

STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

APPLICATION OF BLACK BEAR HYDRO PARTNERS, LLC
FOR CLASS IV RENEWABLE ENERGY SOURCE ELIGIBILITY
OF STILLWATER HYDROELECTRIC PROJECT (FERC No. 2712)

Pursuant to New Hampshire Admin. Code Puc 2500 Rules

March 31, 2010

1. ELIGIBILITY CLASS APPLIED FOR: I II III IV

2. Applicant's legal name: Black Bear Hydro Partners , LLC

3. Address: (1) Davenport Street

(2) PO Box 276

(3) Milford ME 04461
(City) (State) (Zip code)

4. Telephone number: 207-827-5364 or 207-461-3617

5. Facsimile number: 207-827-4102

6. Email address: shall@blackbearhydro.com

7. Facility name: Stillwater Hydroelectric Project (FERC No. 2712)

8. Facility location: (1) Franklin Street

(2) Old Town ME 04461
(City) (State) (Zip code)

9. Latitude: 44° 54' 34.29" N Longitude: 68° 41' 00.36" W

10. The name and telephone number of the facility's operator, if different from the owner: Same

(Name)

(Telephone Number)

11. The ISO-New England asset identification number, if applicable: 16523 or N/A

12. The GIS facility code, if applicable: MSS16523 Under 5MW – Stillwater or N/A

13. A description of the facility, including fuel type, gross nameplate generation capacity, the initial commercial operation date, and the date it began operation, if different.

Please see Supplemental Information Sheet.

14. If Class I certification is sought for a generation facility that uses biomass, the applicant shall submit:

- (a) quarterly average NO_x emission rates over the past rolling year,
- (b) the most recent average particulate matter emission rates as required by the New Hampshire Department of, Environmental Services (NFIDES),
- (c) a description of the pollution control equipment or proposed practices for compliance with such requirements,
- (d) proof that a copy of the completed application has been filed with the NHDES, and
- (e) conduct a stack test to verify compliance with the emission standard for particulate matter no later than 12 months prior to the end of the subject calendar quarter except as provided for in RSA 362-F:12,II.
- (f) N/A: Class I certification is NOT being sought for a generation facility that uses biomass.

15. If Class I certification is sought for the incremental new production of electricity by a generation facility that uses biomass, methane or hydroelectric technologies to produce energy, the applicant shall:

- (a) demonstrate that it has made capital investments after January 1,2006 with the successful purpose of improving the efficiency or increasing the output of renewable energy from the facility, and
- (b) supply the historical generation baseline as defined in RSA 362-F:2,X.
- (c) N/A: Class I certification is NOT being sought for the incremental new production of electricity by a generation facility that uses biomass, methane or hydroelectric technologies.

16. If Class I certification is sought for repowered Class III or Class IV sources, the applicant shall:

- (a) demonstrate that it has made new capital investments for the purpose of restoring unusable generation capacity or adding to the existing capacity, in light of the NHDES environmental permitting requirements or otherwise, and
- (b) provide documentation that eighty percent of its tax basis in the resulting plant and equipment of the eligible generation capacity, including the NHDES permitting requirements for new plants, but exclusive of any tax basis in real property and intangible assets, is derived from the new capital investments.
- (c) N/A: Class I certification is NOT being sought for repowered Class III or Class IV sources.

17. If Class I certification is sought for formerly nonrenewable energy electric generation facilities, the applicant shall:

(a) demonstrate that it has made new capital investments for the purpose of repowering with eligible biomass technologies or methane gas and complies with the certification requirements of Puc 2505.04, if using biomass fuels, and

(b) provide documentation that eighty percent of its tax basis in the resulting generation unit, including NHDES permitting requirements for new plants, but exclusive of any tax basis in real property and intangible assets, is derived from the new capital investments.

(c) N/A: Class I certification is NOT being sought for formerly nonrenewable energy electric generation facilities.

18. If Class IV certification is sought for an existing small hydroelectric facility, the applicant shall submit proof that:

(a) it has installed upstream and downstream diadromous fish passages that have been required and approved under the terms of its license or exemption from the Federal Energy Regulatory Commission, and

(b) when required, has documented applicable state water quality certification pursuant to section 401 of the Clean Water Act for hydroelectric projects.

(c) N/A: Class IV certification is NOT being sought for existing small hydroelectric facilities.

Please see Supplemental Information Sheet.

19. If the source is located in a control area adjacent to the New England control area, the applicant shall submit proof that the energy is delivered within the New England control area and such delivery is verified using the documentation required in Puc 2504.01(a)(2) a. to e.

Please see Supplemental Information Sheet.

20. All other necessary regulatory approvals, including any reviews, approvals or permits required by the NHDES or the environmental protection agency in the facility's state.

Please see Supplemental Information Sheet.

21. Proof that the applicant either has an approved interconnection study on file with the commission, is a party to a currently effective interconnection agreement, or is otherwise not required to undertake an interconnection study.

Please see Supplemental Information Sheet.

22. A description of how the generation facility is connected to the regional power pool of the local electric distribution utility.

Please see Supplemental Information Sheet.

23. A statement as to whether the facility has been certified under another non-federal jurisdiction's renewable portfolio standard and proof thereof.

Please see Supplemental Information Sheet.

24. A statement as to whether the facility's output has been verified by ISO-New England.

Please see Supplemental Information Sheet.

25. A description of how the facility's output is reported to the GIS if not verified by ISO-New England.

Please see Supplemental Information Sheet.

26. An affidavit by the owner attesting to the accuracy of the contents of the application.

Please see Supplemental Information Sheet.

27. Such other information as the applicant wishes to provide to assist in classification of the generating facility.

Please see Supplemental Information Sheet.

28. This application and all future correspondence should be sent to:

Ms. Debra A. Howland
Executive Director and Secretary
State of New Hampshire
Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, NH 03301-2429

29. Preparer's information:

Name: Scott D. Hall

Title: Manager Environmental Services, Black Bear Hydro Partners, LLC

Address: (1) Davenport Street

(2) PO Box 276

(3) Milford ME 04461
(City) (State) (Zip code)

30. Preparer's signature:  3-31-10

**SUPPLEMENTAL INFORMATION IN SUPPORT OF
BLACK BEAR HYDRO PARTNERS, LLC'S APPLICATION FOR
CLASS IV RENEWABLE ENERGY SOURCE ELIGIBILITY
OF ITS STILLWATER HYDROELECTRIC PROJECT (FERC NO. 2712)**

Black Bear Hydro Partners, LLC ("Black Bear Hydro") submits the following information in response to the respective information requests contained in the completed application form (organized by number). In addition, Black Bear Hydro has included a general description of the Stillwater Hydroelectric Project and additional information in Section 27 in support of the Project's eligibility as a Class IV renewable energy source pursuant to New Hampshire R.S.A. 362- F:4(IV) and F:13 and Admin. Code Puc 2502.10.

Sections 1 through 12. – Please see Application Form.

Section 13. A description of the facility, including fuel type, gross nameplate generation capacity, the initial commercial operation date, and the date it began operation, if different.

The Stillwater Hydroelectric Project is a run-of-river hydroelectric generating facility located on the Stillwater Branch of the Penobscot River in Old Town, Maine with a gross nameplate generating capacity of 1.95 MW. The Stillwater Project commenced initial commercial operations in 1913.

Sections 14 through 17. – Please see Application Form.

Section 18. If Class IV certification is sought for an existing small hydroelectric facility, the applicant shall submit proof that: (a) it has installed upstream and downstream diadromous fish passages that have been required and approved under the terms of its license or exemption from the Federal Energy Regulatory Commission, and (b) when required, has documented applicable state water quality certification pursuant to section 401 of the Clean Water Act for hydroelectric projects.

In compliance with the Federal Energy Regulatory Commission license for the Stillwater Hydroelectric Project (issued April 20, 1998), and associated Water Quality Certification (issued by the State of Maine on October 23, 1992), (both of which are attached to Section 20 of this Supplemental Information Sheet), both upstream and downstream diadromous fish passage facilities were constructed and are currently operated at the Stillwater Project. Please see the attached example photo, pertinent part of FERC order approving drawings that include passage facilities, and condition compliance letter from the Maine Department of Environmental Protection (Attachment – Section 18).

Section 19. If the source is located in a control area adjacent to the New England control area, the applicant shall submit proof that the energy is delivered within the New England control area and such delivery is verified using the documentation required in Puc 2504.01(a)(2) a. to e.

Not applicable since the Stillwater Hydroelectric Project is located within ISO-New England.

Section 20. All other necessary regulatory approvals, including any reviews, approvals or permits required by the NHDES or the environmental protection agency in the facility's state.

Please see the attached Federal Energy Regulatory Commission license for the Stillwater Hydroelectric Project (issued April 20, 1998) which also contains the provisions of the Water Quality Certification (issued by the State of Maine on October 23, 1992) for the Stillwater Hydroelectric Project (Attachment – Section 20).

Section 21. Proof that the applicant either has an approved interconnection study on file with the commission, is a party to a currently effective interconnection agreement, or is otherwise not required to undertake an interconnection study.

Please see attached the pertinent parts of the interconnection agreement with Bangor Hydro Electric Company for the Stillwater Hydroelectric Project (Attachment – Section 21).

Section 22. A description of how the generation facility is connected to the regional power pool of the local electric distribution utility.

