

## Record of Categorical Exclusion for

### EOS Manufacturing Project

#### **Description of Categorically Excluded Action:**

The US Department of Energy (DOE) is considering whether to issue a loan guarantee under the Title XVII Clean Energy Financing Program to Eos Energy Enterprises, Inc. (“EOS”) for equipment reconfiguration and retooling of three manufacturing buildings, in Turtle Creek, Pennsylvania. EOS applied for a loan guarantee pursuant to Title XVII of the Energy Policy Act of 2005, as amended. The purpose of this program is to finance projects and facilities in the United States (U.S.) that employ innovative and renewable or efficient energy technologies to avoid, reduce, or sequester anthropogenic emission of greenhouse gases (GHGs).

The proposed action is needed for EOS to transition from the existing Gen 2.3 battery to a new Eos Z3™ battery design. The project will require the installation of some newly designed manufacturing equipment while also reusing some of the Gen 2.3 equipment.

#### **Project Description:**

The purpose of the manufacturing facility is to manufacture EOS’s Znyth™ battery storage system. EOS would use existing leased buildings located at the Keystone Commons industrial complex in Turtle Creek, PA. The buildings include the following: 700 Braddock Avenue, “South Building” (approximately 46,000 square feet), 200 Braddock Avenue, “North Shop” (approximately 58,000 square feet), and 400 Braddock Avenue, “East Shop” (approximately 200,000 square feet), for a total of approximately 304,000 square feet of manufacturing building space. There are minimal modifications required to the interior of the existing buildings, and no exterior modifications are required. Specifically, EOS will need to add some additional electrical circuits and compressed air loops into each of the buildings to accommodate their manufacturing equipment utility needs. EOS will move all battery manufacturing equipment to the “South Building” and use the “North Shop” for container finalization and shipment. The “East Shop” is being evaluated to be used for additional battery manufacturing lines and container finalization. There are no plans for any ground disturbing activities at this time.

The specific reconfiguration and retooling activities include:

- Site improvements and infrastructure upgrades within the previously disturbed/developed area (i.e., stormwater retention, utility coordination and upgrades, onsite improvements for vehicle traffic, and parking) to facilitate movement of materials and to meet city building code requirements
- Interior building shell improvements
- Purchase and installation of new assembly lines, inventory management systems, and manufacturing equipment

- Stormwater Compliance Equipment
  - the preparation and execution of SWPP (storm water pollution prevention plan and associated equipment)
  - The preparation and execution of SPCC (Spill Prevention, Control, and Countermeasure and associated equipment)
  - The preparation and execution of the SDCP (slug discharge control plan and associated equipment)
- Air Emissions Equipment
  - Bag house (wet) for fugitive combustible dust and particulates along with dust collectors and ventilation
  - HVAC systems
  - Natural Gas heaters
- Chemical Facility Anti-terrorism Standard
  - Physical barriers and access control
  - Security system
- Chemical & HAZMAT Storage
  - H4 rated room
  - Independent fire suppression system for the H4 room
  - Hazardous Waste accumulation areas, access control, physical barriers etc.
- HAZMAT Transporter
- Solid Waste Management
  - Movement to Zero Waste to Landfill (ZWTFL) certification (management system and associated equipment)
- Fire Safety & General Safety
  - installation or upgrades to both internal and external lighting to comply with OSHA standard(s) – specifically in the loading and unloading bays
  - installation of fire suppression system
  - Upgrades to fire suppression in both 200 and 700
  - Purchase and installation of portable fire extinguishers to comply with NFPA and OSHA standards.
  - Purchase and installation of chemical showers, eye wash stations, first aid kits, AED's, Blood Borne Pathogen clean up kits.

EOS's innovative Znyth™ technology is manufactured in the U.S, has over 80% of its materials being sourced in the U.S., and is anticipated to drive a substantial number of new jobs in the U.S. The proposed project is expected to generate approximately 650 facility-related jobs at full operational capacity. In addition, EOS estimates the plant would contribute to the creation of an additional 3,000 jobs indirectly through its vendor and services ecosystem.

Because the EOS manufacturing project is located in an historic district, DOE consulted with the Pennsylvania State Historic Preservation Office (PA SHPO) under Section 106 of the National Historic Preservation Act (NHPA). The PA SHPO concurred with DOE's finding of "No Effect" to historic properties or archaeological resources on January 3, 2023.

July 2023

On March 30, 2023 the Allegheny County Health Department Air Quality Program concluded its review of the EOS battery manufacturing process, and concluded that the project has de minimis air emissions and an air permit is not required.

The environmental due diligence review determined that the actions associated with the loan guarantee would not adversely affect any physical, biological, or socio-cultural resources at the facility or surrounding environment.

**Number and Title of Categorical Exclusion:**

The actions that would be taken pursuant to the proposed Title XVII loan guarantee for the EOS manufacturing project are consistent with and are covered by DOE categorical exclusions B1.31 for installation or relocation of machinery and equipment and B5.1 for engineering integration work. The text of the categorical exclusions are as follows:

**B1.31 Installation or Relocation of Machinery and Equipment**

Installation or relocation and operation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of environmental impacts.

**B5.1 Actions to Conserve Energy or Water**

Actions to conserve energy or water, demonstrate potential energy or water conservation, and promote energy efficiency that would not have the potential to cause significant changes in the indoor or outdoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, manufacturers, and designers), organizations (such as utilities), and governments (such as state, local, and tribal). Covered actions include, but are not limited to weatherization (such as insulation and replacing windows and doors); programmed lowering of thermostat settings; placement of timers on hot water heaters; installation or replacement of energy efficient lighting, low-flow plumbing fixtures (such as faucets, toilets, and showerheads), heating, ventilation, and air conditioning systems, and appliances; installation of drip-irrigation systems; improvements in generator efficiency and appliance efficiency ratings; efficiency improvements for vehicles and transportation (such as fleet changeout); power storage (such as flywheels and batteries, generally less than 10 megawatt equivalent); transportation management systems (such as traffic signal control systems, car navigation, speed cameras, and automatic plate number recognition); development of energy-efficient manufacturing, industrial, or building practices; and small-scale energy efficiency and conservation research and development and small-scale pilot projects. Covered actions include building renovations or new structures, provided that they occur in a previously disturbed or developed area. Covered actions could involve

July 2023

commercial, residential, agricultural, academic, institutional, or industrial sectors. Covered actions do not include rulemakings, standard-settings, or proposed DOE legislation.

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

The proposed loan 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 Environmental Compliance (EC) staff reviewed numerous project-related documents obtained between June 2022 and April 2023 and participated in several conference calls with EOS staff to ensure a complete understanding of the activities associated with the battery manufacturing process. Also, a site visit by LPO EC staff to the EOS facility in Turtle Creek, Pennsylvania was conducted on December 6, 2022.

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

**Comment:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Corporate Validation:**

Name and Title (Print): Nathan Kroeker

Signature: 

Date: 7/31/23

July 2023

**Determination:**

Based on my review of information conveyed to me and in my possession concerning the actions associated with the proposed Title XVII loan guarantee described above, as NEPA Compliance Officer (as prescribed by DOE Policy Directive 451.1), I have determined that the actions involve no extraordinary circumstances 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).

**TODD**  
**STRIBLEY**

Digitally signed by  
TODD STRIBLEY  
Date: 2023.08.31  
12:04:02 -06'00'

August 31, 2031

Signature  
Todd Stribley  
NEPA Compliance Officer  
Loan Programs Office

Date