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October 26, 2015

Via Electronic Filing

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, D.C. 20426

SUBJECT: Bear Swamp Project, FERC Project No. 2669
Response to Comments on Revised Study Plan

Dear Secretary Bose:

Bear Swamp Power Company, LLC (BSPC), a limited liability company jointly owned indirectly by Brookfield Renewable Energy Group and Emera, Inc., is the Licensee, owner, and operator of the 610 megawatt (MW) Bear Swamp Project (Project or BSP). The Project is located along the Deerfield River in Berkshire and Franklin counties, in the Commonwealth of Massachusetts. The Project consists of the Bear Swamp Pumped Storage Development (PSD) and the Fife Brook Development. In support of preparing an application for a new license for the Project, BSPC has elected to use the Federal Energy Regulatory Commission's (FERC or Commission) Integrated Licensing Process (ILP), as defined in 18 C.F.R. Part 5 of the Commission's regulations. Major milestones to date are presented in Table 1.

TABLE 1
MAJOR ILP MILESTONES COMPLETED

Date	Milestone
12/19/2014	Pre-Application Document (PAD) and Notice of Intent (NOI) Filed
02/18/2015	Scoping Document 1 (SD1) Issued by FERC
03/18/2015	FERC Agency and Public Scoping Meetings Conducted
03/19/2015	Project Site Visit Held
06/01/2015	Scoping Document 2 (SD2) Issued by FERC
06/02/2015	Proposed Study Plan (PSP) Filed
06/29-30/2015	PSP Meeting Conducted
08/13/2015	BSPC Follow-up to June 29-30, 2015 PSP Meeting Filed
09/30/2015	Revised Study Plan (RSP) Filed

BSPC filed the RSP with the Commission on September 30, 2015. In accordance with 18 C.F.R. §5.13(b) and the relicensing schedule established for the Project, resource agencies and stakeholders were afforded until October 15, 2015 to file comments on the RSP. Timely comments on the RSP were filed by the Massachusetts Division of Fisheries and Wildlife (MADFW), American Whitewater (AW), U.S. Fish and Wildlife Service (USFWS), Connecticut

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River Watershed Council (CRWC), and the Deerfield River Watershed Chapter of Trout Unlimited (TU). BSPC has reviewed these comments and appreciates the opportunity to briefly clarify certain issues raised recognizing that the Director of the Commission's Office of Energy Projects will issue a Study Plan Determination for the Project on October 30, 2015.

The RSP is Sound and Robust to Serve its Intended Purpose

BSPC stands behind the RSP – inclusive of the important framing of BSPC interests, concerns and context presented in Sections 1.3, 1.4 and 1.5 of the RSP, as well as all the studies that are proposed. As described in Section 1.4 of the RSP, BSPC significantly enhanced the RSP by adding four new studies, enhancing studies already proposed and extending the area to be examined for certain key studies. As such, the RSP moves significantly towards stakeholder study and data collection interests while assuring that overall study scope and purview remain focused on informing those aspects that are under BSPC's direct control. BSPC appreciates that stakeholders acknowledged these enhancements, but notes that stakeholders still contend the enhanced RSP is still not enough and even more study should be performed.

The degree to which BSPC can affect change on overarching issues that are beyond its control, such as the authorized Deerfield River Project (FERC No. 2323) (DRP) peaking flow regime, is inherently limited since BSPC does not control the quantity of water coming into the Project (the degree of which will be borne out by the Operations Model), and there is simply a finite amount of water available that comes into the Project. These principle, driving facts are what guide the RSP. The excessive study sought by stakeholders relative to pursuit of their undefined "appropriate" flow regime becomes academic when studying what is "appropriate" transitions beyond that which BSPC can control and relies upon external factors (e.g. change to the incoming DRP flow regime) or is the responsibility of other entities (e.g. trout stocking). That is, even if BSPC were to study odonates or perform trout scale analysis to the level requested, doing so will not increase BSPC's ability to create the "appropriate" flow regime sought. For example, MADFW's requested odonate study and BSPC's odnonate study each accomplish the same thing; in the end, each confirms the presence/absence of odonates. However, MADFW's version is far more extensive with goals that exceed BSPC's ability to affect change. BSPC's version is far more efficient and commensurate with the fact that BSPC does not cause or create the peaking flow regime that is speculated to have adverse impacts, and is commensurate with BSPC's ability to affect change on that overarching issue.

This approach taken by BSPC holds true for all RSP studies in which stakeholders believe more is somehow better and the RSP avoids studies becoming "science projects". BSPC's approach properly applies FERC's seven ILP study criteria and is consistent with FERC's March 2012 Guide To Understanding And Applying The Integrated Licensing Process Study Criteria which states; "Staff would not, however, typically recommend that a licensee conduct studies on effects caused by developmental activities over which the licensee has no control." BSPC recognizes that stakeholders can always seek to change the Settlement and DRP License as a means to achieve their objectives (as they seemingly have interest in doing). However, BSPC respects the DRP Licensee's right to protect its interests relative to reopening the Settlement or its license at

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what is effectively the mid-point of their authorized license term, and BSPC maintains that the Bear Swamp Project relicensing should not be used as the proving grounds for the study of theoretical conditions that could only exist if that were to occur.

