**UNITED STATES OF AMERICA**

**FEDERAL ENERGY REGULATORY COMMISSION**

Brookfield Renewable Energy Group Bear Swamp Project

Project No. 2669 Application for New License

AMERICAN WHITEWATER’S COMMENTS IN RESPONSE TO THE NOTICE OF INTENT TO FILE LICENSE APPLICATION, FILING OF PRE-APPLICATION DOCUMENT (PAD), COMMENCEMENT OF PRE-FILING PROCESS, AND SCOPING: REQUEST FOR COMMENTS ON THE PAD AND SCOPING DOCUMENT, AND INDENTIFICATION OF ISSUES AND ASSOCIATED STUDY REQUESTS REGARDING THE BEAR SWAMP PUMPED STORAGE PROJECT, FERC PROJECT NO. 2669

American Whitewater is a national non-profit 501(c)(3) river conservation and recreation organization founded in 1954. We have approximately 6,000 members and 100 affiliate clubs, representing tens of thousands of whitewater paddlers across the nation. American Whitewater’s mission is to protect and restore our nation’s whitewater resources and to enhance opportunities to enjoy them safely. Our members are primarily conservation-oriented kayakers and canoeists, many of whom live and/or engage in recreational boating in the western Massachusetts region, including Deerfield River on which the Bear Swamp Project is located.

American Whitewater submits these comments in order to address deficiencies in the Pre-Application Document filed by Brookfield Renewable Energy Group for the Bear Swamp Project. Specifically, the Licensee has failed to adequately address the impact of the project on whitewater boating and other recreational opportunities within the project boundary, and should study whether those opportunities might be enhanced under another mode of operation or through decommissioning of the project. Accordingly, we request that FERC direct the Licensee to correct the deficiencies in its Pre-Application Document by providing supplemental information on the impact of its project works and mode of operation on whitewater boating and other recreational opportunities in order to provide FERC with sufficient information with which to complete its NEPA analysis.

**Issues**

**Issue 1: Enhance recreational opportunities below the Fife Brook Development through flow, facility, and safety improvements**

Unquestionably, the 1994 Settlement Agreement between New England Power and a dozen NGOs and resource agencies has had a profound impact on the recreational opportunities on the Deerfield River. The 106 scheduled whitewater releases from the Fife Brook dam, along with the 32 scheduled release from Dam #5 operated by TransCanada, has brought 25,000 rafters, many thousands of private whitewater boaters, and large numbers of tubers to the region. Each year in July, we celebrate the success of the whitewater releases on the Deerfield River and their impact on the local community at the annual Deerfield Fest in Charlemont, a festival started by New England FLOW and American Whitewater two decades ago to commemorate the historic settlement agreement that brought whitewater boating to the Deerfield River.

The whitewater releases have stimulated an outdoor industry that has expanded multi-sport recreation opportunities for fishing, mountain biking, and zip lining, and has helped support the local economy through jobs and spending on food and lodging in the region. A study of the expected economic benefits of whitewater releases conducted at the time of the prior relicensing showed that the benefits of whitewater releases far outweigh the benefits from power generation. The past 20 years have borne out those predicted benefits. As we enter into a new relicensing cycle, we seek address several issues of concern and seek improvements in the recreational opportunities available on and around the Deerfield River below the Fife Brook dam.

* Flow Improvements

Under the terms of the Settlement Agreement and the project license, the Licensee is required to release flows of at least 700 cfs from the Fife Brook dam on 106 days annually. The flows are released according to a schedule set each year by agreement between the Licensee, local outfitters, and interested NGOs including American Whitewater, New England FLOW, Appalachian Mountain Club, and Trout Unlimited. The Licensee is required to provide a 3-hour release starting between 9:30 a.m. and noon according to the schedule, although releases generally begin on the later side. At other times, the Licensee must provided a minimum flow of 125 cfs; however, the Licensee frequently releases flows well in excess of its minimum flows based on generational or other flows by TransCanada.

