

**U.S. DEPARTMENT OF ENERGY  
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY  
NEPA DETERMINATION**



**RECIPIENT:** Durion, Inc.

**STATE:** VT

**PROJECT TITLE :** Low-Cost Pressurized Water Storage for CSP Applications

Notice of Funding Opportunity Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0011494	GFO-0011494-002	GO11494

**Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Policy 451.1), I have made the following determination:**

**CX, EA, EIS APPENDIX AND NUMBER:**

Description:

**B1.15  
Support  
buildings**

Siting, construction or modification, and operation of support buildings and support structures (including, but not limited to, trailers and prefabricated and modular buildings) within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible). Covered support buildings and structures include, but are not limited to, those for office purposes; parking; cafeteria services; education and training; visitor reception; computer and data processing services; health services or recreation activities; routine maintenance activities; storage of supplies and equipment for administrative services and routine maintenance activities; security (such as security posts); fire protection; small-scale fabrication (such as machine shop activities), assembly, and testing of non-nuclear equipment or components; and similar support purposes, but exclude facilities for nuclear weapons activities and waste storage activities, such as activities covered in B1.10, B1.29, B1.35, B2.6, B6.2, B6.4, B6.5, B6.6, and B6.10 of this appendix.

**B5.1  
Actions to  
conserve  
energy or  
water**

(a) 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); 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 commercial, residential, agricultural, academic, institutional, or industrial sectors. Covered actions do not include rulemakings, standard-settings, or proposed DOE legislation, except for those actions listed in B5.1(b) of this appendix.

(b) Covered actions include rulemakings that establish energy conservation standards for consumer products and industrial equipment, provided that the actions would not:

1. Have the potential to cause a significant change in manufacturing infrastructure (such as construction of new manufacturing plants with considerable associated ground disturbance);
2. involve significant unresolved conflicts concerning alternative uses of available resources (such as rare or limited raw materials);

3. have the potential to result in a significant increase in the disposal of materials posing significant risks to human health and the environment (such as RCRA hazardous wastes); or
4. have the potential to cause a significant increase in energy consumption in a state or region.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Durion, Incorporated (Durion) for the development and demonstration of a thermal energy storage system using pressurized water. The system would be paired with an electric boiler and would augment the existing heating system of a building complex. Project activities would consist of research and development, laboratory operations, data analysis, installation of water storage vessels, and fabrication and testing of the system.

DOE previously completed a NEPA Determination (ND) for all previously defined award activities (GFO-0011492-001: exclusions A9, B1.15, B3.6, signed 10/9/2024). Since that time, new locations have been identified for various project activities, including the installation of the thermal energy storage system. This ND applies to activities taking place at these new locations.

Project design, management, and administration would still take place at Durion's offices in White River Junction, Vermont. Newly added activities would consist of research, development, scale model testing, and parts fabrication at the Windsor Technology Park in Windsor, VT; as well as the installation of the thermal energy storage system at the Stone Science Hall within the Greenway Campus in Montpelier, VT.

The thermal energy storage system would store approximately 9000 gallons of pressurized hot water in vessels installed in a pre-existing parking lot, on either concrete pads or using helical screw anchor foundations. It would be paired with an electric boiler and connected to the existing hot water and steam heating system in place that serves multiple buildings at Greenway. The storage system would be charged by the boiler during off-peak hours, and increase energy efficiency by providing heat when discharged, reducing the need to rely on the existing heating system.

The United States Fish and Wildlife Service Information for Planning and Consultation website identifies two species of concern (Northern Long-eared Bat and Monarch Butterfly) which may occur in the proposed project area. There is no critical habitat in the project area. Project activities would occur in a developed, urban area where these species are unlikely to be present. DOE has determined no effect on special status species.

All activities would occur on previously disturbed ground. Minimal air emissions may result from the use of equipment during system installation. However, significant air impacts are not anticipated since emissions would be temporary and intermittent. No tree cutting or trimming would occur. Neither floodplains nor wetlands occur in the proposed project area.

All necessary permits would be obtained prior to commencing activities. Potential hazards include typical hazards associated with construction and mechanical work, and pressurized water. Award recipients would adhere to established health and safety policies and procedures when performing project work, and would observe all applicable federal, state, and local health, safety, and environmental regulations.

DOE has considered the scale, duration, and nature of proposed activities to determine potential impacts on resources, including those of an ecological, historical, cultural, and socioeconomic nature. DOE does not anticipate impacts on these resources which would be considered significant or require DOE to consult with other agencies or stakeholders.

## NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Solar Energy Technologies Office  
NEPA review completed by Andrew McClellan, 26 March 2026

## FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposal fits within a class of actions that is listed in Appendix B to 10 CFR Part 1021 or Appendix B and C of DOE's NEPA Implementing Procedures (June 30, 2025). To fit within the classes of actions listed in Appendix B to 10CFR Part 1021, or Appendix B of DOE's NEPA Implementing Procedures, a proposal must satisfy the conditions that are integral elements of the classes of actions in Appendix B of both 10 CFR Part 1021 and DOE's NEPA Implementing Procedures.

There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposal.

The proposed action has not been segmented to meet the definition of a categorical exclusion.

The proposed action is categorically excluded from further NEPA review.

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature:  Electronically Signed By: Nicole Serio Date: 3/30/2026  
NEPA Compliance Officer

**FIELD OFFICE MANAGER DETERMINATION**

- Field Office Manager review not required
- Field Office Manager review required

**BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :**

Field Office Manager's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Field Office Manager