The Stillwater Hydroelectric Project generating station is located immediately adjacent to the GSU transformer that is located in a very small former distribution substation that is now part of the project assets. The four (4) powerhouse generators generate at 2.4 KV and the 2.4 KV to 12.5 KV GSU transformer, a single 3-phase 2500 KVA transformer, is directly interconnected with Bangor Hydro Electric Company's (BHEC) 12.5 KV local distribution circuit through the GSU transformer low and high side breakers. That 12.5 KV local distribution circuit is connected to BHEC's Orono substation 12.5 KV bus. That 12.5 KV circuit is then connected to BHEC's 46 KV Line 7 transmission line by a 46KV to 12.5 KV step-down transformer and high side breakers and disconnects. Line 7 is connected to BHEC's 115 KV Pool Transmission Facility Graham Station substation by a 115kv to 46kv step-down transformer.

Section 23. A statement as to whether the facility has been certified under another non-federal jurisdiction's renewable portfolio standard and proof thereof.

The Stillwater Hydroelectric Project currently qualifies as a Class II renewable energy source in the State of Maine. Pursuant to Maine's Portfolio Requirement set forth in the Maine Public Utilities Commission Rules Chapter 311, Section 4, qualification as a Class II resource in Maine does not require certification from the Maine Commission (unlike Class I new renewable resources which must be certified pursuant to Section 3(B)(4) of Chapter 311).

In addition, as provided in Section 12 of this application the Stillwater Hydroelectric Project's GIS facility code is MSS16523, Under5MW – Stillwater, and the GIS system confirms that the Stillwater Project is eligible for Maine Class II renewable energy credits (Attachment – Section 23).

Section 24. A statement as to whether the facility's output has been verified by ISO-New England.

The Stillwater Hydroelectric Project is a settlement only generator (asset identification number 16523) and its output is verified by the ISO New England.

Section 25. A description of how the facility's output is reported to the GIS if not verified by ISO-New England.

Not applicable since the Stillwater Hydroelectric Project output is verified by the ISO-New England.

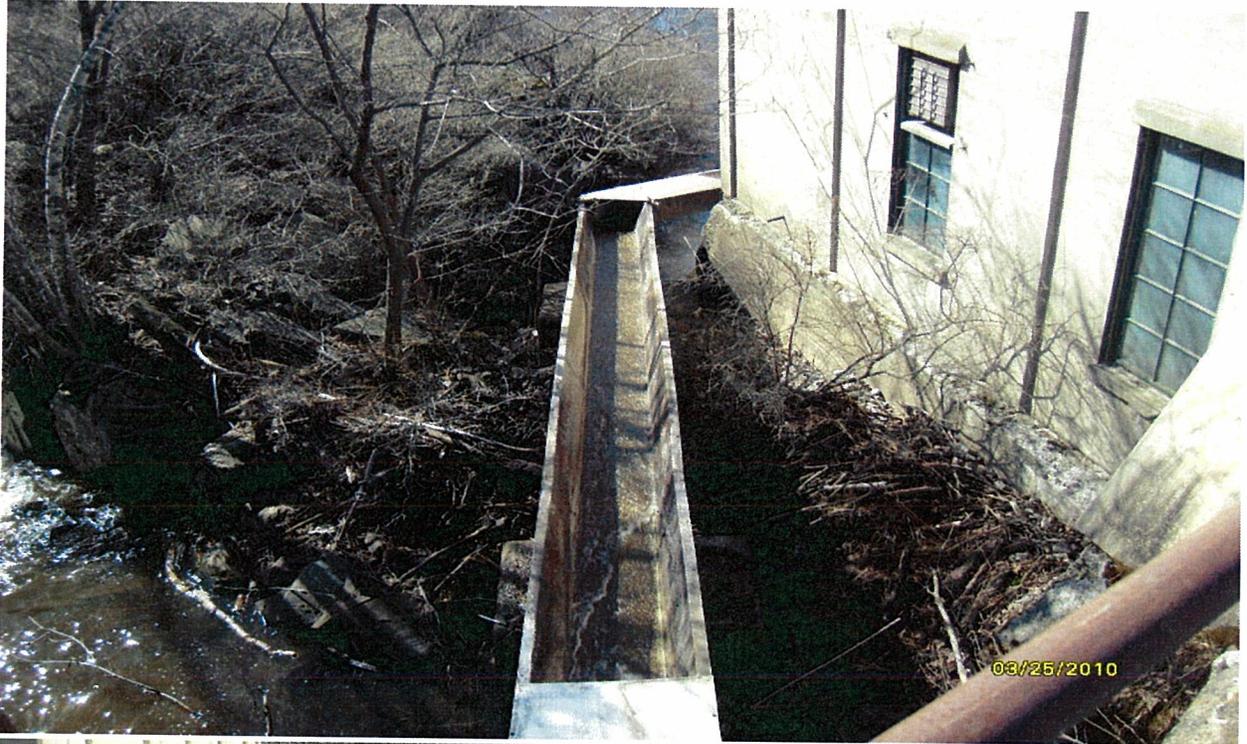
Section 26. An affidavit by the owner attesting to the accuracy of the contents of the application.

Please see attached affidavit of Scott D. Hall, Manager Environmental Services, Black Bear Hydro Partners, LLC, attesting to the accuracy of the contents of this application (Attachment – Section 26).

Section 27. Such other information as the applicant wishes to provide to assist in classification of the generating facility.

The Stillwater Project's license was transferred from Bangor Hydro-Electric Company to Penobscot Hydro, LLC, which later changed its name to PPL Maine, LLC ("PPL Maine") by Federal Energy Regulatory Commission order dated April 1, 1999 (87 FERC ¶62,001). The Stillwater Project license was subsequently transferred from PPL Maine to Black Bear Hydro Partners, LLC by FERC order dated September 17, 2009 (128 FERC ¶62,212).

Attachment – Section 18



Example of diadromous fish passage facilities at the Stillwater Hydroelectric Project.

111 FERC ¶ 62,065
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

PPL Maine LLC

Project No. 2712-055

ORDER MODIFYING AND APPROVING AMENDMENT OF LICENSE

(Issued April 18, 2005)

On June 25, 2004, PPL Maine LLC (licensee) filed an application to amend its license for the Stillwater Project No. 2712 located on the Stillwater Branch in Penobscot County, Maine.¹ The proposed amendment to article 401 would increase the reservoir elevation by one foot, while the proposed amendment to article 402 would reduce the required minimum flows in both the east and west bypassed channels. The proposed amendments to Articles 406, 407, and 408 would extend deadlines relating to the installation of upstream and downstream fish passage facilities. The proposed amendment to Article 409 substitutes a new reservation of authority to prescribe fishways under section 18 of the Federal Power Act. The proposed addition of a new license article would require the license to develop a contingent mitigation fund. Granting these amendments is in the public interest because the amendments are components of a comprehensive settlement agreement which will contribute to the fishery restoration program in the Penobscot Basin and provide for the generation of significant amounts of electric power at the hydroelectric projects covered by the agreement. For the reasons stated below, I am granting the amendment application.

BACKGROUND

On June 25, 2004, the licensee also filed the Lower Penobscot River Basin Comprehensive Settlement Accord (Comprehensive Settlement), which is composed of agreements entered into by the licensee, Bangor-Pacific Hydro, the Penobscot Indian Nation (PIN), the U.S. Department of the Interior (Interior) acting through its bureaus the U.S. Fish and Wildlife Service (FWS), the U.S. Bureau of Indian Affairs (BIA), and the National Park Service (NPS), the Maine agencies,² the Conservation Interests,³ and the Penobscot River Restoration Trust (Trust) concerning the Veazie Project No. 2403, Milford Project No. 2534, Medway Project No. 2666, Orono Project No. 2710, Stillwater

¹ A new license was issued for the Stillwater Project on April 20, 1998. 83 FERC ¶ 61,038.

² The Maine State Planning Office, the Maine Atlantic Salmon Commission, the Maine Department of Inland Fisheries and Wildlife, and the Maine Department of Natural Resources.

³ American Rivers, Inc., the Atlantic Salmon Federation, the Maine Audubon Society, the Natural Resources Council of Maine, and Trout Unlimited.

Project No. 2712-055

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Project No. 2712, Howland Project No. 2721, Basin Mills Project No. 10981, Great Works Project No. 2312 and West Enfield Project No. 2600.

The Comprehensive Settlement includes the Lower Penobscot River Multiparty Settlement Agreement, dated June 2004 (MPA or Agreement). This filing does not request that the Commission approve the Comprehensive Settlement. Rather, the parties to the Comprehensive Settlement request that the Commission approve individual project amendment applications to implement the initial phase of the Comprehensive Settlement.

Section IV of the MPA requires the concurrent filing with the Commission of a number of requests and applications. These various requests and applications (Phase 1 Requests), if granted by the Commission without alteration or change that materially prejudices any party to the Agreement, will permit the parties to proceed to the subsequent phases of the MPA and thus realize the full public interest benefits contemplated by the MPA, including transfer and surrender of some licenses,⁴ and increased generating capacity at other projects. Once fully implemented, this will ultimately result in restoring access to more than 500 miles of fish habitat in the Penobscot River Basin for Atlantic salmon and other anadromous fish. The State of Maine would retain 90 percent of the hydropower generated on the Penobscot because the licensees would be able to increase generation at other dams.

PROPOSED STILLWATER AMENDMENT

Headpond Increase

In order to enhance generation output as proposed in the MPA, the licensee proposes to increase the normal impoundment level at the Stillwater Project by one foot, from 93.65 feet to 94.65 feet. This will result in approximately 965 megawatt hours of additional generation annually. The increase in elevation will be accomplished by simply adding one foot of height to the existing flashboard system and adding flashboards to the non-overflow sections of the dam as necessary to maintain flood flow discharge capacity while allowing the normal headpond increase.

Minimum Flow Modification

In order to enhance generation output as proposed in the MPA, the licensee also proposes to modify the minimum bypass flow requirements at the Stillwater Project by reducing the release to the west bypassed channel from 40 cubic feet per second (cfs) to

⁴ The Veazie and Great Works Projects would be decommissioned and their dams removed; Howland would be decommissioned and studied for potential dam removal.

