

Pipeline and Hazardous Materials Safety Administration 1200 New Jersey Avenue, SE Washington, DC 20590

#### **DOT-SP 21366**

**EXPIRATION DATE: 2024-09-30** 

(FOR RENEWAL, SEE 49 CFR 107.109)

1. <u>GRANTEE</u>: Our Next Energy Inc.

Novi, MI

## 2. <u>PURPOSE AND LIMITATION</u>:

- a. This special permit authorizes the transportation in commerce of low production lithium ion battery assemblies exceeding 35 kg net weight aboard cargo-only aircraft. This special permit provides no relief from the Hazardous Materials Regulations (HMR) or the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
- b. The safety analyses performed in the development of this special permit only considered the hazards and risks associated with the transportation in commerce.
- c. No party status will be granted to this special permit.
- d. This special permit serves as an approval under Special Provision A88 and State Variation US 3 of the ICAO TI and as a "Competent Authority Approval" as defined under 49 CFR § 107.1.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
- 4. <u>REGULATIONS FROM WHICH EXEMPTED</u>: 49 CFR § 172.101 Hazardous materials Table Column (9B) in that a lithium battery may exceed 35 kg when transported aboard cargo-only aircraft, § 173.185(a)(1) in that the low production lithium battery assemblies have not passed the tests in Part III, subsection 38.3 of the UN Manual of Tests and Criteria, and § 173.185(b)(6) in that transportation aboard aircraft is authorized.

Tracking Number: 2022054109

5. <u>BASIS</u>: This special permit is based on the application of Our Next Energy Inc. dated May 3, 2022 submitted in accordance with § 107.105 and the public proceeding thereon.

# 6. <u>HAZARDOUS MATERIALS (49 CFR 172.101)</u>:

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group
Lithium ion batteries including lithium ion polymer batteries*	9	UN3480	N/A

<sup>\*</sup>Only low production lithium ion battery assemblies may be offered for transportation under the terms of this special permit. ("Low production" is defined as a production run of no more than 100 cells or batteries annually of a particular type.) Each different cell and battery type must comply with all the conditions of this special permit prior to being offered for transportation.

## 7. SAFETY CONTROL MEASURES:

### a. OPERATIONAL CONTROLS:

- (1) Authorized battery assemblies are comprised of one hundred eight (108) lithium battery modules and may not exceed 79 kWh.
- (2) Cells, battery modules, and battery assemblies must be protected against short-circuiting.
- (3) Each battery module and battery assembly must be offered for transportation at a state of charge not exceeding 30%.
- (4) The battery assembly must be equipped with a system capable of monitoring the battery assembly and preventing short circuits, or over discharge between the battery modules in the assembly and any overcharge of the battery assembly.
- (5) Cells, modules, or battery assemblies that are leaking or liable to rapidly disassemble, dangerously react, produce a flame or a dangerous evolution of heat, or a dangerous emission of toxic, corrosive, or flammable gases or vapors under normal conditions of transport may not be transported under this special permit.

- (6) Only battery assemblies comprised of 108 lithium battery modules (model: 05ICB43A) with 734 Wh, 228 Ah, and 3.22V are approved under this special permit.
- (7) Any changes to the battery assembly, module, or cells from the one listed invalidates this special permit.

## b TESTING REQUIREMENTS:

- (1) Each cell and battery module must be of a type that has successfully passed the required tests in accordance with the "UN Manual of Tests and Criteria, 7<sup>th</sup> Revised Edition".
- (2) Battery assemblies must be comprised of 108 lithium battery modules with 734 Wh that have passed the required tests as specified in the "UN Manual of Tests and Criteria 7<sup>th</sup> Revised Edition".
- (3) Any changes in the battery cell and module from the tested type invalidates this special permit.

#### c. PACKAGING:

- (1) Inner Packaging: Each battery assembly must be packaged in aluminum outer housing.
- Outer Packaging: Each battery assembly be packaged in a UN 50D Large Packaging meeting the Packing Group I performance level and must comply with § 173.185(b)(6), except that transportation aboard cargo-only aircraft is permitted under the terms of this special permit. The battery assembly must be bolted down inside the wooden crate with a foam pad on top of the battery assembly. Packaging must comply with the requirements in Packing Instruction 974 of the Supplement to the ICAO TI. Additionally, waste lithium battery assemblies and lithium battery assemblies being shipped for recycling or disposal are forbidden from air transport, and lithium battery assemblies must not be packed in the same outer packaging with substances and articles of Class 1 (explosives) other than Division 1.4S, Division 2.1 (flammable gases), Class 3 (flammable liquids), Division 4.1 (flammable solids), or Division 5.1 (oxidizers).
- (3) Only one battery assembly is allowed per package.
- (4) The net mass of the battery assembly within each package must not exceed 550 kg, and the gross mass of the package may not exceed 680 kg.

d. <u>Marking</u>: Each package must be marked with the special permit number, "DOT-SP 21366", in accordance with § 172.302(c).

## 8. SPECIAL PROVISIONS:

- a. Under the terms of this special permit, the grantee may only offer hazardous materials (i.e., the grantee is not authorized as a carrier).
- b. A person who is not a holder of this special permit who receives a package covered by this special permit may reoffer it for transportation provided no modification or change is made to the package and it is reoffered for transportation in conformance with this special permit, the HMR, and the ICAO TI.
- c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
- d. This special permit in no way affects the need to obtain any required authorizations from other agencies of the United States Government or from the competent authorities of countries of origin, transit, destination, and the State of the Operator.
- e. The grantee must maintain a record of all activity conducted under the authority granted in this special permit and upon request make this information available to DOT representatives or enforcement officials. The record must contain a listing and number of shipments made to include:
  - (1) Dates of shipment; and
  - (2) Description of each type of shipment.
- 9. <u>MODES OF TRANSPORTATION AUTHORIZED</u>: Cargo-only aircraft.
- 10. <u>MODAL REQUIREMENTS</u>: A current copy of this special permit must be carried aboard each, aircraft used to transport packages covered by this special permit. The shipper must furnish a copy of this special permit to the air carrier before or at the time the shipment is tendered.
- 11. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
  - o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.

- o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
- o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) — "The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. <u>REPORTING REQUIREMENTS</u>: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

for William Schoonover

Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-13, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at <a href="https://www.phmsa.dot.gov/approvals-and-permits/hazmat/special-permits-search">https://www.phmsa.dot.gov/approvals-and-permits/hazmat/special-permits-search</a>. Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

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