate production, then carry out application-specific field testing. The products will be high-efficiency PV modules for both established and specialized applications. This work will be pivotal in transitioning from lab-built prototypes to LRIP, and will mark an important de-risking leap toward gigawatt-scale manufacturing of next-generation solar technology.

Name of Public Agency Approving Project: California Energy Commission

Name of Person or Agency Carrying Out Project: Swift Solar Inc.

Exempt Status: (check one)

- Ministerial Exemption (Pub. Resources Code § 21080(b)(1); Cal. Code Regs., tit. 14, § 15268);
- Declared Emergency (Pub. Resources Code § 21080(b)(3); Cal. Code Regs., tit. 14, § 15269(a));
- Emergency Project (Pub. Resources Code § 21080(b)(4); Cal. Code Regs., tit. 14, § 15269(b)(c));
- Categorical Exemption. State type and section number
Cal. Code Regs., tit. 14, § 15301
- Statutory Exemptions. State code number.
- Common Sense Exemption. (Cal. Code Regs., tit. 14, §15061(b)(3))

Reasons why project is exempt:

Cal. Code Regs., tit. 14, sect. 15301 provides that projects which consist of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, and which involve negligible or no expansion of existing or former use at the time of the lead agency’s determination, are categorically exempt from the provisions of the California Environmental Quality Act (CEQA). Work under this proposed project will include paper studies for cost modeling of the manufacturing line, laboratory research and development of perovskite solar cells, including materials and processing and characterization, planning and

Authority cited: Sections 21083 and 21110, Public Resources Code. Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Swift Solar Inc.

implementing testing methods and design of perovskite modules for vehicle integration and rooftop deployment. This project will include the installation of approximately 2,000 square-feet of new equipment, to establish the cell-to-module manufacturing line. The new equipment to be installed which does not include pathways, service access, material positioning and movement, and support functions. The paper studies, laboratory research and installation of equipment will all be located at an existing, approximately 10,000 square-foot building in an industrial area located in the San Francisco Bay Area. Minor interior modifications, such as minor electrical work, may be required to accommodate new equipment installations and operation. The modules produced on the LRIP line will be tested in open rack (modules mounted on racking typical of rooftop application) and vehicle-integrated applications. For the vehicle-integrated application, testing will be conducted with approximately 1-2 existing vehicles. Testing will involve limited driving in recipient's parking lot and possibly local streets to measure solar output at different orientations. For open rack application, testing will be conducted at contract and partner environmental weathering sites located in various climate zones. This project will result in negligible or no expansion of use beyond that already existing. Therefore, the project falls within section 15301 and will not have a significant effect on the environment.

The project does not involve impacts on any particularly sensitive environment; will not impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies; does not involve any cumulative impacts of successive projects of the same type in the same place that might be considered significant; does not involve unusual circumstances that might have a significant effect on the environment; will not result in damage to scenic resources within a highway officially designated as a state scenic highway; the project site is not included on any list compiled pursuant to Government Code section 65962.5; and the project will not cause a substantial adverse change in the significance of a historical resource. Therefore, none of the exceptions to categorical exemptions listed in CEQA Guidelines section 15300.2 apply to this project, and this project will not have a significant effect on the environment.

Lead Agency

Contact Person: Michael Ferreira **Area code/Telephone/Ext:** 510-364-8808

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? Yes No

Signature: Michael Ferreira **Date:** 7/15/2024 **Title:** Electric Generation System Specialist I

Signed by Responsible Agency

Signed by Lead Agency

Signed by Applicant

Date received for filing at OPR: _____