Brookfield

Brookfield Renewable New England Regional Operations Center Rumford Falls Hydro LLC P.O. Box 280 Rumford, Maine 04276 Tel 207.364.3069 Fax 207.364.3058 www.brookfieldrenewable.com

October 30, 2020

VIA E-FILING

Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

Subject: Rumford Falls Hydroelectric Project (FERC No. 2333)

First Quarterly Study Progress Report

Dear Secretary Bose:

Rumford Falls Hydro LLC (RFH), a subsidiary of Brookfield Renewable, herein submits to the Federal Energy Regulatory Commission (FERC or Commission) the first quarterly study progress report for the Rumford Falls Hydroelectric Project (Project) in accordance with 18 CFR §5.15(b). The Project is a two-development hydroelectric facility on the Androscoggin River in the Town of Rumford, Oxford County, Maine. The FERC license for the Project expires on September 30, 2024, and RFH is pursuing a new license for the Project through the Commission's Integrated Licensing Process (ILP).

Consistent with the ILP and 18 CFR §5.13, RFH filed the Revised Study Plan (RSP) with the Commission on July 7, 2020. The Commission issued a Study Plan Determination (SPD) on August 6, 2020. Consistent with the RSP and associated SPD, RFH will be conducting a total of eight studies. Per 18 CFR §5.15(b), the enclosed table provides the status of these studies as well as any modifications to the approved study methodology identified to date. The available results from these studies will be presented in the Initial Study Report, which will be filed with the FERC on August 7, 2021. RFH will file a second quarterly study progress report in February 2021.

In addition to filing a copy of this letter with the Commission, RFH is distributing this letter to those listed on the enclosed distribution list. This submittal is also available in FERC's eLibrary system at https://elibrary.ferc.gov/idmws/search/fercgensearch.asp under docket number P-2333.

If there are any questions or comments regarding this submittal, please contact me by phone (207) 755-5613 or at luke.anderson@brookfieldrenewable.com.

Sincerely,

Luke Anderson Manger, Licensing Brookfield Renewable

cc: Distribution List Enclosures (1)

Federal Agencies

John T. Eddins Program Analyst Advisory Council on Historic Preservation Office of Project Review 401 F Street NW, Suite 308 Washington, DC 20001-2637 Email: jeddins@achp.gov

Peter T. Gaynor Administrator Federal Emergency Management Agency 500 C Street S.W. Washington, DC 20472

Paul Ford Acting Regional Administrator Federal Emergency Management Agency, Region 1 99 High Street Boston, MA 02110

John Spain
Regional Engineer
Federal Energy Regulatory Commission
Division of Dam Safety and Inspections - New York
Regional Office
19 W 34th Street, Suite 400
New York, NY 10001
Email: john.spain@ferc.gov

Matt Buhyoff
Atlantic Salmon Recovery Coordinator
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
17 Godfrey Dr.
Orono, ME 04473
Email: matt.buhyoff@noaa.gov

Don Dow Hydro/Fish Passage Engineer National Oceanic and Atmospheric Administration National Marine Fisheries Service 17 Godfrey Dr. Orono, ME 04473 Email: donald.dow@noaa.gov

Jon Hare
Director, Northeast Region
National Oceanic and Atmospheric Administration
Northeast Fisheries Science Center
166 Water Street
Woods Hole, MA 02543-1026
Email: jon.hare@noaa.gov

William McDavitt
Environmental Specialist
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
HCD, 55 Great Republic Dr.
Gloucester, MA 01930
Email: william.mcdavitt@noaa.gov

Sean McDermott
Hydropower Program Coordinator
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
55 Great Republic Drive
Gloucester, MA 01930-2298
Email: sean.mcdermott@noaa.gov

Scott Acone Deputy District Engineer U.S. Army Corps of Engineers New England District 696 Virginia Rd Concord, MA 01742-2751