The revised Exhibit A conforms to the Commission's rules and regulations and is approved by this order. This order will revise the project description in the license to reflect the changes at the project.

In addition, the licensee submitted revised Exhibit F and G drawings showing the proposed revisions at the project. The revised drawings replace old F-1 and F-2 drawings, labeled FERC No. 2712-1005 and 2712-1007 in the license. The revised Exhibit F drawings conform to the Commission's rules and regulations and are approved by this order.

According to §§ 4.39 (a) and 4.41(h) of the Commission's regulations the licensee is required to provide project boundary data in a geo-referenced format. Each drawing must contain a minimum of three known reference points. The latitude and longitude coordinates, or state plane coordinates of each reference point must be shown. Our review of the revised exhibits G-1 through G-4 found that they lack the three reference points and surveyor stamp as required by our regulations. Therefore, the licensee will be required by this order to file the drawings in compliance with the requirements of § 4.39 of the Commission's regulations.

Finally, the proposed increase in reservoir elevation will require editorial changes to Ordering Paragraph B of the license to reflect the changes made at the project. The licensee's request to amend its license for the Stillwater Project, with the above modification, is in the public interest and should, therefore, be approved.

The Director orders:

(A) The revised Exhibit A filed on June 25, 2004, conforms to the Commission's rules and regulations, and is approved and made a part of the license.

(B) Ordering paragraph (B)(2) of the license is revised as follows :

(2) Project works consisting of:

(a) a main concrete gravity dam, about 1,720 feet long, with a maximum height of 22 feet at crest elevation 91.65 feet National Geodetic Vertical Datum (NGVD), consisting of 13 sections: a non-overflow section, totaling 63 feet long, which serves as abutment and wing-wall, containing a 6-foot-wide unused stop-log sluice gate; a 381-foot-long primary spillway section, with a maximum height of 22 feet at a crest elevation of 91.65 feet NGVD, topped with 3.0-foot-high pin-supported flashboards; an 85-foot-long by 2.0-foot-wide by 2.5-foot-high leveling concrete course topped with 1.67 foot-high pin-supported flashboards; a 43-foot-long concrete sill section on top of a ledge island topped with 0.65-foot-high pin-supported flashboards; a 174-

foot-long ogee section, with varying heights from 4 to 20 feet, topped with 3-foot-high pin-supported flashboards; a 52-foot-long ogee section, with a maximum height of 9 feet, topped with a concrete curb, 15 inches wide by 25 inches high, 1.80-foot-high-pin-supported flashboards; an 89-foot-long spillway section, with an average height of 6 feet topped with 1.05-foot-high pin-supported flashboards; a 42-foot-long spillway section, with a maximum height of 8 feet topped with 0.85- to 3.8-foot-high pin-supported flashboards; an 89.5-foot-long abutment section, with an average height of 4 feet topped with 0.85-foot-high pin-supported flashboards; a 187-foot-long non-overflow section, with varying heights from 3 to 12 feet, which abuts an abandoned powerhouse; a 63-foot-long non-overflow section, which is part of the abandoned powerhouse's foundation; a 255.5-foot-long section, with varying heights from 2 to 4 feet, abutting the old and existing powerhouses; and a 162.5-foot-long non-overflow section, with a downstream-facing earth backfill, having a maximum height of 12 feet, topped with a 2-foot-high concrete curb and a driveway on top of the earth backfill.

(b) A concrete and wooden powerhouse, about 83.5 feet long by 32 feet wide by 45 feet high, equipped with four horizontal hydro-electrical generating units: three of which are rated at 450-kilowatts (kW) each, with a net head of 19 feet and a hydraulic capacity of 560 cfs; all totaling a rated capacity of 1,950 kW; a hydraulic capacity range from 380 to 1,700 cfs; an average annual generation of about 14,333,000 kWh; and each having a net head of 19 feet;

(c) An impoundment, about 3 miles long, having a surface area of about 191 acres; a gross storage capacity of approximately 1,910 acre-feet; a negligible useable storage capacity; a normal headwater surface elevation of about 94.65 feet NGVD; and a normal tailwater surface elevation of about 73.65 feet NGVD;

(d) Appurtenant facilities

(C) The following revised Exhibit F drawings, filed on June 25, 2004, conform to the Commission's rules and regulations, and are approved and made a part of the license. The superseded exhibits are eliminated from the license.

EXHIBIT No.	FERC DRAWING No.	DRAWING TITLE	SUPERSEDED FERC DRAWING No.
F-1	2712-1008	General Plan and Dam Sections	2712-1005
F-2	2712-1009	Powerhouse Plan and Sections	2712-1007



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

VIA ELECTRONIC MAIL

March 23, 2010

Scott D. Hall
Manager Environmental Services
Black Bear Hydro Partners LLC
PO Box 276
Milford, ME 04461

RE: Condition Compliance—Upstream Eel Passage Facility Plans
Stillwater Hydroelectric Project
DEP Order #L-16773-33-I-C

Dear Scott:

Attached is a copy of the final Department Order approving final design and operational plans for permanent upstream eel passage facilities at the Stillwater Hydroelectric Project. These plans submitted in compliance with Special Condition 4(F) of the DEP Order dated January 13, 2005 approving a permit pursuant to the Maine Waterway Development and Conservation Act permit and water quality certification, pursuant to Section 401 of the Clean Water Act, in conjunction with the amendment of license for the Stillwater Project by the Federal Energy Regulatory Commission.

Please note that any person aggrieved by the DEP's decision in this matter may appeal that decision to the Board of Environmental Protection or to Maine Superior Court following the procedures set forth in the applicable State law and DEP rules. These procedures are described in the DEP Information Sheet entitled "Appealing a Commissioner's Licensing Decision," which is enclosed with the Order.

Sincerely,

A handwritten signature in black ink that reads "Dana Paul Murch".

Dana Paul Murch
Dams & Hydropower Specialist

cc: Gail Wippelhauser, DMR
Steve Timpano, DIFW
Richard Dill, DIFW-Region F
John Banks, PIN
Fred Seavey, USFWS
Jeff Murphy, NMFS



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION
AUGUSTA, ME 04333

DEPARTMENT ORDER

IN THE MATTER OF

BLACK BEAR HYDRO PARTNERS LLC)	MAINE WATERWAY DEVELOPMENT AND
Old Town, Penobscot County)	CONSERVATION ACT PERMIT AND
STILLWATER HYDRO PROJECT)	WATER QUALITY CERTIFICATION
)	
#L-16773-33-I-C (Approval))	CONDITION COMPLIANCE

Pursuant to the provisions of the *Water Classification Program*, 38 M.R.S.A. §§ 464–470, the *Maine Waterway Development and Conservation Act*, 38 M.R.S.A. §§ 630–637, the *Administrative Rules For Hydropower Projects*, 06-096 CMR 450 (effective September 1, 1987), and Section 401 of the Federal Water Pollution Control Act (a.k.a. Clean Water Act), the Department of Environmental Protection has considered the application of BLACK BEAR HYDRO PARTNERS LLC with its supportive data and other related materials on file, and FINDS THE FOLLOWING FACTS:

1. Application Summary

Black Bear Hydro Partners LLC (“BBHP”) has submitted final design and operational plans for permanent upstream eel passage facilities at the Stillwater Hydro Project, in compliance with Special Condition 4(F) of Department Order #L-16773-33-F-M dated January 13, 2005. This Order was issued pursuant to the Maine Waterway Development and Conservation Act and Section 401 of the Clean Water Act in conjunction with the amendment of license for the Stillwater Hydro Project (No. 2712) by the Federal Energy Regulatory Commission, and amended the certification originally issued on December 29, 1992, in conjunction with the relicensing of the project.

2. Permit/Certification Condition

Condition 4 of Department Order #L-16773-33-F-M reads in pertinent parts as follows:

“4. FISH PASSAGE

A. UPSTREAM EEL PASSAGE

The applicant shall install and operate an upstream fishway for eels at the Stillwater Project, in accordance with the terms of the Lower Penobscot River Multiparty Settlement Agreement, dated June 2004.

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F. FISH PASSAGE FACILITIES PLANS

The applicant shall, in accordance with the terms of the Lower Penobscot River Multiparty Settlement Agreement, dated June 2004, or upon such other schedule(s) as established by FERC, submit final design and operational plans for all upstream and downstream fish passage facilities and/or operational measures required by this approval, prepared in consultation with state and federal fisheries agencies and the Penobscot Indian Nation. These plans shall include a schedule for facilities construction and operation. These plans shall be reviewed by and must receive approval of the DEP prior to construction.”

3. Procedural History

Under the terms of the June 2004 Lower Penobscot River Multiparty Settlement Agreement, an upstream eel passage facility was originally scheduled to be operational at the Stillwater Project prior to the beginning of the third upstream eel migration season following the effective date of the Agreement. The Agreement was effective June 22, 2004, and the beginning of the third upstream eel migration season following this date was May, 2007. However, high river flows during 2005 and 2006 did not allow for completion of the required siting studies. As a consequence, by order dated March 22, 2007, FERC extended the deadline to construct the upstream eel passage facility at the Stillwater Project to May 31, 2008.

By filing dated December 10, 2007, BBHP's predecessor, PPL Maine LLC, submitted an American Eel Upstream Fish Passage Evaluation report for the Lower Penobscot River Hydroelectric Projects. The report states that very few eels have been observed at the Stillwater Project and that no point of eel concentration has yet been identified at the project. The report further states that the absence of eels could be the result of the lack of passage at the downstream Orono Project. As a result, PPL Maine LLC proposed to provide temporary upstream eel passage at the Stillwater Project via a submerged trap, and to continue to monitor areas downstream of the Stillwater Dam to assess the number and locations of eels at the site, with the goal of defining the best location for a permanent upstream eel passage facility at the Stillwater Project.