BSPC and stakeholders simply maintain very different views of the intent of the BSP relicensing proceeding. Stakeholders believe relicensing should be used to study matters or conditions BSPC neither creates nor can exercise direct control over. In contrast, BSPC maintains that this proceeding should focus on matters under BSPC's direct control and upon which BSPC can affect change. The RSP is designed to do exactly that in a sound and robust manner to serve its intended purpose of informing potential future <u>BSP</u> license conditions.

The Formal Study Area is Appropriate

Several commenters continue to request that the formal study area for all studies should extend downstream from the Fife Brook Development to DRP Station No.4 impoundment. In particular, the MADFW cites the Turners Falls Hydroelectric Project (FERC No. 1889) and Northfield Mountain Pumped Storage Project (FERC No. 2485) on the Connecticut River and posits that decisions specific and unique to those projects and their setting should by default also extend to the Bear Swamp Project.

For the reasons described at length in Sections 1.3, 1.4, and 1.5 of the RSP, BSPC respectfully disagrees with commenters' requests to extend the formal study area. The Connecticut and Deerfield river systems are dramatically different and cannot be reduced for purposes of easy comparison simply because each happens to be the relicensing of a pumped storage project in Massachusetts. If anything, the reason why the study area associated with the Turners Falls Project extends so far downstream perhaps lies in the fundamental difference that the Turners Falls Project includes three developments including the Cabot Station at the downstream end of a 2.1-mile-long power canal which is "operated in a peaking mode, with the number of peaks per day varying with electrical demand and/price." That is, the Turners Falls Project and Cabot Station in particular is operated in a manner that initiates and creates a unique downstream peaking flow regime that is different from what comes into that project. In contrast, the Fife Brook Development does not create a peaking flow regime different from inflow and is operated in a run-of-release mode passing the incoming DRP peaking flow regime.

If projects are to be compared, BSPC finds that a more appropriate comparison lies with the New York Power Authority's (NYPA) Blenheim-Gilboa Pumped Storage Project (FERC No. 2685) on Schoharie Creek in Schoharie County, New York. That project's lower reservoir was created by a dam across Schoharie Creek, and is operated so that outflow to Schoharie Creek downstream from the project equals inflow to the lower reservoir. Similar to the Fife Brook Development, the Blenheim-Gilboa Project neither controls the quantity of water in Schoharie

¹ See Federal Energy Regulatory Commission. 2015. Study Plan Determination for the Blenheim-Gilboa Pumped Storage Project. February 19, 2015.

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Creek nor does it have the ability to sustainably pass more water below the project than what is received as inflow from the upstream. Accordingly, FERC took these concepts into consideration when determining an appropriate, measured set of studies for the Blenheim-Gilboa Project which did not involve studying every resource area for miles and miles below that project's FERC boundary.

As described in Section 1.5 of the RSP, BSPC maintains that the formal study area proposed is appropriate. However, BSPC has proposed to extend certain field studies, namely the Water Quality Study and Mesohabitat Mapping and Assessment downstream from the confluence of the Deerfield and Cold Rivers to the Station No. 4 impoundment to supplement data collection efforts that resource agencies and stakeholders have undertaken in recent years in a manner consistent with BSPC's sound history of river stewardship.

Lower Reservoir Access

AW's comments on the RSP assert that BSPC "unilaterally declared this section of the river [the Project's Lower Reservoir] off-limits to the public." AW's suggestion that access to the Lower Reservoir was restricted without consultation with the public, municipalities, resource agencies, or stakeholders is inaccurate. BSPC appreciates the opportunity to correct AW's mischaracterization of the record.

First, fencing the Lower Reservoir to protect public safety was part of the original design of the Project. The license application filed by the New England Power Company (NEPCO) with the Federal Power Commission (FPC, predecessor to FERC) in 1968 included provisions for fencing the Lower Reservoir to enhance public and wildlife safety.

Second, the potential effects of public safety measures at the Upper and Lower Reservoirs on recreational access were considered by the applicant, FERC, municipalities, and other stakeholders in the licensing process. Exhibit R of the 1968 license application provided the Recreation Development Plans for the Bear Swamp Project. In May 1968 responses to the Exhibit R filed with the original license application, both Berkshire and Franklin counties expressed concern that public access of the Lower Reservoir would be restricted once the Project was constructed. However, by letter dated September 5, 1969, the Franklin County Department of Planning stated that NEPCO had "taken additional steps to provide additional recreational facilities in the region and proposes future actions in this regard which we feel will be more than adequate to remedy any previous objections that we may have had on the recreational aspects of the project." By letter dated September 5, 1969, the Berkshire County Regional Planning Commission (BCRPC) requested modifications to NEPCO's proposal, including components of The Commission issued a license for the construction and operation of the Bear Swamp Project on April 28, 1970. Article 46 of the license order required the licensee to file a revised Exhibit R within one year of the license order. NEPCO filed a revised Exhibit R that incorporated the BCRPC's recommendations on April 20, 1971.