Jay Clement U.S. Army Corps of Engineers 675 Western Avenue Manchester, ME 04351 Email: jay.l.clement@usace.army.mil

Richard Kristoff
U.S. Army Corps of Engineers
New England District/Regulatory Branch
696 Virginia Rd
Concord, MA 01742-2718
Email: Richard.C.Kristoff@usace.army.mil

Major General Jeffrey L. Milhorn Division Commander U.S. Army Corps of Engineers North Atlantic Division Fort Hamilton Military Community / 302 General Lee Avenue Fort Hamilton, NY 11252-6700

Lieutenant General Todd T. Semonite Commander U.S. Army Corps of Engineers Headquarters 441 G Street NW Washington, DC 20314

Harold Peterson Natural Resources Officer U.S. Bureau of Indian Affairs 545 Marriott Drive Suite 700 Nashville, TN 37214

Email: Harold.Peterson@bia.gov

Karen Mouritsen State Director U.S. Bureau of Land Management Eastern States Office 7450 Boston Boulevard Springfield, VA 22153 Email: castatedirector@blm.gov

William Perry Pendley Director U.S. Bureau of Land Management Headquarters 1849 C Street NWMIB 5655 Washington, DC 20240

Brenda W. Burman Commissioner U.S. Bureau of Reclamation Headquarters 1849 C Street NW Washington, DC 20240 Email: bburman@usbr.gov

Secretary Wilbur L. Ross Office of the Secretary U.S. Department of Commerce 1401 Constitution Avenue NW Washington, DC 20230 Email: WLRoss@doc.gov

David Bernhardt Acting Secretary U.S. Department of Interior 1849 C Street, N.W. Washington, DC 20240

Andrew Raddant Regional Environmental Officer U.S. Department of Interior 15 State Street, Suite 400 Boston, MA 02109 Email: andrew raddant@ios.doi.gov Ralph Abele Chief, Water Quality Branch (CWQ) U.S. Environmental Protection Agency 5 Post Office Square, Suite 100 Mail Code: OEP06-02 Boston, MA 02109 Email: abele.ralph@epa.gov

Dennis Deziel
Regional Administrator
U.S. Environmental Protection Agency
Region 1: New England
5 Post Office Square, Suite 100
Boston, MA 02109-3912
Email: Deziel.dennis@Epa.gov

Ken Moraff
Director, Office of Ecosystem Protection
U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code: OEP06-02
Boston, MA 02109-3912
Email: moraff.ken@epa.gov

Andrew Wheeler Administrator U.S. Environmental Protection Agency Mail Code: 1101A 1200 Pennsylvania Avenue, N.W. Washington, DC 20460 Email: wheeler.andrew@epa.gov

Tom Chapman Supervisor U.S. Fish & Wildlife Service New England Field Office 70 Commercial Street, Suite 300 Concord, NH 03301 Email: tom_chapman@fws.gov

Anna Harris U.S. Fish & Wildlife Service Maine Field Office 4 Fundy Road #R Falmouth, ME 04105 Email: Anna Harris@fws.gov

Aurelia Skipwith Director U.S. Fish & Wildlife Service Main Interior 1849 C Street NW, Room 3331 Washington, DC 20240-0001

Bryan Sojkowski Civil Engineer U.S. Fish & Wildlife Service Northeast Region 300 Westgate Center Dr. Hadley, MA 01035 Email: bryan sojkowski@fws.gov

Wendi Weber Regional Director U.S. Fish & Wildlife Service 300 Westgate Center Dr Northeast Regional Office Hadley, MA 01035-9587 Email: wendi weber@fws.gov

Vicki Christiansen Interim Chief U.S. Forest Service Sidney R. Yates Federal Building 201 14th Street, S.W. Washington, DC 20024 Email: vcchristiansen@fs.fed.us

Mark Prout
Forest Fish Biologist
U.S. Forest Service
71 White Mountain Dr
White Mountain National Forest
Campton, NH 03223
Email: mprout@fs.fed.us