By Condition Compliance Order #L-16773-33-G-M dated January 16, 2008, the Department approved PPL Maine LLC's plans with respect to the design and operation of a temporary upstream eel passage facility, and required that final design and operational plans for permanent upstream eel passage facilities at the Stillwater Project be prepared and filed with the Department upon a schedule approved by the consulting fisheries agencies and the Penobscot Indian Nation.

By order dated March 5, 2008, FERC required that PPL Maine LLC file within one year a schedule for the development of final design drawings and an operation and maintenance plan for permanent upstream eel passage facilities at the Stillwater Project.

By filing dated March 4, 2009, PPL Maine LLC submitted an American Eel Upstream Passage Assessment 2008 for the Lower Penobscot River Hydroelectric Projects. The assessment notes that annual installation of upstream eel passage facilities at the Orono and Stillwater Projects was delayed in 2008 due to high flows and that further assessment of the siting of permanent passage facilities at the Stillwater Project was needed. As a consequence, the assessment included a request for an extension of time until March 31, 2010 to file final design drawings and an operation and maintenance plan for permanent upstream eel passage facilities at the Stillwater Project. Both the Department and FERC approved the requested extension of time.

4. Condition Compliance Filing

In response to Special Condition 4(F) of the Department's January 13, 2005 Order, by filing dated March 11, 2010, BBHP has now submitted final design drawings and an operation and maintenance plan for permanent upstream eel passage facilities at the Stillwater Project, as contained in an American Eel Upstream Passage Assessment 2009 for the Lower Penobscot River Hydroelectric Projects. These plans were developed in consultation with the DEP, the Maine Department of Marine Resources, the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, the Maine Department of Inland Fisheries and Wildlife, and the Penobscot Indian Nation.

5. Description of Plans

Pursuant to the design plans as submitted, the upstream eel passage facilities for the Stillwater Project consist of two submerged eel traps equipped with trap water and attraction flow via a gravity flow from the dam. Each facility consists of a 24-inch section of 10-inch diameter plastic pipe fitted with an aluminum punch plate cone as an entrance. The east facility is installed annually in the pool below the abutment at the east end of the dam spillway. The west facility is installed annually in the pool below the minimum flow discharge pipe located near the abutment at the west end of the dam spillway. The facilities are monitored throughout the upstream eel migration season, and are periodically lifted to the top of the spillway where the captured eels are counted, measured, and released into the project impoundment.

The general provisions of the proposed operation and maintenance plan are as follows:

- The eel traps and attraction flow equipment will be installed and operational each spring as early as flows allow safe installation and will be operated through July.
- The traps will be checked and maintained by BBHP staff as part of the normal operation of the project.

- BBHP will provide resource agencies and the PIN with an annual report on the operation and maintenance of the Stillwater facilities for the first three years of operations and for succeeding years if deemed necessary as a result of consultation with the resource agencies and the PIN.

6. Discussion

The Department notes that, under the terms of the June 2004 Lower Penobscot River Multiparty Settlement Agreement, BBHP may apply for regulatory approvals to construct a second powerhouse and install additional turbine-generator units at the Stillwater Project. Such an expansion of project generation capacity will change the existing spill and powerhouse attraction flow conditions at the project, and may result in a change in where eels attempt to migrate upstream at the project.

Based on its independent review, the Department has determined that the upstream eel passage design and operational plans for the Stillwater Hydro Project, as submitted, satisfactorily address the requirements of Special Condition 4(F) with respect to permanent upstream eel passage design and operational plans for the project, provided that (1) all annual operations and maintenance reports are file with the Department and consulting agencies by March 31 of the following year, and (2) the design, location, and operation of the upstream eel passage facilities is reassessed following any project redevelopment.

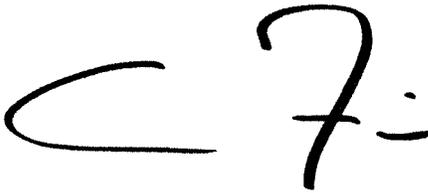
Based on the above Findings of Fact, the Department CONCLUDES that BLACK BEAR HYDRO PARTNERS LLC has complied with Special Condition 4(F) of Department Order #L-16773-33-F-M dated January 13, 2005, with respect to permanent upstream eel passage facility design and operational plans for the Stillwater Project, SUBJECT TO THE FOLLOWING CONDITIONS:

1. All annual operations and maintenance reports shall be filed with the Department and consulting agencies by March 31 of the following year.
2. Upon such schedule as approved by the consulting agencies, the design, location, and operation of the upstream eel passage facilities shall be reassessed following any project redevelopment, and a report shall be filed with the Department and consulting agencies recommending any changes in facility design, location, and/r operation needed to provide adequate upstream eel passage at the project.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 03/16/2010

Date application accepted for processing: 03/22/2010

A handwritten signature in black ink, appearing to read 'A. C. Fisk', with a stylized flourish at the end.

This permit has been digitally signed by Andrew C. Fisk on behalf of Commissioner David P. Littell. It is digitally signed pursuant to authority under 10 M.R.S.A. § 9418. It has been filed with the Board of Environmental Protection as of the signature date. 2010.03.24 07:59:14 -04'00'

This Order prepared by Dana Murch, Bureau of Land and Water Quality.

Attachment – Section 20

83 FERC ¶ 61,038
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

686387

Before Commissioners: James J. Hoecker, Chairman;
Vicky A. Bailey, William L. Massey,
Linda Breathitt, and Curt Hébert, Jr.

Bangor Hydro-Electric Company) Project No. 2712-004

ORDER ISSUING NEW LICENSE

(Issued April 20, 1998)

On December 23, 1991, Bangor Hydro-Electric Company (Bangor Hydro) filed an application with the Federal Energy Regulatory Commission (Commission) under Part I of the Federal Power Act ^{1/} (FPA) for a new license authorizing the continued operation and maintenance of the 1.95-megawatt (MW) Stillwater Hydroelectric Project No. 2712, located on the Stillwater Branch of the Penobscot River in the city of Old Town, Penobscot County, Maine. ^{2/} The Commission issued an original license for this project to Bangor Hydro in 1978, effective April 1, 1962. ^{3/} The original license expired on December 31, 1993, and since then Bangor Hydro has operated the project under an annual license.

Bangor Hydro proposes no major construction or project modifications. For the reasons discussed below, we will issue a new license to Bangor Hydro for a period of 40 years.

BACKGROUND

Notice of the application for the Stillwater Project was published. ^{4/} Four parties filed timely and unopposed motions to intervene in this proceeding: Maine FLOW, Maine State Planning Office, U.S. Department of the Interior (Interior), and the Penobscot Indian Nation (Penobscot Nation). These motions were granted automatically under Rule 214(c)(1) of the Commission's

1/ 16 U.S.C. §807.

2/ The Stillwater Branch of the Penobscot River is a navigable waterway of the United States. 1 FERC ¶ 61,104 (1977). Therefore the Stillwater Project is required to be licensed pursuant to § 23(b)(1) of the FPA.

3/ 4 FERC ¶ 61,157 (1978).

4/ 58 FR 5,966 (January 25, 1993).

Rules of Practice and Procedure. 5/ American Rivers' motion to intervene was opposed by Bangor Hydro. We are granting its motion.

Comments on the application were filed by the U.S. Fish and Wildlife Service (FWS), Atlantic Sea Run Salmon Commission, U.S. Army Corps of Engineers (Corps), Maine Department of Marine Resources, Maine Department of Environmental Protection (MDEP), U.S. Department of the Interior (Interior), Maine State Planning Office, National Marine Fisheries Service (NMFS), and the Penobscot Nation.

On November 15, 1994, the Commission's staff issued the Lower Penobscot River Basin Draft Environmental Impact Statement (Draft EIS), analyzing the Basin Mills, Milford, and Stillwater hydroelectric projects, and requesting public comment. The Commission received comment letters from Bangor Hydro; Atlantic Salmon Federation; Maine Council of Atlantic Salmon Federation; American Rivers, Inc.; Maine Audubon Society; Sportsman's Alliance of Maine; Trout Unlimited; Maine Council of Trout Unlimited; the Corps; Department of Commerce; Interior; U.S. Geological Survey; U.S. Environmental Protection Agency; Penobscot Nation; and the Penobscot River Coalition. The Commission's staff considered these comments in preparing the Final Environmental Impact Statement (Final EIS).

Concurrently with this order, we are issuing an Order on Applications for New and Original Licenses, which discusses issues common to three projects on the Penobscot and Stillwater Rivers. The discussion in that order is incorporated by reference herein.

PROJECT DESCRIPTION

The Stillwater Project's principal features are a meandering dam approximately 1,720 feet long, consisting of 13 sections, a concrete and wooden powerhouse, an impoundment about 3.1 miles long with a surface area of about 300 acres, and appurtenant facilities. The existing project has a total nameplate generator capacity of 1.95 MW and an average annual generation of about 13.1 gigawatthours (GWh). The maximum hydraulic capacity of the Stillwater Project is 1,700 cubic feet per second (cfs). Flows in the Stillwater Branch exceed the maximum hydraulic capacity of the project 60 percent of the time. A more detailed project description is contained in ordering paragraph B(2).

5/ 18 C.F.R. §385.214(c) (1) (1993).

WATER QUALITY CERTIFICATION

Under Section 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1341(a)(1), the Commission may not issue a license for a hydroelectric project unless the state's certifying agency has issued a water quality certification for the project or has waived certification. 6/ On October 23, 1992, the Maine Department of Environmental Protection granted water quality certification for the project, subject to certain conditions. The water quality certification contains 11 conditions, which are attached in full as Appendix A to this order.

