

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: Noon Energy Inc.

Project Title: Scale-up of Ultra Low Cost Long-Duration Battery for Fully Reliable Renewable Power

Project Location – Specific: 24662 County Road 102

Project Location – City: Davis 95618 **Project Location – County:** Yolo

Description of Nature, Purpose and Beneficiaries of Project:

The proposed project would be deployed at the existing PVUSA site, located at 24662 Co Rd 102, Davis, CA 95618. The proposed project aims to demonstrate, validate, and accelerate the commercialization of a novel, safe, and reversible solid oxide battery energy storage system. The system, developed by Noon Energy in collaboration with Electric Power Research Institute and PVUSA, would provide 100 Kilowatt (kW)/ 10 Megawatt-hours (MWh) (100 hours) of low-cost, long-duration energy storage (LDES). The proposed project would be installed at the existing PVUSA site and would include the placement of a single, 40-foot-long shipping container (approximately 400 square feet) that would house the proposed 100 kW / 10 MWh system. During charging operation, the system would use electrolysis to convert low-cost, non-metal oxide chemicals into storage chemicals. The storage chemicals would then be retained in a storage tank, while a small amount of oxygen would be vented to the atmosphere. During discharge, the process would be reversed, converting stored chemical media plus oxygen from the atmosphere into the original oxide chemical, which would be stored in the discharge tank. The system contains no hazardous chemicals or materials, and would not require water, generate wastewater, or require new utility connections. The system would be test-operated for a period of approximately 18 months to prove its effectiveness and validate operation and cost parameters and would then be removed from the project site. Project construction would be limited to the placement of a gravel at grade, sufficient to support a 40-ft long shipping container, or equivalent, mounted on top of a semi-truck trailer chassis. The battery system would connect to an existing electrical connection located immediately north of the proposed gravel pad area. Existing internal access roads would be sufficient to support the proposed use. The project site is located within the FEMA-defined 100-year floodplain (Zone A), but the system would be elevated at least one-foot above the base flood elevation.

Name of Public Agency Approving Project: California Energy Commission

Name of Person or Agency Carrying Out Project: Noon Energy 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; Cal. Code Regs., tit. 14, § 15303 ; Cal. Code Regs., tit. 14, § 15306

Statutory Exemptions. State code number.

Common Sense Exemption. (Cal. Code Regs., tit. 14, §15061(b)(3))

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

Reasons why project is exempt:

The proposed project qualifies for categorical exemptions under CEQA Guidelines Sections:

California Code of Regulations, title 14, section 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 use beyond that existing at the time of the lead agency's determination, are categorically exempt from the provisions of the California Environmental Quality Act. All of the components for this project will be installed on a gravel pad at an existing Photovoltaics for Utility Scale Applications (PVUSA) site in Yolo County in an area that is currently used for equipment storage and has been historically used for prior on-site demonstrations. The proposed battery system would connect to an existing electrical connection located immediately north of the proposed gravel pad area. Existing internal access roads would be sufficient to support the proposed use. These modifications will not result in any expansion of capacity. For these reasons, the proposed work will not have any significant effect on the environment and falls under section 15301.

Cal. Code Regs., tit. 14, sec. 15303 provides that projects which consist of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure are categorically exempt from CEQA. This project includes the placement of gravel to create a pad for a single, 40-foot long shipping container (approximately 400 square feet) mounted on a semi-truck trailer chassis for a temporary basis. The container and all ancillary equipment would remain onsite for approximately 18 months and would then be removed from the property. The container will house the proposed 100 kW / 10 MWh battery energy storage system. The area on which the container will be placed is currently used for equipment storage and has been historically used for prior on-site demonstrations. For these reasons, the project falls within section 15303 and will not have a significant impact on the environment.

Cal. Code Regs., tit. 14, sec. 15306 provides that projects that consist of basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource are exempt categorically exempt from CEQA. These may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded. The proposed project is part of a research project to demonstrate, validate, and accelerate the commercialization of a novel, safe, and reversible solid oxide battery energy storage system. The proposed project is located at the existing PVUSA site, a research/demonstration facility that houses similar solar arrays and related infrastructure.

This project does not involve impacts on any particularly sensitive environment; 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.

For these reasons, the proposed work will not have any significant effect on the environment and falls under sections 15301, 15303, and 15306.

Lead Agency

Contact Person: Sean Anayah Area code/Telephone/Ext: (916) 931-5044

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

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: 

Date: 6/25/2024

Title: EGSSI

Signed by Responsible Agency

Signed by Lead Agency

Signed by Applicant

Date received for filing at OPR: _____