Regional Forester U.S. Forest Service Eastern Region - 9 626 East Wisconsin Avenue Milwaukee, WI 53202

Richard Kiah Section Chief U.S. Geological Survey 361 Commerce Way Pembroke, NH 03275 Email: rkiah@usgs.gov

Jim Reilly
Director
U.S. Geological Survey
12201 Sunrise Valley Drive
Reston, VA 20192
Email: jfreilly@usgs.gov

Nicholas Stasulis
Data Section Chief
U.S. Geological Survey
New England Water Science Center
196 Whitten Rd.
Augusta, ME 04333
Email: nstasuli@usgs.gov

Mike Tupper Regional Director, Northeast Region U.S. Geological Survey 12201 Sunrise Valley Drive Reston, VA 20192 Email: mtupper@usgs.gov

Kevin Mendik Hydro Program Coordinator U.S. National Park Service 15 State Street, 10th floor Boston, MA 02109 Email: kevin mendik@nps.gov

David Vela Director U.S. National Park Service 1849 C Street NW Washington, DC 20240

Gay Vietzke Regional Director, Northeast Region U.S. National Park Service U.S. Custom House 200 Chestnut Street 5th Floor Philadelphia, PA 19106

State Agencies

Kathy Davis Howatt
Hydropower Coordinator
Maine Department of Environmental Protection
17 State House Station
Augusta, ME 04333-0017
Email: Kathy.Howatt@maine.gov

Jim Pellerin
Regional Biologist
Maine Department of Inland Fisheries and Wildlife
Region A
15 Game Farm Road
Gray, ME 04039
Email: James.Pellerin@maine.gov