APPLICANT'S PLANS AND CAPABILITIES

In accordance with Sections 10(a)(2)(C) and 15(a) of the FPA, we have evaluated Bangor Hydro's record as a Licensee with respect to the following: (1) consumption improvement program; (2) compliance history and ability to comply with the new license; (3) safe management, operation, and maintenance of the project; (4) ability to provide efficient and reliable electric service; (5) need for power; (6) transmission services; (7) cost effectiveness of plans; and (8) actions affecting the public.

1. Consumption Improvement Program

Section 10(a)(2)(C) of the FPA, 16 U.S.C. § 803(a)(2)(C), requires the Commission, in acting on a license application, to consider the extent of electricity consumption efficiency improvement programs in the case of license applicants primarily engaged in the generation or sale of electric power. Bangor Hydro submitted a comprehensive and detailed report, entitled "1988 Annual Narrative - Energy Management Services," that covers programs designed to improve the consumption efficiency and to reduce peak demands of metered customers.

We have reviewed the report cited and conclude that Bangor Hydro has made in good faith a satisfactory effort to establish and maintain efficiency improvement and load management programs that comply with Section 10(a)(2)(c) of the FPA and to support the objectives of the Electric Consumers Protection Act of 1986.

6/ Section 401(a)(1) requires an applicant for a federal license or permit to conduct any activity which may result in any discharge into navigable waters to obtain from the state in which the discharge originates certification that any such discharge will comply with applicable water quality standards.

2. Compliance History and Ability to Comply with the New License

We have reviewed Bangor Hydro's license application and its record of compliance with the existing license in an effort to judge its ability to comply with the articles, terms, and conditions of any license issued, and with other applicable provisions of this part of the FPA.

Based on our review of Bangor Hydro's compliance record, we find that Bangor Hydro has complied in good faith with all articles, terms, and conditions of its current license. As a result of our review of its compliance record and the license application, we believe Bangor Hydro can satisfy the conditions of a new license.

3. Safe Management, Operation, and Maintenance of the Project

Bangor Hydro ensures safe management, operation, and maintenance by holding periodic meetings for maintenance and management personnel to review and update safety procedures and maintain a comprehensive safety policy. This includes displaying warning signs and buoys and installing and maintaining safety equipment.

Although Stillwater is exempt from FERC's five-year inspections, Bangor Hydro retains an independent consultant to inspect the project facilities every five years. In addition, the facility is inspected annually, and remedial/monitoring programs are developed as necessary.

As a result of our review of Bangor Hydro's plans, we conclude that it will be able to manage, operate, and maintain the Stillwater Project in a safe manner.

4. Ability to Provide Efficient and Reliable Electric Service

We reviewed Bangor Hydro's plans and its ability to operate and maintain the project in a manner most likely to provide efficient and reliable electric service.

Bangor Hydro evaluated four alternatives for the Stillwater Project, ranging from life extension of the original units to construction of a new powerhouse on the opposite side of the river. Bangor Hydro's economic analysis of the alternatives determined that none of the upgrade/expansion alternatives are presently feasible; therefore, Bangor Hydro is proposing no increase in either installed capacity or energy generation.

There are no personnel stationed at the project. Roving operators make a minimum of three trips to the plant during each

shift for three shifts a day. During each of these plant visits, an operator takes water readings and makes adjustments to keep the impoundment level as constant as possible. The operator also checks the equipment, the plant, and its surrounding grounds including the substation and takes a full set of readings that are reported to the System Operator.

Bangor Hydro is refining the project operation to protect or enhance the project area's natural resources, such as passing minimum flows. Bangor Hydro also maintains and improves the project through various programs and refinements.

Based on our review of the information, we conclude that Bangor Hydro has been operating the project efficiently within the constraints of the existing license and that it would continue to provide efficient and reliable electric services in the future.

5. Need for Power

Bangor Hydro is an investor-owned electric utility serving more than 110,000 customers in the central and southern counties of Maine. As licensed herein, the Stillwater Project will generate an average of 13.1 gigawatthours (GWh) of energy annually for Bangor Hydro.

To assess the need for power, we reviewed not only Bangor Hydro's use and need for the project power, but also the needs in the operating region in which the project is located. The Stillwater Project is located in the New England Power Pool (NEPOOL) area of the Northeast Power Coordinating Council region of the North American Electric Reliability Council (NERC). NERC annually forecasts electrical supply and demand in the nation and the region for a ten-year period. NERC's most recent report ^{7/} on annual supply and demand projections indicates that, for the period 1995-2004, loads in the NEPOOL area will grow faster than planned capacity additions. The project displaces nonrenewable fossil-fired generation and contributes to diversification of the generation mix in the NEPOOL area. We conclude that the project's power, its low cost, its displacement of nonrenewable fossil-fired generation, and its contribution to a diversified generation mix will help meet a need for power in the NEPOOL area.

^{7/} NERC's Electricity Supply and Demand Database, Data set 1995-2004.

6. Transmission Service

We find that licensing the project to continue its current operations will have no significant effect on the licensee's existing or planned transmission system.

7. Cost Effectiveness of Plans

Bangor Hydro has no plans for making other significant project changes, except for those periodically required to ensure the project's safety. Based on the license application and past practice, we conclude that Bangor Hydro's plans for constructing fish and recreation facilities, as well as its continued operation of the project, will be achieved in a cost-effective manner.

8. Actions Affecting the Public

Constructing fish passage facilities and additional recreational facilities and releasing minimum flows will increase benefits to fisheries and recreation opportunities and, therefore, will benefit the public.

FISH PASSAGE

Bangor Hydro contends that prescriptions filed by Interior and Commerce should not be given mandatory status, because they were filed after the deadline established in the public notice that the project was ready for environmental analysis. 8/

Interior and Commerce both filed requests that the Commission include in the license a reservation of their authority to prescribe fishways. 9/ Interior subsequently submitted a fishway prescription on February 17 and revised the prescription on June 22, 1995, and May 20, 1997; and Commerce submitted a prescription on February 16, 1995. A request for a reservation of prescription authority is not itself a

8/ See 18 C.F.R. § 4.43(b). As discussed in the lead order issued today in this proceeding, 83 FERC ¶ 61,039 (1998), we decline to address Bangor's arguments with respect to whether Interior is authorized to prescribe a fishway for the fish species at issue in this proceeding.

9/ The notice that the Stillwater application was ready for environmental analysis set March 15, 1993, as the deadline for submitting Section 18 prescriptions.

prescription. ^{10/} And since the request is that a reservation of authority be included in the license, the reservation request cannot be invoked before the license is issued, and thus cannot make an untimely pre-license prescription timely. ^{11/}

In any event, the agencies' late prescriptions were analyzed in the EIS as recommendations pursuant to FPA Section 10(a) and, as described below, we adopt most of those recommendations.

Article 405 requires that Bangor Hydro construct, operate and maintain fishways for the design populations of the species specified by Interior and to provide personnel of the U.S. Fish and Wildlife Service access to the project site and pertinent project records for the purpose of inspecting the fishways to determine compliance with the fishway conditions of the license. ^{12/}

Articles 406 (addressing downstream fishways) ^{13/} and 407 (addressing upstream fishways) require that the licensee install and operate fish passage facilities at the project. These articles specify the migration periods during which the facilities must be operated. These articles also require Bangor Hydro to file and implement fishway maintenance and operational plans and to modify the fishways if the effectiveness studies

^{10/} See Niagara Mohawk Power Corp., 83 FERC ¶ 61,036 (1998).

^{11/} This result is of limited import, as there remain the agencies' requests for reservation of their prescription authority, which we grant, pursuant to our policy. See Niagara Mohawk, *supra*.

^{12/} We have not included Interior's recommendation that all fishways be operational within three years as a condition of the license. Construction schedules are an element which must be included in the final design plans which Bangor Hydro must file with the Commission. Bangor Hydro must consult with Interior in preparing the design plans; however, the authority to determine the timing of the construction of project works, including fishways, rest exclusively with the Commission. See Niagara Mohawk Power Corp. 67 FERC ¶ 61,300 at p. 62, 039 (1994).

^{13/} Article 406 also requires that Bangor Hydro install trashracks with a one-inch clear opening at the powerhouse turbine intake and gated surface and bottom bypasses discharging up to 70 cfs during the downstream migration period.

required by Article 408 indicate that modifications are needed. 14/

Article 408 requires Bangor Hydro to file and implement a plan to study the effectiveness of the fishways required by Article 406 and 407. If the study indicates that changes in the project's structures or operations, including flow, are necessary, Article 408 requires Bangor Hydro to file and implement a plan to improve the effectiveness of the fishways.

Article 409 contains a reservation of authority for the prescriptions of fishways under Section 18 of the Federal Power Act by the Secretary of the Interior. 15/

RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES

Section 10(j) of the FPA requires the Commission, when issuing a license, to include conditions based on recommendations of federal and state fish and wildlife agencies submitted pursuant to the Fish and Wildlife Coordination Act, 16/ to "adequately and equitably protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat)" affected by the project.

Pursuant to Section 10(j) of the FPA, we evaluated each recommendation of the federal and state fish and wildlife agencies for consistency with the purpose and requirements of Part I of the FPA or other applicable law. By executive order of the Governor of the State of Maine, the terms and conditions contained in Maine's 401 Water Quality Certifications represent the state's official recommendations regarding the application

14/ We have not adopted Commerce's recommendation prohibiting trapping and trucking as a permanent means of fish passage. We have also not adopted Commerce's recommendation to prohibit the inclusion of fish pumps in fish passage design. Commerce's objections to these measures can be addressed during consultation, if they are proposed. We do not believe it is appropriate to categorically exclude either of these measures from consideration.