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Third, BSPC notes that the Board of Consultants established under Article 32 of the license recommended that the licensee install fencing at the Project's Upper and Lower Reservoirs for the protection of the public and wildlife. Accordingly, a fencing plan was developed by NEPCO and approved by the Commission by letter order dated September 6, 1973. As part of this, NEPCO consulted with both the Massachusetts Division of Fisheries and Game and the Massachusetts Department of Natural Resources who recognized its need and provided input on the fencing plan design.

Fencing was a requirement, not an optional or unilateral decision on behalf of the licensee. BSPC did not simply "declare a section of a navigable river off-limits...without any process for review" as AW contends. As described in the RSP, permits under Chapter 91 of the Massachusetts Public Waterfront Act were obtained by the licensee, and BSPC maintains that a balanced approach to recreation and public safety was developed and approved by FERC, state and federal resource agencies, municipalities, and other stakeholders.

AW's comments further suggest that BSPC does not intend to study recreational access to the Deerfield River upstream from Fife Brook Dam. This is incorrect. The objectives of the Recreation Survey described in the RSP include quantifying recreational use; evaluating the effects of continued operation of the Project on recreation resources and activities in the Project area; and identify a range of protection, mitigation and enhancement (PM&E) measures that could be implemented to enhance recreation or mitigate Project effects on recreation. As described in the RSP, BSPC does indeed intend to study recreation use in the Project area to determine recreation demand and the appropriate PM&E measures. To the extent that access to the Lower or Upper Reservoir is raised during this study, it will be reflected and discussed in the license application materials.

Entrainment Evaluation

Within their RSP comment letters the USFWS and MADFW supply a listing of fish species that may occur in the Lower Reservoir and which each agency characterizes as pelagic spawners. However, few, if any of those fish species are pelagic spawners comparable to American shad on the Connecticut River where ichthyoplankton netting/sampling was contemplated due to concern of pelagic spawning American shad in very close proximity to the Northfield Mountain intake. As described in the RSP, BSPC maintains that the requested ichthyoplankton netting/sampling is not an appropriate alternative that is germane or applicable to the BSP. Unlike the Connecticut River, there is no such comparable resource or known problem in the vicinity of the Bear Swamp PSD intake in the Lower Reservoir. BSPC would also note that the MADFW's references to the entrainment evaluation at the Blenheim-Gilboa Project do not acknowledge or recognize that a desktop entrainment evaluation coupled with field velocity measurements (similar to that proposed for the BSP), was deemed appropriate and that ichthyoplankton netting/sampling was not required at the Blenheim-Gilboa Project.

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2016 Recreation Release Schedule

BSPC notes the email exchange attached to TU's October 15, 2015 letter (email dated September 25, 2015 from TU to TransCanada, copying BSPC and other interested parties). In that email TU requests that recreation releases below Fife Brook Dam, made during July-August 2016, occur as early as possible within the allowable 9:30 AM – 12:00 PM window identified in Appendix A of the Settlement and Article 404 of the BSP License. TransCanada replied that it is not prepared to re-open the Settlement or change its current operations, and that whitewater releases are a matter to be taken-up in the BSP relicensing. However, this appears to be a compliance matter under the existing BSP License in that this specific TU email does not seek to change the Settlement or BSP License Article 404, it only requests that licensed releases occur earlier in the licensed window. Accordingly, BSPC looks forward to discussing this request with all interested parties within the upcoming joint planning meetings to establish the 2016 release schedule. BSPC would note that it may still be necessary for some July-August 2016 releases to occur closer to 12:00 PM such that BSPC's proposed Water Quality Study (RSP Section 4) collects data at more-typical, historical release timing as well as any earlier releases that may be agreed-to by all the interested parties.

After considering alternative methods and approaches, BSPC is confident that the RSP methodology and level of effort reflects the most efficient and cost-effective means for obtaining the information necessary to inform and support development of BSP license application materials. The RSP presents a robust and practical study package that moves significantly towards stakeholder study and data collection interests while assuring that overall study scope and purview remain focused on informing those aspects that are under BSPC's direct control. Accordingly, BSPC would respectfully request that the Commission maintain a similar balanced accommodation of interests within its Study Plan Determination.

BSPC looks forward to working with the Commission, agencies, Indian tribes, local governments, and members of the public to timely develop a license application and supporting record that fully meets regulatory requirements in relicensing the Project. If you have questions or require additional information, please contact me at (315) 598-6130 or via email at Steven.Murphy@brookfieldrenewable.com.

Steven P. Murphy

Manager, Licensing

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