John Perry

Environmental Coordinator

Maine Department of Inland Fisheries and Wildlife

284 State Street

41 SHS

Augusta, ME 04333-0041

Email: john.perry@maine.gov

Paul Christman

Maine Department of Marine Resources

21 State House Station

Augusta, ME 04333-0021

Email: paul.christman@maine.gov

Casey Clark

Maine Department of Marine Resources

21 State House Station

Augusta, ME 04333-0021

Email: casey.clark@maine.gov

Gail Wippelhauser

Marine Resources Scientist

Maine Department of Marine Resources

21 State House Station

Augusta, ME 04333

Email: Gail.Wippelhauser@maine.gov

Megan M. Rideout

Review & Compliance/CLG Coordinator

Maine Historic Preservation Commission

55 Capitol Street

65 State House Station

Augusta, ME 04333

Email: Megan.M.Rideout@maine.gov

Dr. Arthur Spiess

Review & Compliance/CLG Coordinator

Maine Historic Preservation Commission

55 Capitol Street

65 State House Station

Augusta, ME 04333

Email: arthur.spiess@maine.gov

Kathleen Leyden

Dir., Maine Coastal Program

State of Maine Department of Agriculture,

Conservation & Forestry

93 State House Station

Augusta, ME 04333-0038

Email: kathleen.leyden@maine.gov

James Vogel

Senior Planner

State of Maine Department of Agriculture,

Conservation & Forestry

Bureau of Parks and Lands

18 Elkins Lane, Harlow Building

22 State House Station

Augusta, ME 04333-0022

Email: jim.vogel@maine.gov

Municipalities and Government Officials

Nichole Cargnino

Commissioners Clerk

Board of Oxford County Commissioners

26 Western Ave

South Paris, ME 04281-1431

Email: info@oxfordcounty.org

Stacy Carter

Town Manager

Town of Rumford

145 Congress Street

Rumford, ME 04276

Email: townmanager@rumfordme.org

Lisa Keim

State Senator

Maine Senate District 18

3 State House Station

Augusta, ME 04333-0003

Email: Lisa.Keim@legislature.maine.gov

Native American Tribes

Edward Peter-Paul

Chief

Aroostook Band of Micmacs

7 Northern Road

Presque Isle, ME 04769

Email: epeterpaul@micmac-nsn.gov

Jennifer Pictou

THPO

Aroostook Band of Micmacs

7 Northern Road

Presque Isle, ME 04769

Email: jpictou@micmac-nsn.gov

Clarissa Sabattis

Chief

Houlton Band of Maliseet Indians

88 Bell Road

Littleton, ME 04730

Marla Dana Chief

Passamaquoddy Native American Nation

Pleasant Point Reservation Tribal Building Office Route No. 190 Perry, ME 04667

William J. Nicholas, Sr

Chief

Passamaquoddy Tribe Indian Township PO Box 301

Princeton, ME 04668

Donald Soctomah

THPO

Passamaquoddy Tribe

PO Box 159

Princeton, ME 04668

Email: Soctomah@gmail.com

Kirk Francis

Chief

Penobscot Nation 12 Wabanaki Way Indian Island, ME 04468

Christopher Sockalexis

THPO

Penobscot Nation 12 Wabanaki Way Indian Island, ME 04468

Email: chris.sockalexis@penobscotnation.org

Additional Parties

Kevin Richard Colburn National Stewardship Director American Whitewater 1035 Van Buren Street Missoula, MT 59802

Email: kevin@americanwhitewater.org

Robert Nasdor

Northeast Stewardship Director

American Whitewater 65 Blueberry Hill Lane Sudbury, MA 01776

Email: bob@americanwhitewater.org

Mark Zakutansky

Director of Conservation Policy Engagement

Appalachian Mountain Club

100 Illick's Mill Rd. Bethlehem, PA 18017

Email: mzakutansky@outdoors.org

Sean Mahoney

Executive Vice President and Director Conservation Law Foundation Maine 53 Exchange Street, Suite 200

Portland, ME 04101

Email: smahoney@clf.org

Kirk Siegel

Executive Director Mahoosuc Land Trust 162 North Road PO Box 981

Bethel, ME 04217

Email: kirk@mahoosuc.org

Gabe Perkins

Executive Director

Mahoosuc Pathways

PO Box 572

Bethel, ME 04217

Email: gabe.perkins@gmail.com

Andrew Beahm

Executive Director

Maine Audubon Society

20 Gilsland Farm Rd

Falmouth, ME 04105-2100

Email: abeahm@maineaudubon.org

Landis Hudson

Executive Director

Maine Rivers

PO Box 782

Yarmouth, ME 04096

Email: landis@mainerivers.org

Thomas J Christopher

Principal

New England FLOW 252 Fort Pond Inn Rd

Lancaster, MA 01523-3230

Email: tom.christopher@comcast.net

Steve Heinz Trout Unlimited Sebago Lake Chapter 3 Spruce Lane Cumberland Foreside, ME 04110 Email: heinz@maine.rr.com

Curtis Mooney Manager, Regulatory Affairs Central Rivers Power 59 Ayers Island Road Bristol, NH 03222

Email: cmooney@centralriverspower.com

Mike Scarzello
Eagle Creek Renewable Energy
65 Madison Avenue, Suite 500
Morristown, NJ 07960
Email: michael.scarzello@eaglecreekre.com

Jennifer Kreckel President EnvisionRumford PO Drawer L Rumford, ME 04276

Scott Reed Manager, Environmental and Public Affairs ND Paper Inc. 35 Hartford Street Rumford, ME 04276 Email: scott.reed@us.ndpaper.com

Jennifer Deraspe Owner Nurture Through Nature 77 Warren Road Denmark, ME 04022

Tony Carter President Pennacook Falls Investments, Ltd. PO Box 35 Rumford, ME 04276

Glenn and Sandee Gordon 72 Congress Street Rumford, ME 04276

Todd Papianou

Email: beoutsidenw@gmail.com

John Preble

Email: jmpreble69@gmail.com

Brie Weisman

Email: brieweisman@yahoo.com

Karen Wilson

Email: karensusanwilson@gmail.com

Craig Zurhorst 757 Hancock Street Rumford, ME 04276

Email: craig.zurhorst@gmail.com

Rumford Falls Hydroelectric Project First Quarterly Study Progress Report – November 2020