15/ Interior and Commerce recommended several alternative design types for the new fishways. Their preferences for the type of fishways to be constructed can be addressed during the consultation required during the design process or through the exercise of Interior's reservation of prescription authority contained in Article 409.

16/ 16 U.S.C. § 661 et al.

and supersede all preliminary recommendations by individual state agencies.

The draft EIS stated that Interior's recommendations concerning a recreation monitoring plan was an inappropriate fish and wildlife recommendation, 17/ and that a 230-cfs minimum flow in the Stillwater bypassed reach may be inconsistent with the balancing provisions of Section 4(e) and 10(a) of the FPA. Under Section 10(j)(2) of the FPA, whenever the Commission believes that any recommendations of the federal and state fish and wildlife agencies may be inconsistent with the FPA or other applicable law, the Commission shall attempt to resolve such inconsistencies. In a Section 10(j) meeting held on February 9, 1996, the Commission's staff requested that Interior consider specifying the habitat goals it sought and allow permanent flows to be within the range of 70 cfs, as specified in the water quality certification, up to 230 cfs, as originally sought by Interior. The required flow would be that amount sufficient to achieve the habitat goals after the berm is modified. Interior's subsequently provided revised minimum flows are incorporated in Articles 402 and 404.

COMPREHENSIVE PLANS

Section 10(a)(2) of the FPA requires the Commission to consider the extent to which a project is consistent with federal or state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by the project. Under Section 10(a)(2), federal and state agencies filed a total of 18 plans. Of these, we identified eight as relevant to the project. 18/ No conflicts were found.

17/ Recommendations that are not specific measures to protect, mitigate, or enhance fish and wildlife resources are not subject to the Section 10(j) process. These recommendations, however, have been evaluated under Section 10(a) of the FPA and are discussed in the final EIS for the project.

18/ Strategic Plan for Management of Atlantic Salmon in the State of Maine, 1984, Atlantic Sea-Run Salmon Commission; Maine Rivers Study, 1982, Maine Department of Conservation and National Park Service; State Comprehensive River Management Plan, 1987, Maine State Planning Office; State Comprehensive Outdoor Recreation Plan, 1988, Maine State Planning Office; Penobscot River Alewife and American Shad Restoration Plan, 1984, Maine Department of Marine Resources; Inland Fisheries River Management Plan, 1982, Maine Department of Inland Fisheries and Wildlife; Species
(continued...)

COMPREHENSIVE DEVELOPMENT

Sections 4(e) and 10(a)(1) of the FPA, 16 U.S.C. §§ 797(e) and 803(a)(1) require the Commission, in acting on applications for license, to give equal consideration to the power and development purposes and to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of fish and wildlife, the protection of recreational opportunities, and the preservation of other aspects of environmental quality. Any license issued shall be best adapted to a comprehensive plan for improving or developing a waterway or waterways for all beneficial public uses. The decision to license this project, and the terms and conditions included herein, reflect such consideration.

The EIS analyzed the effects associated with the issuance of the new license for the Stillwater Project. It recommends a number of measures to protect and enhance environmental resources, which we adopt, as discussed herein. These measures will provide improved fish passage at the dam, protect fish and wildlife resources by requiring run-of-river operation, and enhance recreational resources in the project area.

In determining whether a proposed project will be best adapted to a comprehensive plan for developing a waterway for beneficial public purposes, pursuant to Section 10(a)(1) of the FPA, the Commission considers several public interest factors, including the economic benefits of project power.

Under the Commission's approach to evaluating the economics of hydropower projects, as articulated in Mead Corporation Publishing Paper Division, ^{19/} the Commission employs an analysis that uses current costs to compare the costs of the project and likely alternative power with no forecasts concerning potential future inflation, escalation, or deflation beyond the license issuance date. The basic purpose of the Commission's economic analysis is to provide a general estimate of the potential power benefits and the costs of a project, and reasonable alternatives to project power. The estimate helps to support an informed decision concerning what is in the public interest with respect to a proposed license. In making its decision, the Commission considers the project power benefits both with the applicant's proposed mitigation and enhancement measures and with the

^{18/} (...continued)

Assessments and Strategic Plans, 1991, Maine Department of Inland Fisheries and Wildlife; Gulf of Maine Rivers Ecosystem Plan, 1994, U.S. Fish and Wildlife Service.

^{19/} 72 FERC ¶ 61,027 (1995).

Commission's proposed modifications and additions to the applicant's proposal.

In addition, certain economic factors related to project decommissioning impinge on the decision to issue a new license that are not present in the licensing of new projects. If an existing project is not issued a new license, or if the Licensee declines to accept the new license, the project probably will have to be retired in one form or another. This could range from simply removing the generator at the project to major environmental restoration varying from minor measures to dam removal.

As licensed by the Commission, the Stillwater Project will produce an average of about 12.208 GWh of energy, at an annual cost of about \$552,300 (45.2 mills/kWh). The current annual value of the project's power would be \$376,800 (30.9 mills/kWh). We base this value on the cost of alternative resources, which in this case is the cost of a new combined cycle combustion turbine plant and the regional cost of natural gas. 20/ To determine whether the proposed project is currently economically beneficial, we subtract the project's cost from the value of the project's power. Thus based on current costs, the project, as licensed by the Commission would cost about \$175,500 (about 14.3 mills/kWh) more than the current cost of alternative power.

As described above, our evaluation of the economics of the project shows that the power it generates costs more than alternative power. However, as explained in Mead, the economic analysis is by necessity inexact, and project economics is only one of many public interest factors considered in determining whether or not, and under what conditions, to issue a license. 21/ Bangor Hydro is ultimately responsible and best able to determine whether continued operation of the existing project, with the conditions adopted herein, is a reasonable decision in these circumstances.

Based on our review of the comments on this project filed by agencies and the public, our review of the staff's evaluation of

20/ Our estimate of the value of power is more completely described in the EIS.

21/ In analyzing public interest factors, we consider the fact that hydroelectric projects offer unique electric utility system operational benefits and that proposed projects may provide substantial benefits not directly related to utility operations, benefits that would be lost if a license were denied solely on economic grounds. See City of Augusta, et al., 72 FERC ¶ 61,114, at p. 61,599, n. 57 (1995).

the environmental and economic effects of the proposed project and its alternatives, and our analysis pursuant to Sections 4(e) and 10(a)(1), we find that the Stillwater Project, with our mitigative and enhancement measures, will be best adapted to the comprehensive development of the Stillwater River for beneficial public uses.

LICENSE TERM

Section 15(e) of the FPA specifies that any license issued under Section 15 shall be for a term that the Commission determines to be in the public interest, but not less than 30 years, nor more than 50 years. The Commission's policy is to establish 30-year terms for projects that propose little or no redevelopment, new construction, or new capacity; 40-year terms for projects that propose moderate redevelopment, new construction, or new capacity; and 50-year terms for projects that propose extensive redevelopment, new construction, or new capacity.

In our policy statement on cumulative impacts and license reopeners, we stated that we would endeavor to coordinate the expiration dates of licenses for projects located in the same river basin to the maximum extent feasible, consistent with our commitment to considering the cumulative impacts of projects in the same river basin collectively at relicensing. 22/ Issuing a license for the Stillwater Project with the same expiration date as for the Milford and Veazie Projects would further this policy by ensuring that these licenses expire simultaneously. Therefore, we will issue a license for a 40-year term for the Stillwater Project, effective the first day of the month in which this license is issued.

SUMMARY OF FINDINGS

The EIS issued for this project includes background information, analysis of effects, discussion of enhancement measures, and support for related license articles. The project will not produce any major, long-term adverse environmental effects.

22/ Use of Reserved Authority in Hydropower Licenses to Ameliorate Cumulative Impacts, 59 Fed. Reg. 66718 (December 28, 1994), FERC Statutes and Regulations ¶ 31,010 at p. 31,219 (1994). This policy is codified at 18 C.F.R. § 2.23 (1996). See also Central Maine Power Company, 73 FERC ¶ 61,149 at p. 61,422 (1995); Duke Power Company, 73 FERC ¶ 61,335 at p. 61,940 (1995).

The design of this project is consistent with the engineering standards governing dam safety. The project will be safe if operated and maintained in accordance with the requirements of this license.

We conclude that the project will not conflict with any planned or authorized development and will be best adapted to the comprehensive development of the lower Penobscot River Basin for beneficial public uses.

The Commission orders:

(A) This license is issued to Bangor Hydro-Electric Company (Licensee) for a period of 40 years, effective the first day of the month in which this order is issued, to operate and maintain the Stillwater Hydroelectric Project. This license is subject to the terms and conditions of the Federal Power Act, which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the Federal Power Act.

