# **Before the Federal Energy Regulatory Commission**

# Final Application for New License for Major Water Power Project – Existing Dam

### **Northfield Project**

Northfield Mountain Pumped Storage Project (FERC Project Number 2485) Turners Falls Hydroelectric Project (FERC Project Number 1889)







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## **APRIL 2016**

# **INITIAL STATEMENT PER 18 CFR § 4.51**

Before the Federal Energy Regulatory Commission

Application for New License Major Water Power Project - Existing Dam

- FirstLight Hydro Generating Company ("FirstLight" or "Applicant") applies to the Federal Energy Regulatory Commission ("Commission" or "FERC") for a new license for the existing Turners Falls Hydroelectric Project (Turners Falls Project), FERC Project Number 1889 and for the existing Northfield Mountain Pumped Storage Project (Northfield Mountain Project), FERC Project Number 2485, as described in the attached Exhibits. The current license for the Turners Falls Hydroelectric Project was issued on May 5, 1980 and expires on April 30, 2018. The license for the Northfield Mountain Project was issued on May 14, 1968 and also expires on April 30, 2018. Although the Turners Falls Project and Northfield Mountain Project are currently licensed as separate projects, FirstLight is seeking a single license for both developments, and will hereafter refer to the Turners Falls Project as the Turners Falls Development and the Northfield Mountain Project as the Northfield Mountain Pumped Storage Development or collectively as the Northfield Project (Project).
- **2.** The location of the Project is:

The structures associated with the Turners Falls Development are located in the towns of Montague and Gill, MA. The Turners Falls bypass (Connecticut River) flanks the towns of Greenfield and Montague, MA. The Turners Falls Impoundment borders several towns including Gill, Montague, Northfield, and Erving, MA, with upper portions extending into Vernon, VT and Hinsdale, NH.

The structures associated with the Northfield Mountain Pumped Storage Development are located in the towns of Northfield and Erving, MA.

3. The exact name, address, and telephone number of the Applicant are:

FirstLight Hydro Generating Company Northfield Mountain Station 99 Millers Falls Road Northfield, MA 01360 Tel: 413-422-5915

The exact name, address, and telephone number of each person authorized to act as agent for the Applicant in this application are:

Mr. Gus Bakas Director- Massachusetts Hydro FirstLight Hydro Generating Company Northfield Mountain Station 99 Millers Falls Road Northfield, MA 01360 Tel: 413-422-5915 Email: gus.bakas@gdfsuezna.com Mr. Michael A. Swiger, Esq. Ms. Julia S. Wood, Esq. Van Ness Feldman 1050 Thomas Jefferson Street, NW Seventh Floor Washington, DC 20007 Tel: 202-298-1800 Email: mas@vnf.com jsw@vnf.com

**4.** The Applicant is a domestic corporation and is not claiming preference under section 7(a) of the Federal Power Act, 16 U.S.C. 796.

#### Northfield Project INITIAL STATEMENT

- 5. (i) The statutory or regulatory requirements of the State of Massachusetts which affect the Project as it exists with respect to bed and banks and the appropriation, diversion, and use of water for power purposes, and with respect to the right to engage in the business of developing, transmitting, and distributing power and in any other business necessary to accomplish the purpose of the license under the Federal Power Act, are:
  - Applicant must obtain a Water Quality Certification from the Massachusetts Department of Environmental Protection and Section 401 (a)(1) of the Clean Water Act.

(ii) The steps which the Applicant has taken or plans to take to comply with the regulations cited above are:

- The Applicant will submit a request for Water Quality Certification from the Massachusetts Department of Environmental Protection within 60 days of FERC's issuance of a notice that the license application is ready for environmental analysis, as provided for in FERC's regulations. Since this is an application for relicensing two existing developments, the Applicant expects to continue to operate the facility pursuant to approvals, licenses, permits, and exemptions already in effect.
- **6.** FirstLight owns all of the existing Project facilities; there are no Federally owned or operated facilities associated with this application.

# ADDITIONAL INFORMATION REQUIRED BY 18 C.F.R. § 5.18(A)

# 1. Identify every person, citizen, association of citizens, domestic corporation, municipality, or state that has or intends to obtain and will maintain any proprietary right necessary to construct, operate or maintain the project:

FirstLight has or intends to obtain and will maintain the proprietary rights necessary to construct, operate and maintain the Project.