The scheduled Fife Brook dam releases provide thousands of people with the opportunity for beginning and intermediate whitewater boating on a reach containing numerous waves, holes and playspots. The whitewater run culminates in the Class III Zoar Gap, site of the 1993 National Slalom Championship. Running Zoar Gap upright is a right of passage for every new kayaker in the region and is a precondition for more advanced boating on the Dryway section of the river below the No. 5 dam in Monroe. This section of the river also provides the opportunity for family-oriented rafting as well as tubing on a scenic river section. The releases of cold water from the bottom of Fife Brook dam have also benefitted river habitat and improved trout fishing opportunities downstream.

As an initial matter, the Licensee needs to provide a more accurate measure of flows from Fife Brook dam. There is no USGS gage at the dam, the nearest gage being USGS-01168500 located in Charlemont. Based on the drainage area, the Bear Swamp Project (254 sq. mi.) accounts for approximately 70 percent of drainage area at the Charlemont gage (361 sq. mi). A review of the flow data during scheduled release days during 2014 suggests that the Licensee released flows below the level specified by the settlement agreement and FERC license during September of 2014. Inaccurate flow measurement has also resulted in an informal agreement by the Licensee to release water at 800 cfs rather than the specified 700 cfs due to the inaccuracy of the original flow measurement.

The renewal of Brookfield’s license for the Bear Swamp Project provides an opportunity to make flow improvements that would provide additional recreation benefits and improve the recreation experience. Specifically, the Licensee should conduct a controlled flow study to determine the optimal flow level for whitewater boating. During the prior licensing process, there was no study performed to determine the optimal level for whitewater boating, and the flows specified in the Settlement Agreement were based on a “best guess” as to optimal flows. Now with more than 20 years of experience by commercial outfitters and private boaters, we have vastly more knowledge about the river characteristics and optimal flow levels.

The Licensee should also explore the feasibility of shifting the timing of scheduled releases earlier in the day. Earlier releases would benefit recreation by permitting boating earlier in the day, expanding the number of river users. Earlier releases would also improve fish habitat through cold-water releases before the peak heat of the day warms water temperatures. The Licensee should also explore the feasibility of more frequent summer releases, and shift the scheduled October releases to the summer months, benefitting both recreation and fish habitat.

* Facility Improvements

The recreational experience of boaters would be enhanced through facility improvements below the Fife Brook dam. The Licensee should improve access for private boaters who access the river from the unimproved path at the put-in. Constructing stairs at this location would allow private boaters to reach the river safely and avoid injury from falling on the muddy path that leads from the parking area to the river. Parking at the put-in is limited, and additional parking would promote additional recreational usage. Further downriver, roadside parking for river access by boaters and anglers is also limited, creating an unsafe condition for unloading boats, and access to the river is gained through unimproved paths. The Licensee should improve access by adding additional parking and improving river access at several locations including but not limited to the Zoar Whitewater Access Area.

With increasing numbers of disabled veterans and other handicapped individuals showing an interest in kayaking, providing handicapped accessible put-in and takeout locations is becoming increasingly important. Providing handicapped accessibility in public accommodations is also a requirement of state and federal law. The Massachusetts Public Accommodation Law ( M.G.L c. 272, §92A, 98 and 98A ) prohibits making any distinction, discrimination, or restriction in admission to or treatment in a place of public accommodation based on religion, creed, class, race, color, denomination, sex, sexual orientation, nationality, or because of deafness or blindness, or any physical or mental disability. Under Maassachusetts law, a public accommodation includes “a place of public amusement, recreation, sport, exercise or entertainment.” M.G.L. c. 272, §92A The Licensee should assure that all of its access locations are accessible to all members of the recreating public.

The Licensee should also make facility improvements to enhance the recreational experience of boaters and anglers. The Licensee should improve sanitation facilities at both the Zoar Picnic Area and Fife Brook dam boat launch locations through the construction of permanent pit toilets and changing rooms.

