FEDERAL ENERGY REGULATORY COMMISSION Washington, D.C. 20426 January 14, 2021

OFFICE OF ENERGY PROJECTS

Project No. 2485-071 – Massachusetts/New Hampshire/Vermont Northfield Mountain Pumped Storage Project Northfield Mountain LLC

VIA FERC Service

Mr. Nick Hollister Senior Operations Manager Northfield Mountain LLC 99 Millers Falls Rd. Northfield, MA 01360

Reference: Deficiency of License Application and Additional Information Request

Dear Mr. Hollister:

Northfield Mountain LLC's (Northfield Mountain) application for a new license for the Northfield Mountain Pumped Storage Project No. 2485 that was filed on April 29, 2016, and amended on December 4, 2020, does not conform to the requirements of the Commission's regulations. A list of deficiencies is attached in Schedule A, pursuant to section 5.20(a)(2) of the Commission's regulations. Northfield Mountain has 60 days from the date of this letter to correct the deficiencies in the application.

In addition, requests for additional information made pursuant to section 5.21 of the Commission's regulations are attached in Schedule B. Please provide this information within 60 days from the date of this letter.

If the correction of any deficiency or requested information causes another part of the application to be inaccurate, that part must be revised and refiled by the due date. Also, please be aware that further requests for additional information may be sent to Northfield Mountain at any time before final action on the application.

The Commission strongly encourages electronic filing. Please file the requested information using the Commission's eFiling system at https://ferconline.ferc.gov/eFiling.aspx. For assistance, please contact FERC Online Support at FERCOnlinesupport@ferc.gov; call toll-free at (866) 208-3676; or, for TTY,

contact (202) 502-8659. In lieu of electronic filing, Northfield Mountain may submit a paper copy. Submissions sent via the U.S. Postal Service must be addressed to: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Room 1A, Washington, D.C. 20426. Submissions sent via any other carrier must be addressed to: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 12225 Wilkins Avenue, Rockville, Maryland 20852. The first page of any filing should include docket number P-2485-071.

If Northfield Mountain has any questions concerning this letter, please contact Steve Kartalia at (202) 502-6131, or via email at stephen.kartalia@ferc.gov.

Sincerely,

Nicholas Tackett, Chief New England Branch Division of Hydropower Licensing

Attachments: Schedule A – Deficiencies

Schedule B – Requests for Additional Information

DEFICIENCIES

The following deficiencies have been identified after review of the final license application (FLA) for the Northfield Mountain Pumped Storage Project. These deficiencies must be corrected within 60 days of the date of this letter.

Exhibit E

- 1. Section 5.1(d) of the Commission's regulations requires an applicant to consult with appropriate federal and state agencies, Native American tribes, and members of the public that may be interested in the proceeding before filing an application for a license. In addition, section 5.18(b)(5)(ii)(G) requires documentation of such consultation in the form of a list of consulted entities. In section 1.4 of Exhibit E, Northfield Mountain states that documentation of consultation is included in section 6.0 of Exhibit E. However, this section was not included in Exhibit E. Northfield Mountain must provide documentation of consultation.
- 2. Section 5.18(b)(5)(ii)(F) of the Commission's regulations requires a review of applicable comprehensive plans, and consideration of the extent to which the proposed project complies with such plans. Northfield Mountain has not provided an evaluation of the consistency of the project with applicable comprehensive plans. Please review the list of comprehensive plans available on the Commission's webpage at https://ferc.gov/sites/default/files/2020-07/ListofComprehensivePlans.pdf to identify all applicable plans and provide a discussion of how and why the project would, would not, or should not comply with each of these plans.

Exhibit G

3. Section 4.41(h) of the Commission's regulations requires an Exhibit G that identifies the owners of lands within the project boundary. The Exhibit G maps included in the FLA for the project do not identify the landowners. Northfield Mountain must provide the landowner identities and may refer to the Commission's guidance document, *Managing Hydropower Project Exhibits*, dated August 2014, in particular, appendix 3, page 28, which shows an example Exhibit G map with land ownership identified. Given the number of landowners to be identified, the parcels may be identified on the maps and the landowner information can be provided on separate tables in Exhibit G.