No.	Study	Status	Modifications to Methodology
1	Water Quality Study	 Consistent with the approved study plan, all field work associated with the Water Quality Study was conducted this year, including the following: Impoundment Trophic State Study – Trophic sampling occurred in a deep-water location in the Upper Dam and Middle Dam impoundments twice a month from June through September 2020. In October, sampling occurred twice in the Upper Dam Impoundment and once in the Middle Dam Impoundment. Prior to sampling, field personnel were certified by the Maine Department of Environmental Protection (MDEP or Department). Temperature and Dissolved Oxygen Monitoring – Continuous, once per hour water temperature and dissolved oxygen monitoring was conducted at a site downstream of the Middle Dam and at the lower powerhouse intake from July to September 2020. Benthic Macroinvertebrate Study – Three rock-filled bag samplers were deployed from July 30 to August 27, 2020, downstream of the Middle Dam. In consultation with the MDEP, a representative sampling location downstream of the Project could not be identified and, therefore, the MDEP requested that Rumford Falls Hydro LLC (RFH) utilize the data collected by the Department in the Town of Mexico, Maine, in lieu of additional downstream sampling. The samples collected downstream of the Middle Dam were processed by a certified taxonomy laboratory and were provided to the MDEP on October 20, 2020 for analysis. Outlet Stream Aquatic Habitat Study – Bank full elevation, wetted width, water depth, and water velocity measurements were recorded at two representative cross-sections within the Middle Dam bypass reach on September 15, 2020. Bed elevation information obtained during the survey will be incorporated into a 2D HEC-RAS model to compute the flow at which at least 75% of the bank full cross-sectional area of the river is watered. 	In October, trophic sampling was conducted once (not twice) in the Middle Dam impoundment due to sampling constraints. RFH continues to coordinate with the MDEP regarding this sampling event.

Rumford Falls Hydroelectric Project First Quarterly Study Progress Report – November 2020

No.	Study	Status	Modifications to Methodology
		Per the option presented to RFH in the MDEP's comments on the Pre- Application Document and Study Request dated January 25, 2020, RFH provided three years of elevation data for the Upper Dam impoundment and outflow data for the Project. This data was summarized in the Proposed Study Plan (PSP) as well as the Revised Study Plan (RSP) and the raw data was provided to the MDEP on March 10, 2020, the day the PSP was filed. RFH continues to review the data with the MDEP.	
2	Angler Creel Survey	Consistent with the approved study plan, the first year of the Angler Creel Survey will be conducted in 2021.	None
3	Impoundment Bass Spawning Survey	Consistent with the approved study plan, the Impoundment Bass Spawning Survey was conducted weekly in June 2020. RFH is in the process of analyzing the data and will consult with the Maine Department of Inland Fisheries and Wildlife to determine if a second year of evaluation is warranted in 2021.	None
4	Flow Study for Aquatic Habitat Evaluation	Consistent with the approved study plan, the Flow Study for Aquatic Habitat Evaluation will be conducted in 2021.	None
5	Aesthetic Flow Study	Consistent with the approved study plan, the Aesthetic Flow Study will be conducted in 2021.	None
6	Whitewater Boating Study	The Whitewater Boating Study will be conducted in 2021 consistent with the methods identified in the Study Plan Determination (SPD) issued by the Federal Energy Regulatory Commission (FERC).	None
7	Recreation Study	The Recreation Study will be conducted in 2021 consistent with the approved study plan as modified in FERC's SPD.	None
8	Historic Architectural Survey	Concurrence on the Project's Area of Potential Effect was received from the Maine Historic Preservation Commission in an email dated July 28, 2020. The historic architectural resource inventory was conducted in October 2020.	None