* River Safety Improvements

An unintended consequence of the success of the river releases has been an abundance of river tubers that have stressed the river. The Licensee should be credited for its support for the Deerfield River Forum and its support for boater education and safety. The Deerfield River Forum is a collaborative effort supported by the Licensee, local outfitters, and private organizations including American Whitewater and Trout Unlimited with the goal of promoting PFD usage, eliminating alcohol usage on the river and at the Zoar Picnic Area, and ending littering on the river. The Licensee’s financial support for the Charlemont Police river patrols, along with the support from outfitters and river organizations, has been instrumental in cleaning up the river, making the Deerfield a safer and more family friendly experience, and reducing the overcrowding by river tubers. We would like that support for the Deerfield River Forum and the Charlemont Police to continue under the new license.

River safety would also be enhanced through real-time notification of river levels at the Zoar Picnic Area and at the Fife Brook Fishing and Boating Access Area via kiosk or wifi access to accurate real-time river level data. The Licensee should also make improvements to the WaterLine FlowCast system. WaterLine or another flow notification system should be updated automatically and in real-time, and the information should be made available to American Whitewater to integrate with its river database. These improvements will increase safety for boaters and anglers, and assure that those traveling to the Deerfield will know the actual and anticipated water levels. A cell tower at the Bear Swamp Pumped Storage Development would also benefit boater safety as the area is totally lacking in cell phone coverage.

**Issue #2: The Pumped Storage Development has a negative impact on recreational boating above Fife Brook dam**

The Licensee’s Pre-Application Document erroneously maintains that the “Bear Swamp PSD operates independent of, and has no effect on Deerfield River flows upstream or downstream of the Bear Swam PSD and Fife Brook Development.” (PAD, 4-14). Contrary to the Licensee’s assertion, its operation of the project has a damaging impact on river recreation and the ecological function of the river. These impacts include habitat fragmentation by blocking sediment, gravel and wood transport. Furthermore, the project negatively impacts on whitewater boating opportunities above the Fife Brook dam through fluctuation in the Lower Reservoir pool height, and obstructs the free and unimpeded access to the river and other lands in the project boundary.

Bear Swamp is not a closed-loop pumped storage project. Its lower reservoir obstructs the Deerfield River at Fife Brook dam and disrupts the free passage of fish. Fluctuations in the pool height alternately reveal or obscure the significant Class IV Labrynth rapid at the bottom of the Dryway section of the Deerfield River below Dam #5. In addition, the Licensee’s closure of 1.75 miles of the Deerfield River above the Fife Brook Dam eliminates access to the Class III Showtime rapid below the Dryway takeout. Contrary to the Licensee's assertion, the project has a damaging impact on river recreation and the ecological function of the river.

The Bear Swamp Project also has a negative impact on land based recreation opportunities. In the more than 20 years since New England Power signed a settlement agreement with a dozen NGOs and resource agencies, neither the Licensee nor its predecessors have complied with the requirements of this agreement, the terms of its Comprehensive Recreation Plan, and Article 402 of its license requiring the completion of the 10-mile long Hoosac Tunnel Loop Hiking Trail. To date, only a 1.2-mile segment of the trail has been completed and it appears that the Licensee or its predecessor sold much of the property on which it was obligated to construct the trail. It is unclear from the PAD whether the trail was to be located on the land that was subject to the easement granted to the Massachusetts Department of Environmental Management (now the Department of Conservation and Recreation). The Licensee’s failure to complete the trail is a material breach of the terms the project license. This trail must be completed prior to the issuance of a new license, and a permanent easement must be granted to qualified land trust. To be clear, completion of the trail should not be considered mitigation under a new license, but an unsatisfied obligation under the current license.

By way of contrast, the Northfield Mountain Pumped Storage Project provides a wealth of opportunities for hiking and cross country skiing on Northfield Mountain. Similar recreation opportunities should be provided by the Licensee in the vicinity of the Bear Swamp Pumped Storage Development. With the increasing popularity of mountain biking in the area, we would support the construction of a mountain bike trail linking the as yet to be completed Hoosac Tunnel Loop Trail to the trail network in Charlemont.