(B) The project consists of:

(1) All lands, to the extent of the Licensee's interest in those lands, enclosed by the project boundary shown by exhibit G:

<u>Exhibit-G</u>	<u>FERC Drawing No.</u>	<u>Showing</u>
1	2712-1001	Stillwater Hydro Project General Map - Project Area (sheet 1 of 4)
2	2712-1002	Stillwater Hydro Project Detail Map Reservoir (sheet 2 of 4)
3	2712-1003	Stillwater Hydro Project Detail Map Reservoir (sheet 3 of 4)
4	2712-1004	Stillwater Hydro Project Detail Map Reservoir (sheet 4 of 4)

(2) Project works consisting of:

(a) A main concrete gravity dam, totaling about 1,720 feet long, with a maximum height of 22 feet at crest elevation 91.65 feet National Geodetic Vertical Datum (NGVD), consisting of 13 sections: a non-overflow section, totaling 63 feet long, which serves as an abutment and wingwall, containing a 6-footwide unused stoplog sluice gate; a 381-foot-long primary spillway section, with a maximum height of 22 feet at a crest elevation of 91.65 feet NGVD, topped with 2.0-foot-high pin-supported flashboards; an 85-foot-long by 2-foot-wide by 2.5-foot-high leveling concrete course; a 43-foot-long concrete sill section on top of a ledge island; a 174-foot-long ogee section, with varying heights from 4 to 20 feet, topped with 2.0-foot-high pin-supported flashboards; a 52-foot-long ogee section, with a maximum height of 9 feet, topped with a concrete curb, 15 inches wide by 25 inches high; a 105-foot-long spillway section, with an average height of 6 feet; a 42-foot-long spillway section, with a maximum height of 8 feet, topped with 1-foot-high pin-supported flashboards; a 73.5-foot-long abutment section, with an average height of 4 feet; a 187-foot-long non-overflow section, with varying heights from 3 to 12 feet, which abuts an abandoned powerhouse; a 63-foot-long non-overflow section, which is part of the abandoned powerhouse's foundation; a 197.5-foot-long section, with varying heights from 2 to 4 feet, abutting the old and existing powerhouses; and a 162.5-foot-long non-overflow section, with a downstream-facing earth backfill, having a maximum height of 12 feet, topped with a 2-foot-high concrete curb and a driveway on top of the earth backfill;

(b) A concrete and wooden powerhouse, about 83.5 feet long by 32 feet wide by 45 feet high, equipped with four horizontal hydroelectrical generating units: three of which are rated at 450-kilowatts (Kw) each, with a net head of 18 feet and a hydraulic capacity range from 380 to 1,140 cubic feet per (cfs); and one rated at 600 Kw, with a net head of 18 and a hydraulic capacity of 560 cfs; all totaling a rated capacity of 1,950 Kw; a hydraulic capacity range from 380 to 1,700 cfs; an average annual generation of about 13,120,000 kWh; and each having a net head of 18 feet;

(c) An impoundment, about 3.1 miles long, having a surface area of about 300 acres (AC); a gross storage capacity of 3,040 acre-feet (AF); a negligible useable storage capacity; a normal headwater surface elevation of about 93.65 feet NGVD; and a normal tailwater surface elevation of about 73.65 feet NGVD; and

(d) Appurtenant facilities.

The project works generally described above are more specifically shown and described by those portions of Exhibits A and F shown below.

Exhibit A: The following sections of Exhibit A filed December 23, 1991:

Pages A-1 through A-11, including Table A-1 describing the existing mechanical, electrical and transmission equipment.

<u>Exhibit F</u>	<u>FERC Drawing No.</u>	<u>Showing</u>
F-1	2712-1005	Stillwater Hydro Project General Plan and Dam Sections.
F-2	2712-1006	Stillwater Hydro Project Power House Plan and Sections.

(3) All of the structures, fixtures, equipment, or facilities used to operate or maintain the project and located within the project boundary, all portable property that may be employed in connection with the project and located within or outside the project boundary, and all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.

(C) The Exhibits A, F, and G described above are approved and made part of the license.

(D) This license is subject to the articles set forth in Form L-3 (October 1975), entitled "Terms and Conditions of License for Constructed Major Project Affecting Navigable Waters of the United States", and the following additional articles:

Article 201. The Licensee shall pay the United States the following annual charges, effective as of the first day of the month in which this license is issued, for the purposes of reimbursing the United States for the costs of administering Part I of the Federal Power Act, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 1,920 kilowatts.

Article 202. Within 45 days of the date of issuance of the license, the licensee shall file an original set and two duplicate sets of aperture cards of the approved drawings. The set of originals must be reproduced on silver or gelatin 35 mm microfilm. The duplicate sets are copies of the originals made

on diazo-type microfilm. All microfilm must be mounted on type D (3-1/4 x 7-3/8") aperture cards.

Prior to microfilming, the FERC Drawing Number (2712-1001 through 2712-1006) shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number must be typed on the upper right corner of each aperture card. Additionally, the Project Number, FERC Exhibit (e.g., F-1, G-1, etc.), Drawing Title, and date of this license must be typed on the upper left corner of each aperture card.

The original and one duplicate set of aperture cards must be filed with the Secretary of the Commission, ATTN: DPCA/ERB. The remaining duplicate set of aperture cards shall be filed with the Commission's New York Regional Office.

Article 203. Pursuant to Section 10(d) of the FPA, a specified reasonable rate of return upon the net investment in the project shall be used for determining surplus earnings of the project for the establishment and maintenance of amortization reserves. The Licensee shall set aside in a project amortization reserve account at the end of each fiscal year one half of the project surplus earnings, if any, in excess of the specified rate of return per annum on the net investment.

To the extent that there is a deficiency of project earnings below the specified rate of return per annum for any fiscal year, the Licensee shall deduct the amount of that deficiency from the amount of any surplus earnings subsequently accumulated, until absorbed. The Licensee shall set aside one-half of the remaining surplus earnings, if any, cumulatively computed, in the project amortization reserve account. The Licensee shall maintain the amounts established in the project amortization reserve account until further order of the Commission.

The specified reasonable rate of return used in computing amortization reserves shall be calculated annually based on current capital ratios developed from an average of 13 monthly balances of amounts properly included in the Licensee's long-term debt and proprietary capital accounts as listed in the Commission's Uniform System of Accounts. The cost rate for such ratios shall be the weighted average cost of long-term debt and preferred stock for the year, and the cost of common equity shall be the interest rate on 10-year government bonds (reported as the Treasury Department's 10 year constant maturity series) computed on the monthly average for the year in question plus four percentage points (400 basis points).

Article 401. The Licensee shall operate the Stillwater Project in a run-of-river mode for the protection of fisheries resources and recreational opportunities in the Stillwater Branch

of the Penobscot River. Except as temporarily modified by approved maintenance activities, inflows to the project area, or operating emergencies beyond the Licensee's control, the Licensee shall maintain water levels in the Stillwater impoundment within one foot of normal full pond elevation of 93.65 feet NGVD while flashboards are in place.

The Licensee shall at all times act to minimize the fluctuation of the reservoir surface elevation by maintaining a discharge from the project so that, at any point in time, outflows, as measured immediately downstream from the project tailrace, approximate the sum of inflows to the project reservoir.

Run-of-river operation may be temporarily modified if required by operating emergencies beyond the control of the Licensee, and for short periods upon mutual agreement between the Licensee and the Maine Department of Environmental Protection. If the flow is so modified, the Licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

The Licensee shall prepare a plan in consultation with the Maine Department of Environmental Protection to monitor the water levels in Stillwater Impoundment and file the plan with the Commission, for approval, no later than 180 days after the issuance of this license. The Commission reserves the right to require changes to the water level monitoring plan. Upon Commission approval, the Licensee shall implement the plan, including any changes required by the Commission.

Article 402. The Licensee shall release from the Stillwater Project an interim minimum flow of 40 cubic feet per second (cfs) into the so-called west bypass channel and an interim minimum flow of 190 cfs into the so-called east bypass channel, as measured at a location determined in consultation with the Maine Department of Environmental Protection, the U.S. Department of the Interior, the U.S. Geological Survey, and the Penobscot Indian Nation, or inflow to the project reservoir, whichever is less, for the protection and enhancement of fish and wildlife resources, water quality, and recreation opportunities on the Stillwater Branch of the Penobscot River.

This flow may be temporarily modified if required by operating emergencies beyond the control of the Licensee, and for short periods upon mutual agreement between the Licensee and the Maine Department of Environmental Protection. If the flow is so modified, the Licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

Article 403. The Licensee shall, in consultation with the Maine Department of Inland Fisheries and Wildlife, the Maine Department of Marine Resources, the Atlantic Sea Run Salmon Commission, the U.S. Fish and Wildlife Service and the Penobscot Indian Nation, prepare a plan to make physical modifications to the gravel/cobble berm separating sections 1 and 3 of the Stillwater bypassed reach to improve fish habitat availability. The Licensee shall file the plan with the Commission, for approval, no later than 180 days after issuance of this license.

The plan shall be reviewed by the state and federal fisheries agencies and the Maine Department of Environmental Protection Bureau of Land Quality Control. The Commission reserves the right to require changes to the berm modification plan. Activities shall not begin until the Licensee is notified by the Commission that these plans are approved. Upon Commission approval, the Licensee shall implement the plan, including any changes required by the Commission.

Article 404. The Licensee shall, in consultation with the Maine Department of Inland Fisheries and Wildlife, the Maine Department of Marine Resources, the Atlantic Sea Run Salmon Commission, the U.S. Fish and Wildlife Service and the Penobscot Indian Nation, prepare a plan to study various minimum flow releases between leakage and 40 cfs in the west bypassed reach and between leakage and 190 cfs on the habitat in sections 1, 2, and 3, of the east bypassed reach, following berm modification. The purpose of the study will be to determine the permanent minimum flow in the east and west channels of the Stillwater bypassed reach. The target habitat units of the combined areas of the east bypassed reach are an additional 80.6 salmon nursery habitat units, 176.6 smallmouth bass spawning/incubation habitat units, 268 smallmouth bass young-of-year habitat units, 434.9 smallmouth bass juvenile habitat units, 311.4 smallmouth bass adult habitat units, 60 shad spawning/incubation habitat units, and 328.2 shad larvae/juvenile habitat units. These target habitat units are to be attained with flows into the bypassed reach no greater than 230 cfs and no less than 70 cfs.

The plan shall be reviewed by the state and federal fisheries agencies and the Maine Department of Environmental Protection Bureau of Land Quality Control. The Licensee shall file the plan with the Commission, for approval, no later than 180 days after issuance of this license.