#### 2. Identify (providing names and mailing addresses):

# (i) Every county in which any part of the project and any Federal facilities that would be used by the project would be located;

Franklin County government in Massachusetts was abolished in 1997, although the county continues to exist as a geographical and political entity. County-wide comprehensive planning responsibilities are undertaken by the Franklin Regional Council of Governments (FRCOG). The FRCOG's offices are located at:

The Franklin Regional Council of Governments 12 Olive Street, Suite 2 Greenfield, MA 01301-3318

Montague, MA 01376

Upper portions of the Turners Falls Impoundment extend into the following Vermont and New Hampshire counties:

Windham County	Cheshire County
P.O. Box 784	Administration
Brattleboro, VT 05302	33 West Street
	Keene, NH 03431

#### (ii) Every city, town, or similar local political subdivision:

i. In which any part of the Project, and any Federal facility that would be used by the project, would be located; or

Town of Erving	Town of Northfield
12 East Main Street	69 Main Street
Erving, MA 01344	Northfield, MA 01360
Town of Gill	Town of Vernon
325 Main Street	567 Governor Hunt Road
Gill, MA 01354	Vernon, VT 05354
Town of Greenfield 14 Court Street Greenfield, MA 01301	Town of Hinsdale Town Hall 11 Main Street Hinsdale, NH 03451
Town of Montague 1 Avenue A	

# ii. That has a population of 5,000 or more people and is located within 15 miles of the project dam.

The following cities and towns each have a population of 5,000 or more people (2010 census data) and are located within 15 miles of the Project dams:

Town of Amherst (population: 37,819)	Town of Greenfield (population:
Town Clerk	17,456)
Town Hall	Town Clerk
4 Boltwood Avenue	14 Court Street
Amherst, MA 01002	Greenfield, MA 01301
Town of Athol (population: 8,265) Town Clerk 584 Main Street, Suite 10 Athol, MA 01331	Town of Hadley (population: 5,250) Town Clerk 100 Middle Street Hadley, MA 01035
Town of Brattleboro (population: 7,414)	Town of Montague (population: 8,437)
Town Clerk	Town Clerk
230 Main Street, Suite 108	One Avenue A
Brattleboro, VT 05301	Turners Falls, MA 01376
Town of Deerfield (population: 5,125)	Town of Orange (population: 7,839)
Town Clerk	Town Clerk
8 Conway Street	6 Prospect Street
South Deerfield, MA 01373	Orange, MA 01364

(iii) Every irrigation district, drainage district or similar special purpose political subdivision (A) in which any part of the project is located, and any Federal facility that is or is proposed to be used by the project is located, or (B) that owns, operates, maintains, or uses any project facility or any Federal facility that is or is proposed to be used by the project:

There is no irrigation district, drainage district, or similar special purpose political subdivision in which any part of the Project is located or that owns, operates, maintains, or uses any project facility.

#### (iv) Every other political subdivision in the general area of the Project that there is reason to believe would likely be interested in, or affected by, the application.

There is no other political subdivision in the general area of the Project that there is reason to believe would be likely to be interested in, or affected by, this notification.

#### (v) All Indian tribes that may be affected by the Project.

Federally recognized tribes in Massachusetts include:

Wampanoag Tribe of Gay Head (Aquinnah) Bettina Washington, Tribal Historic Preservation Officer 20 Black Brook Road Aquinnah, MA 02535-1546 Mashpee Wampanoag Indian Tribe Ramona Peters, Historic Preservation Director 431 Main Street Mashpee, MA 02649

Narragansett Indian Tribe Doug Harris, Deputy Tribal Historic Preservation Officer 4425-A South County Trail Charlestown, RI 02813

Stockbridge-Munsee Band of Mohican Indians Bonney Hartley, Tribal Historic Preservation Assistant New York Office, P.O. Box 718 Troy, NY 12181

There are no federally recognized tribes in New Hampshire or Vermont.