**Issue #3: The Bear Swamp Project unlawfully and unjustifiably obstructs navigation on the Deerfield River**

The Deerfield River is a navigable river based on its commercial and recreational use. *See*, Knott v. Federal Energy Regulatory Commission, 386 F.3s 368 (1st Cir. 2004)(“the fact that the Blackstone River required portages [does not] defeat a finding of navigability”). In Massachusetts, the public has the right to boat, fish, and fowl in navigable waters. Opinion of the Justices, 383 Mass. 895 (1981) Even in non-navigable waters, the public still retains the right to “passage up and down the stream in boats or other craft, for purposes of business, convenience, or pleasure.”Brosnan v. Gage, 240 Mass. 113 (1921). The Commonwealth, in trust for the public, owns the streambeds of navigable waterways, and the public has the right to freely pass over all waters in Massachusetts. This right of passage includes the recreational use of the water. Under Massachusetts law and regulations, any water-dependent use project which interferes with the public's right to free passage over and through water, including “the right to float on, swim in, or otherwise move freely within the water column without touching the bottom,” is required to provide “compensation to the public for interfering with its broad rights to use such lands for any lawful purpose … commensurate with the extent of interference caused, and shall take the form of measures deemed appropriate by the Department to promote public use and enjoyment of the water, at a location on or near the project site if feasible.” 310 CMR 9.35.

The Licensee provides no access to the Lower Reservoir or riparian lands, prohibiting boating, fishing, hiking or other recreational use, and provides no portage around Fife Brook dam. In an effort to justify this river closure, the Licensee states in the PAD that “[d]ue to safety and security concerns, the Lower Reservoir is partially fenced and public access prohibited.” (PAD, 4-6) The PAD does not, however, contain any information that would support its basis for the closure. Furthermore, the extent of the closure appears unjustified. By way of contrast, the Blenheim-Gilboa Pumped Storage Project(FERC Project No. P-2685) in Blenheim, NY provides both boating and fishing access in both its upper and lower reservoirs on the Schoharie Creek. These opportunities are unavailable at the Bear Swamp Pumped Storage Project.

Through this closure and the denial of the public the right to use and enjoy this section of the Deerfield River, the Licensee has appropriated a public resource for private use without the payment of appropriate compensation. The Licensee’s actions are in violation of Article 19 of its license which requires that it “allow free public access, to a reasonable extent, to project waters and adjacent project lands owned by the licensee for the purpose of full public utilization of such lands and waters for navigation and recreational purposes, including fishing and hunting.…” While Article 19 does authorize the Licensee to reserve certain areas from public access as may be necessary for the protection of life, health, and property, the Article does not give the Licensee carte blanche to close nearly two miles of the river, prevent navigation, and prohibit access to the shoreline.

**Specific Comments**

**4.3 Project Description**

The Licensee states the Lower Reservoir impoundment is partially fenced and closed to the public due to safety and security concerns. The Licensee has provided no criteria for evaluating safety and security concerns and has provided no documentation of its process for making this determination. Furthermore, the Licensee has not provided any evidence that it has received authorization from the State of Massachusetts for its closure of a navigable river.

**4.4 Project Operation**

The Licensee states that the Bear Swamp Pumped Storage Development operates independent of and has no effect on Deerfield River flows upstream or downstream of the Pumped Storage and Fife Brook developments. This is plainly incorrect. The Bear Swamp development has a significant impact on flows in the natural river channel. When the Lower Reservoir is filled to 870 feet, the lower rapids on the Dryway are submerged below the reservoir, eliminating the Class IV Labyrinth Rapid below the Dragon’s Tooth rapid[[1]](#footnote-1) as well as the Showtime rapid below the boater takeout on scheduled release days from the TransCanada’s No.5 dam. When the Upper Reservoir is filled and the Lower Reservoir levels drops to 830 feet, these rapids are revealed.

The Licensee states that it operates the Fife Brook Development in a run-of-release mode, meaning that outflows equal inflows simultaneously. This is only partially accurate. The Licensee deviates from run-of-release in order to maintain a minimum flow of 125 cfs as per its Article 401 license requirement, irrespective of inflows from TransCanada, which is required to provide minimum flows of 73 cfs from the No. 5 dam. The Licensee also provides flows from storage due to sudden unscheduled flow changes by TransCanada. In addition, the Licensee is allowed, under the terms of its March 25, 2005 agreement with USGen New England, to provide flows out of storage to meet its obligations to provide whitewater releases required under the license. TransCanada is the successor in interest to that agreement. It is important to note, however, that the 2005 agreement requiring that TransCanada provide sufficient flows to the Licensee for whitewater releases will expire with the issuance of a new license.