REQUESTS FOR ADDITIONAL INFORMATION

The following is a list of additional information needs that have been identified after review of the final license application (FLA) for the Northfield Mountain Project (project). Please file the requested information within 60 days of the date of this letter.

Net Investment and Cost of Environmental Measures

- 1. Section 2.2 of Exhibit D, on page D-1, provides the net investment value, but does not state the date for which the value was provided (e.g., as of December 31, 2019). Please provide the applicable date for the net investment value. This will ensure that staff apply the value correctly in the economic analysis.
- 2. In section 4.5 of Exhibit D, in table 4.5-1, costs are provided for proposed environmental measures. In various places in the application, additional measures are identified that are not listed in table 4.5-1, including, but not limited to: (1) implement the Recreation Management Plan, Historic Properties Management Plan, Bald Eagle Protection Plan, and Invasive Plant Species Management Plan (pages E-36 to E-37); (2) include or remove lands from the project boundary (page E-37); and (3) implement northern long-eared bat protection measures (page E-45). Please provide a revised table 4.5-1 that lists all proposed measures, both environmental and developmental, and any associated costs. If the measures are considered to have no appreciable cost, please provide a brief explanation.
- 3. In section 9 of Exhibit D, Northfield Mountain provides a list of proposed operational changes and their combined effects on annual generation (table 9.0-1). For each proposed operational change (e.g., operate in accordance with operational flow regime; maintain continuous minimum flow), please note the associated effect on annual generation. This will allow staff to isolate effects of individual measures if resource agencies, stakeholders, or staff identify alternatives to the proposed measures that may have different effects on annual generation.

Aquatic Resources

4. In section 3.3.2.2.1 of Exhibit E, Northfield Mountain proposes to operate the Northfield Mountain Project Upper Reservoir between elevation 1004.5 and 920 feet National Geodetic Vertical Datum of 1929 (NGVD29). Northfield Mountain evaluates the effects of the proposed changes relative to baseline conditions by using hourly data from the Operations Model to develop flow and elevation duration curves for the Turner Falls Impoundment. In section 3.3.1.8, Northfield Mountain provides approximate hydraulic capacities for the Northfield Mountain Project when operating in pumping mode and generation mode. To enable staff's evaluation of effects of the proposed project on fish entrainment at the Northfield Mountain Project, please provide estimated

weekly and/or monthly pumping flow volumes for both current and proposed operations in a typical year.

Terrestrial Resources

- 5. In section 2.2.1.2 of Exhibit E, Northfield Mountain proposes to construct several facilities at the project, including a fish barrier and recreation features. However, there is minimal discussion of these activities in section 3.3.4, where environmental effects on terrestrial resources are discussed. To support staff's analysis on the potential effects of these construction activities on vegetation communities, please describe any disturbance to existing vegetation that would occur during the proposed construction activities. If vegetation disturbance would occur, please quantify the extent of temporary and permanent disturbance, by community type.
- 6. In section 2.2.4 of Exhibit E, Northfield Mountain proposes to modify the operational range of the Northfield Mountain upper reservoir from 1,000.5-938 feet to 1,004.5-920 feet NGVD29. Please identify vegetation communities, by acreage, in the proposed new inundation zone between elevations 1,000.5 and 1,004.5 feet NGVD29, and describe the effects of the proposed operation on terrestrial resources in that range.