There are no state recognized tribes in Massachusetts or New Hampshire. There are two Vermont state-listed tribes as well as other tribes that may potentially be interested in the relicensing as listed below:

Nulhegan Abenaki Tribe Chief Don Stevens 156 Bacon Drive Shelburne, VT 05482

Koasek Tradional Band Abenaki Nation Peggy Fullterton P.O. Box 272 Newbury, VT, 05051

Abenaki Nation of Missisquoi Chief Lawrence Moose Lampman P.O. Box 133 Swanton, VT 05488

Elnu Abenaki Tribe Robert Longtoe Sheehan Tribal Headquarters 5243 VT Route 30 Jamaica, VT 05343 Nolumbeka Project, Inc. Joseph Graveline, President 88 Columbus Avenue Greenfield, MA 01301

3.

- (i) For a license (other than a license under section 15 of the Federal Power Act), state that the applicant has made, either at the time of or before filing the application, a good faith effort to give notification by certified mail of the filing of the application to:
  - (A) Every property owner of record of any interest in the property within the bounds of the Project, or in the case of the Project without a specific boundary, each such owner of property which would underlie or be adjacent to any Project works, including any impoundments; and
  - (B) The entities identified in paragraph (2) above, as well as any other federal, state, municipal or other local government agencies that there is reason to believe would likely be interested in or affected by the application.

Because this is an application for a new license under section 15 of the FPA, this regulatory provision does not apply.

#### **PURPA Benefits**

FirstLight is not seeking any PURPA benefits in association with the relicensing of the Project.

#### Northfield Project VERIFICATION STATEMENT

### **VERIFICATION STATEMENT**

This application is executed in the

STATE OF: Massachusetts

COUNTY OF: Franklin

By: Gus Bakas, being duly sworn, deposes and says that the contents of this application are true to the best of his knowledge or belief. The undersigned has signed the application this 27 day of April, 2016.

Gus Bakas Director- Massachusetts Hydro FirstLight Hydro Generating Company Northfield Mountain Station 99 Millers Falls Road Northfield, MA 01360

Subscribed and sworn to before me, a Notary Public of the State of Massachusetts, this 27 day of April 2016.

Notary Public



My Commission Expires: June 22, 2018

# **ACRONYMS AND ABBREVIATIONS**

2D	two dimensional
3D	three dimensional
Α	ampere
AC	alternating current
ACHP	Advisory Council of Historic Preservation
AMC	Appalachian Mountain Club
ARLAC	Ashuelot River Local Advisory Committee
AWWA	American Whitewater Association
CAFRC	Conte Anadromous Fish Research Center
CFR	Code of Federal Regulations
cfs	cubic feet per second
CFU	colony forming units
CL&P	Connecticut Light & Power
cm	centimeter
CRASC	Connecticut River Atlantic Salmon Commission
CRJC	Connecticut River Joint Commissions
CRSEC	Connecticut River Streambank Erosion Committee
CRWC	Connecticut River Watershed Council
CT	Connecticut
CTDEP	Connecticut Department of Environmental Protection
CTDEEP	Connecticut Department of Energy and Environmental Protection
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
°C	degrees Celsius
°F	degrees Fahrenheit
ft	foot or feet
ft <sup>2</sup>	square feet
DLA	Draft License Application
DRTU	Deerfield River Chapter of Trout Unlimited
DO	dissolved oxygen
EA	Environmental Assessment
ECP	Erosion Control Plan
EFH	essential fish habitat
EIS	Environmental Impact Statement
ESA	Endangered Species Act
FCD	Franklin Conservation District
FCRP	Friends of the Connecticut River Paddlers
FEMA	Federal Emergency Management Agency
FERC or Commission	Federal Energy Regulatory Commission
FIS	Flood Insurance Study
FGS	Field Geology Services
FirstLight	FirstLight Hydro Generating Company
FLA	Final License Application
FPA	Federal Power Act
FRCOG	Franklin Regional Council of Governments
FRR	Full River Reconnaissance
FSF	Four Star Farms
GPD	gallons per day