As part of the relicensing process, the Licensee should explore whether a different mode of operation would enable it to increase the volume or change the timing or schedule of releases in order to provide additional recreation opportunities through the utilization of the Lower Reservoir storage as needed. For example, a release of an additional 200 cfs from reservoir storage would result in a reduction of reservoir storage by approximately 50 acre feet, or a lowering of reservoir levels by approximately 4 inches based on a surface area of 152 acres. In its renegotiation of its agreement with TransCanada, the Licensee should explore the feasibility of alternate modes of operation.

**4.5 Information for an Existing Licensed Project**

Like all pumped storage projects, the Bear Swamp Pumped Storage Development is a net energy consumer. The Project consumes approximately 37 percent more energy than it produces. Power generation from the Fife Brook Development does not offset the power losses, resulting in a net loss of 38 MW. While the Project does not produce a net power gain, it does produce significant revenue for the Licensee through the use of a public resource and serves a public function of load balancing and reserve generation. The Project, however, is not a source of renewable energy, as it does not utilize excess power to pump water. This results in the consumption of fossil fuels and contributes to global warming. Large-scale batteries for grid storage are being developed, and over time, may reduce the need for pumped storage.

With regard to current license requirements, the Licensee is not in compliance with its license requirement to complete the 10-mile Hoosac Tunnel Loop Trail as specified in its 1994 Settlement Agreement. More than 20 years have passed and still the trail remains largely uncompleted with property on which the trail was to be built having been improperly conveyed. The trail must be completed in order to fulfill current license obligations and should not be considered mitigation under any new license. In order to prevent future non-compliance, permanent conservation easements should be granted to a land trust, and additional trail construction should be required as past mitigation, including the construction of a mountain bike trail linking the Upper Reservoir to Charlemont.

**5.3 Water Resources**

The drainage area for the Deerfield River at the Bear Swamp Project is 254 sq. mi. The minimum flow of 125 cfs from the Fife Brook Development represents approximately 0.5 CSM of the drainage area at the project. The Deerfield River at the Bear Swamp Project represents approximately 70 percent of the 361sq. mi. drainage area at USGS-01168500 gage in Charlemont. In order to more accurately measure flows from the Fife Brook Development, we recommend that the Licensee fund the installation and maintenance of a USGS stream gage below the Fife Brook impoundment, as it is difficult to determine the accuracy of flows from the Fife Brook Development using the Charlemont gage. Based on the Charlemont gage, it would appear that the Licensee did not provide the required whitewater flows in September of 2014.

**5.9 Recreation**

The Licensee is obligated to provide free public access to its lands and waters under Article 19 of its License. Notwithstanding this obligation, the Licensee has closed significant portions of its lands and waters within the project boundary to public access including the waters and shorelines of the Upper Reservoir and Lower Reservoir, as well as significant portions of the land surrounding the pumped storage development. The Licensee has failed to meet its obligation to complete the Hoosac Tunnel Loop Trail and has not provided recreational access or facilities at this location similar to what is provided at the Northfield Mountain or Blenheim Gilboa pumped storage projects. Boating and fishing are prohibited at both the Upper Reservoir and Lower Reservoir, and there is no portage around Fife Brook Dam. The Licensee has imposed these restrictions without substantial justification and without any process for public input or dispute resolution. These issues should be addressed in relicensing

**Conclusion**

We respectfully request that FERC require the Licensee to supplement its Pre-Application Document with additional information to adequately describe the impact of the Bear Swamp Pumped Storage Project on recreation resources on and around the Deerfield River due the presence of project facilities and operations. American Whitewater will separately file study requests jointly with other parties in accordance with FERC guidelines. Thank you for considering these comments

Respectfully submitted this 18th day of March, 2015

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1. See American Whitewater website, http://www.americanwhitewater.org/content/River/detail/id/681/ [↑](#footnote-ref-1)