Cultural Resources

7. In section 3.3.8.1 of Exhibit E, Northfield Mountain provides a summary of all cultural resources identified within the project's Area of Potential Effects (APE), including the status of their eligibility to be listed in the National Register of Historic Places (National Register). In Northfield Mountain's proposed Historic Properties Management Plan (HPMP) for the project, filed on December 4, 2020, further details are provided regarding these resources. However, while Northfield Mountain states that separate HPMPs were prepared for the Northfield Mountain and Turners Falls projects, much of the information in the HPMPs appears to pertain to both projects. For example, table 5.3.1-1 and other information appears to be identical in both HPMPs.

Additionally, letters from the Massachusetts Historical Commission (MHC) dated March 7, 2019, and November 21, 2019 (filed May 6, 2019, and December 3, 2019 respectively), provide the MHC's determinations of National Register eligibility. However, staff has identified some minor discrepancies between what is contained in these letters and what is provided in the HPMP. For example, in MHC's March 7, 2019, letter, site GIL-MA-14.2 (Munn's Ferry 1 site) is described as ineligible for listing in the National Register and site GIL.HA.9 (Munn's Ferry site) is eligible. Table 3.1-3 also indicates that MA-14.2 is not eligible, but table 5.3.1-1 of the HPMP states that there has been no determination of eligibility for either site

To clarify which resources are located only within the APE at the Northfield

Mountain Project, please file a new, comprehensive table of all resources documented within the APE for the project, identifying sites that are also located at the Turners Falls Project, and with any necessary updates to site information and the dates of MHC's eligibility determinations.

- 8. In section 3.3.8.2 of Exhibit E, Northfield Mountain identifies two parcels of land that are proposed for removal from the Northfield Mountain Project boundary (Riverview Drive [0.2 acres] and Fuller Farm [8.1 acres]). According to the HPMP, the Riverview Drive property contains one historic-period resource (GIL.043). The Fuller Farm property is considered sensitive for both precontact and historic-period resources. Northfield Mountain indicates in Exhibit E that the house, barn, and outbuildings are not historically significant, and a footnote refers to the Historic Architectural Resources Survey filed on January 21, 2015. However, while the 2015 report refers to the nearby Frederick Morgan, Sr. property, it does not appear to specifically reference the Fuller Farm property itself. The Phase IA report filed on May 15, 2015 does discuss the farm, but does not provide a National Register evaluation of the structures. In the HPMP, Northfield Mountain proposes to conduct a Phase IB archaeological survey of the property if required for transfer. According to 36 CFR 800.5(a)(2)(vii), the transfer, lease, or sale of property out of federal control without conditions to ensure the long-term preservation of historic properties on the property may constitute an adverse effect. Please clarify the National Register status of the Fuller Farm property, describe any specific proposed measures for the lands proposed for removal, including the Riverview Drive property, and any consultation records with MHC involving any proposed measures and/or post-licensing studies.
- 9. In section 3.3.8.2 of Exhibit E, Northfield Mountain states that several recreational improvements are proposed that may affect cultural resources within the APE. Please clarify which cultural resources may be affected by these improvements.
- 10. In section 3.3.8.2 of Exhibit E, Northfield Mountain states that erosion as a result of project operation was identified at two cultural resource sites. Please identify these sites and provide additional information about the type and extent of project-related erosion at both.
- 11. In the proposed HPMP, Northfield Mountain notes that visitors to the project area are collecting artifacts at several eligible or unevaluated archaeological sites. Please clarify which sites are being affected by artifact collection, and whether these sites are accessible as a result of project features, such as hiking trails, or whether these sites would otherwise be accessible absent project features. Please file this information as privileged pursuant to section 388.112 of the Commission's regulations.

Project Boundary

- 12. The Exhibit G maps identify lands to be acquired. For these lands, please provide an explanation of what the acquisition will entail (e.g., fee ownership, land rights, flowage rights) and how the lands will be used for project purposes.
- 13. Section 2 of Exhibit G lists lands to be added or removed from the project boundary. While the acreages are provided, it is not clear on the maps where the lands are located. Please revise the maps to clearly outline the lands in question and label them as lands to be added or removed with the corresponding acreage and identification of the landowners.