



HYDROELECTRIC EFFICIENCY IMPROVEMENT INCENTIVES

Fifteen projects in the New England region selected for incentives to enhance existing hydroelectric facilities

Supported by the Bipartisan Infrastructure Law (BIL), the U.S. Department of Energy's (DOE) Hydroelectric Incentives Program is authorized to provide a historic \$750 million to help maintain and enhance existing hydroelectric facilities to ensure generators continue to provide clean electricity, while improving dam safety and reducing environmental impacts. Part of this program, the Hydroelectric Efficiency Improvement Incentives, expects to make nearly \$71.5 million in incentive payments for owners or operators of existing hydroelectric facilities, including pumped storage hydropower, to support capital improvements that can improve their efficiency by at least 3%. In addition to increasing efficiency, projects receiving this incentive could also increase operational reliability, grid resiliency, electricity production, dam safety, and provide environmental enhancements. Capital improvement projects under this incentive will sustain industry jobs, such as hydropower plant operators, electrical engineers, civil engineers, electricians, millwrights, mechanics, carpenters, concrete contractors, and hydropower equipment manufactures.

On February 2, 2024, DOE announced the selection of 46 hydroelectric projects across 19 states to receive Hydroelectric Energy Efficiency Improvement incentives. View full list of selectees.

Capital improvement projects in the New England region will include:

- Upgrading generating units to increase reliability and efficiency of power production
- Installing trash racks and trash rake systems as well as maintain and repair penstocks
- Installing automation controls leading to increased efficiency

Projects in this region will provide economic benefits including:

- Committing to hiring local workers and contractors
- Providing apprenticeship, pre-apprenticeship programs, and youth education to showcase the opportunities available in the clean energy workforce
- Over 80% of selectees already have contracts in place or have committed to a contractor preference, with Minority Business Enterprises, Minority Owned Businesses, Woman Owned Businesses, or Veteran Owned Businesses
- Over 50% of projects are located will benefit disadvantaged communities



New England region by the numbers:

- Projects: 15 throughout Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont
- Total capacity: 72.26 MW
- Average efficiency increase: 14.78%
- Total incentive payments requested: \$16.5 million
- Approximate jobs supported: 271

February 2024

2024 New England Region

Hydroelectric Efficiency Improvement Incentives selectees



- Andro Hydro Riley Rubber Dam, Eagle Creek
 Renewable Energy Holdings, LLC, Jay, ME
 (\$880,000 requested) will install a rubber dam
 and gorilla bars. The installation of a rubber dam
 will provide a rapid recovery of head after a highflow event and allow debris and ice passage on
 the forebay wall, as well as allow for automated
 and remote operation. The installation of gorilla
 bars will protect the forebay area where ice sheets
 commonly enter. The facility came online in 1897
 and is located on the Androscoggin River in
 Jay, Maine.
- Bolton Falls Hydroelectric Project, Green
 Mountain Power, Duxbury, VT (\$2.4 million
 requested) will replace the two existing turbine generator units with two new turbine-generator
 units at the Project. The facility started operation
 in 1986 and is located on the Winooski River in
 Duxbury, Vermont.
- Campton Hydro Project, Campton, Elevate Power LLC, NH (\$150,000 requested) will conduct a turbine replacement on Unit 1 and rebuild Unit 2 using salvaged parts from the old Unit 1 turbine. The facility started operation in 1984 and is located on the Mad River in Campton, New Hampshire.
- Cobble Mountain Hydropower Station: Unit 3
 Modernization, Springfield Water and Sewer
 Commission, Granville, MA (\$5 million requested)
 will refurbish Unit 3 through replacement of the
 generator and turbine runner and wicket gates,
 rehabilitation of remaining turbine components,
 valves and supporting equipment, and repair of
 the penstock. The facility started operation in
 1933 and is located on the Little River in Granville,
 Massachusetts.

- Eel Weir Project, Elevate Power LLC, Standish, ME (\$1.9 million requested) will replace two of the existing units (Units 1 and 2) with two new vertical double-regulated Kaplan units, as well as modify the transmission line. The facility started operation in 1903 and is located on the Presumpscot River.
- Essex No. 19 Hydroelectric Project, Green Mountain Power (GMP), Essex Junction,
 VT (\$493,000 requested) will improve the performance of the minimum flow unit (Unit 9) by removing the 1 inch – 2 inch layer of organic buildup and re-coating the penstock. The facility started operation in 1907 and is located on the Winooski River in Essex Junction, Vermont.
- Hitchcock Hydro, LLC, Glendale Hydropower Efficiency Improvements, Stockbridge, MA (\$117,000 requested) will carry out improvements in generator leads and contactors, and a controls package upgrade. The facility started operation in 1906 and is located on the Houstatonic River in Stockbridge, Massachusetts.
- Livermore Trash Rake, Eagle Creek Renewable
 Energy Holdings, LLC, Livermore Falls, ME
 (\$566,000 requested) will upgrade the trash rake
 system at the facility, which dates back to the World
 War II era. By upgrading the trash rake system to a
 more efficient and automated design. The facility
 started operation in 1908 and is located on the
 Androscoggin River in Livermore Falls, Maine.
- Newport Hydropower Efficiency Improvements, Great Bay Hydro Corporation, Newport, VT (\$2.2 million requested) will conduct a water conveyance repair and improvement, generator refurbishments, and runner replacements. The facility started operation in 1936 and is located on the Clyde River in Newport, Vermont.

2024 New England Region

Hydroelectric Efficiency Improvement Incentives selectees



- Pawtucket Hydropower Efficiency Improvements, Pawtucket Hydropower LLC, Pawtucket, RI (\$601,000 requested) will install new runners for both units along with a new hydraulic power units and Switchgear. The facility started operation in 1989 and is located on the Blackstone River in Pawtucket, Rhode Island.
- Quinebaug 5-Mile Hydropower Efficiency Improvements, Quinebaug Associates, LLC, Brooklyn, CT (\$112,000 requested) will conduct a Unit 2 runner rebuild, hub rebuild and generator refurbishment. A Unit 1 runner and hub rebuild will also take place as part of the improvement. The facility started operation in 1990 and is located on the Quinebaug River in Brooklyn, Connecticut.
- Rollinsford Hydroelectric Project, Green Mountain Power, Rollinsford, NH (\$294,000 requested) will replace the runners at the two existing hydroelectric turbines within the project. The facility started operation in 1981 and is located on the Salmon Falls River in Rollinsford, New Hampshire.

- Texon Hydropower Efficiency Improvements, Hitchcock Hydro, LLC, Russell, MA, (\$573,000 requested) will conduct intake improvements, a controls package upgrade, and a static exciter improvement. The facility started operating in 1985 and is located on the Westfield River in Russell, Massachusetts.
- Upgrade of Historic 3.6 MW Gardners Falls
 Hydroelectric Station, Patriot Hydro, LLC,
 Automation and Electric Controls, Buckland,
 MA (\$119,000 requested) will upgrade controls
 to improve the efficiency of capturing river flows
 for the 3.6 megawatt facility. The facility started
 operation in 1904 and is located on the Deerfield
 River, in Buckland, Massachusetts.
- Wyre Wynd Hydroelectric Project, Aspinook Hydro, LLC, Jewett City (Town of Griswold), CT (\$1 million requested) will conduct a main unit runner replacement, intake hydraulic improvements, and a mini unit runner replacement. The facility started operation in 1982 and is located on the Quinebaug River in Griswold, Connecticut.