Northfield Project	
ACRONYMS AND ABBREVIATIONS	

UEC	LICACE Hudrologia Engineering Contar
HEC HPMP	USACE Hydrologic Engineering Center
	Historic Properties Management Plan
hr U D	hour
ILP	Integrated Licensing Process
ISR ISO NE	Initial Study Report
ISO-NE	ISO New England
kV	kilovolt
kW	kilowatt
kWH	kilowatt-hour
LCCLC	Landowners and Concerned Citizens for License Compliance
МА	Massachusetts
MAEOEEA	Massachusetts Executive Office of Energy and Environmental Affairs
MACRIS	Massachusetts Cultural Resources Information System
MADFW	Massachusetts Division of Fish and Wildlife
MAFBF	Massachusetts Farm Bureau Federation, Inc.
MAWMA	Massachusetts Water Management Act
MBI	Midwest Biodiversity Institute
MDEP	Massachusetts Department of Environmental Protection
m <sub>.</sub>	meter
mi	mile
mg	milligram
MGD	million gallons per day
MHC ·2	Massachusetts Historical Commission
mi <sup>2</sup>	square miles
ml	milliliter
MOA	Memorandum of Agreement
msl	mean sea level
MVA	megavolt ampere
MW	megawatt
MWH	megawatt-hour
NEMBA	New England Mountain Biking Association
NEPA	National Environmental Policy Act
NEE NE EL OW	New England Environmental
NE FLOW	New England Flow
NEFU	New England Farmers Union
NEPOOL	New England Power Pool
NET NID	New England National Scenic Trail
NIT	National Inventory of Dams Narragansett Indian Tribe
NGVD29	National Geodetic Vertical Datum of 1929
NG V D29 NH	
NHDES	New Hampshire New Hampshire Department of Environmental Services
NHDHR	New Hampshire Department of Environmental Services
NHESP	•
NHFGD	Natural Heritage and Endangered Species Program New Hampshire Fish and Game Department
NHPA	National Historic Preservation Act
NID	National Inventory of Dams
NLCD	National Land Cover Database
NMFS	National Marine Fisheries Service
NMTTC	Northfield Mountain Tour and Trail Center

#### Northfield Project ACRONYMS AND ABBREVIATIONS

NPDES	National Pollution Discharge Elimination System
NPS	National Park Service
NRHP	National Register of Historic Places
NOI	Notice of Intent
NTU	Nephelometric Turbidity Unit
NU	Northeast Utilities
NWI	National Wetland Inventory
NY-ISO	New York ISO
O&M	operation and maintenance
PAD	Pre-Application Document
PCBs	polychlorinated biphenyls
PLC	Programmable logic controller
PM&E	Protection, Mitigation & Enhancement
PIT	passive integrated transponder
	Northfield Project (collectively the Northfield Mountain Pumped
Project	Storage Development and the Turner Falls Development)
PSP	Proposed Study Plan
PVPC	Pioneer Valley Planning Commission
QA/QC	quality control/quality assurance
REA	Ready for Environmental Analysis
RM	River mile
RTE	Rare, Threatened, and Endangered
RRA	River Residents Association
RSP	Revised Study Plan
S&A	Simons and Associates
SAV	submerged aquatic vegetation
SCORP	State Comprehensive Outdoor Recreation Plan
SD1	Scoping Document 1
SD2	Scoping Document 2
SHPO	State Historic Preservation Officer
SPDL	Study Plan Determination Letter
TDS	total dissolved solids
TFI	Turners Falls Impoundment
THPO	Tribal Historic Preservation Officer
TMDL	Total Maximum Daily Load
TN	total nitrogen
TNC	The Nature Conservancy
ТР	total phosphorus
TSS	total suspended solids
Turners Falls Development	Turners Falls Hydroelectric Development
UMass	University of Massachusetts at Amherst
USACE	United States Army Corps of Engineers
USDOI	United States Department of the Interior
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
USR	Updated Study Report
μS	microsiemens
UMass	University of Massachusetts at Amherst
VT	Vermont
VTANR	Vermont Agency of Natural Resources

#### Northfield Project ACRONYMS AND ABBREVIATIONS

VTDEC	Vermont Department of Environmental Conservation
VTDHP	Vermont Division of Historic Preservation
VTFWD	Vermont Fish and Wildlife Department
VY	Vermont Yankee Nuclear Facility
WMECO	Western Massachusetts Electric Company
WMA	Wildlife Management Area
WQC	Water Quality Certificate
YOY	young-of-the-year