Results from the minimum flow study and the Licensee's plans for maintenance of the berm and long-term minimum flow releases that will adequately maintain fish habitat in sections 1, 2, and 3 shall be submitted to the Maine Department of Environmental Protection Bureau of Land Quality Control and the Commission within 18 months of license issuance for the project.

The Commission reserves the right to require changes to the berm maintenance plan and minimum flow study. Activities shall not begin until the Licensee is notified by the Commission that these plans are approved. Upon Commission approval, the Licensee shall implement the plan, including any changes required by the Commission.

Article 405. Fishways shall be constructed, operated, and maintained at the Stillwater Project to provide effective (safe, timely, and convenient) passage for the mainstem Penobscot River design populations of Atlantic salmon, American shad, alewives, and unquantified numbers of blueback herring and American eels at the Licensee's expense. The quantified design populations for the mainstem Penobscot River for each target species is: 2.1 million Atlantic salmon; 250,000 American shad; up to 12,000 alewife. The fishways for the Stillwater Project should be sized appropriately for the migrating populations that use this portion of the river.

The Licensee shall provide personnel of the U.S. Fish and Wildlife Service, and other Service designated representatives, access to the project site and to pertinent project records for the purpose of inspecting the fishways to determine compliance with the fishway prescriptions.

Article 406. The Licensee shall install and operate permanent downstream fish passage facilities at the Stillwater Project. Fishways shall be maintained and operated to maximize fish passage effectiveness throughout fish migration period(s) as defined below. The downstream migration period is defined as April 1 to June 30 for Atlantic salmon, July 1 to December 31 for American shad and alewife, August to December 31 for blueback herring, and August 15 to November 15 (or other time periods determined when adequate information is available, and during any spring run that may occur) for American eel. Downstream facilities are to operate whenever generation occurs during the downstream migration period. The Licensee shall keep the fishways in proper order and shall keep fishway areas clear of trash, logs, and material that would hinder passage. Anticipated maintenance shall be performed in sufficient time before a migratory period such that fishways can be tested and inspected and will operate effectively prior to and during the migratory periods.

Fishway maintenance and operational plans (including schedules) for all fish passage facilities shall be developed by the Licensee in consultation and cooperation with the U.S. Fish and Wildlife Service (FWS), the Penobscot Indian Nation (Penobscot Nation), and other fishery agencies (including the Maine Department of Inland Fisheries and Wildlife, Maine Department of Marine Resources, and the National Marine Fisheries

Service). Functional design and final design plans for all fishways shall be developed in consultation and cooperation with the FWS, Penobscot Nation, and other fishery agencies.

Downstream fishways shall consist of installation of trashracks with 1" clear opening at the powerhouse turbine intake and gated surface and bottom bypasses discharging up to 70 cfs during the downstream migration period.

Within 180 days after the date of license issuance, the Licensee shall file, for Commission approval, detailed design drawings of the Licensee's proposed permanent downstream fish passage facilities. This filing shall include but not be limited to: (1) the location and design specifications of the passage facilities; (2) a schedule for installing the facilities; and (3) procedures for operating and maintaining the facilities.

The Licensee shall include with the filing documentation of consultation, copies of agency comments and recommendations on the drawings, plans, and schedule after they have been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the Licensee's facilities. The Licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the drawings, plans, and schedule with the Commission. If the Licensee does not adopt a recommendation, the filing shall include the Licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the proposed facilities and schedule. No construction of downstream fish passage facilities shall begin until the Licensee is notified by the Commission that the plan is approved. Upon Commission approval, the Licensee shall implement the proposal, including any changes required by the Commission.

Article 407. The Licensee shall install and operate permanent upstream fish passage facilities at the Stillwater Project. Fishways shall be maintained and operated to maximize fish passage effectiveness throughout fish migration period(s) as defined below. The upstream migration period is defined as April 15 to November for Atlantic salmon, May 1 to June 30 for American shad and alewife, June 1 to July 31 for blueback herring, and April 1 to November 30 for American eel. The Licensee shall keep the fishways in proper order and shall keep fishway areas clear of trash, logs, and material that would hinder passage. Anticipated maintenance shall be performed in sufficient time before a migratory period such that fishways can be tested and inspected and will operate effectively prior to and during the migratory periods.

Fishway design, maintenance and operational plans (including schedules) for all fish passage facilities shall be developed by the Licensee in consultation and cooperation with the U.S. Fish and Wildlife Service (FWS), the Penobscot Indian Nation (Penobscot Nation), and other fishery agencies (including the Maine Department of Inland Fisheries and Wildlife, Maine Department of Marine Resources, and the National Marine Fisheries Service). Functional design and final design plans for all fishways shall be developed in consultation and cooperation with the FWS, Penobscot Nation, and other fishery agencies. Upstream fishways must be designed to operate at mainstem Penobscot River flows up to 40,000 cfs (as measured for the Penobscot River at the U.S. Geological Survey gaging station at Eddington) during any upstream migration period designated herein. An attraction flow of up to 50 cfs at the fishway entrance shall be provided.

Within 180 days after the date of license issuance, the Licensee shall file, for Commission approval, detailed design drawings for permanent upstream fish passage facilities. This filing shall include but not be limited to: (1) the location and design specifications of the passage facilities; (2) a schedule for installing the facilities; and (3) procedures for operating and maintaining the facilities.

The Licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The Licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the Licensee does not adopt a recommendation, the filing shall include the Licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the proposed facilities and schedule. No land-disturbing or land-clearing activities related to upstream fish passage shall begin until the Licensee is notified by the Commission that the plan is approved. Upon Commission approval, the Licensee shall implement the proposal, including any changes required by the Commission.

Article 408. Within 18 months after license issuance, the Licensee shall file with the Commission, for approval, a plan to monitor the effectiveness of all the facilities and flows provided pursuant to Articles 406 and 409 of this license that will enable the efficient and safe passage of anadromous fish migrating upstream and downstream. The results of these monitoring studies shall be submitted to the agencies listed below and shall provide a basis for recommending future structural or operational changes at the project.

The monitoring plan shall include a schedule for: (1) implementation of the plan; (2) consultation with the appropriate federal and state agencies concerning the results of the monitoring; and (3) filing the results, agency comments, and Licensee's response to agency comments with the Commission.

The Licensee shall prepare the monitoring plan after consultation with the U.S. Fish and Wildlife Service, Maine Department of Marine Resources, the Maine Department of Environmental Protection, the Penobscot Indian Nation, and the National Marine Fisheries Service.

The Licensee shall include with the plan documentation of agency consultation, copies of agency comments and recommendations on the plan after it has been prepared and provided to them, and specific descriptions of how the agencies' comments are accommodated by the Licensee's plan. The Licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the Licensee does not adopt a recommendation, the filing shall include the Licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the proposed plan. Upon Commission approval, the Licensee shall implement the plan, including any changes required by the Commission.

If the results of the monitoring indicate that changes in project structures or operations, including alternative flow releases, are necessary to protect fish resources, the Licensee shall first consult with the agencies listed above to develop recommended measures for amelioration and then file its proposal with the Commission, for approval. The Commission reserves its authority to require the Licensee to modify project structures or operations to protect and enhance aquatic resources.

Article 409. Authority is reserved by the Commission to require the Licensee to construct, operate, and maintain, or to provide for the construction, operation, and maintenance of, such fishways as may be prescribed by the Secretary of the Interior under Section 18 of the Federal Power Act.

Article 410. Within one year of license issuance, the Licensee shall construct and provide for the operation and maintenance of the following recreational facilities:

- (1) provide fencing around the parking area on the east bank of the Stillwater dam and signs warning against launching canoes and walking out on to the dam;

- (2) provide gravel fill to the University of Maine to be used to create parking areas and one hand-carry boat and canoe access site;
- (3) provide surfacing materials for handicapped access to the northern cove in the University Forest adjacent to the Stillwater impoundment; and
- (4) designate a visitor parking area at the Stillwater powerhouse and continue to provide and maintain the portage trail around Stillwater dam, providing safety booms and hazard warning signs near the Stillwater dam, and assess the demand for additional recreational opportunities in conjunction with FERC Form 80 surveys.

The Licensee shall construct these facilities after consultation with the Maine Department of Conservation and the Maine Department of Environmental Protection Bureau Land Quality Control. These facilities shall be shown on the as-built drawings filed pursuant to this license.

The Licensee shall file a report with the as-built drawings, which shall include the entity responsible for operation and maintenance of the facilities, documentation of consultation, copies of comments and recommendations on the report after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the report. The Licensee shall allow a minimum of 30 days for the agencies to comment before filing the report with the Commission. If the Licensee does not adopt a recommendation, the filing shall include the Licensee's reasons, based on project-specific information.

Article 411. The Licensee, after consultation with the Town of Orono, National Park Service, Penobscot Indian Nation, Maine Department of Environmental Protection, and Maine Department of Conservation, shall monitor recreation and Indian cultural use of the project area to determine whether existing recreation facilities are meeting recreation and Indian cultural use needs. Monitoring studies shall begin within six years of the issuance date of this license. Monitoring studies, at a minimum, shall include collection of annual recreation use data.

Every six years during the term of the license, the Licensee shall file a report with the Commission on the monitoring results. This report shall include:

- (1) annual recreation and Indian cultural use figures;
- (2) a discussion of the adequacy of the Licensee's recreation facilities at the project site to meet recreation demand;
- (3) a description of the methodology used to collect all study data;
- (4) if there is need for additional facilities, the licensee's design of recreational facilities and how such design takes into account the national standards established by the Architectural and Transportation Barriers Compliance Board pursuant to the Americans with Disabilities Act of 1990;
- (5) documentation of agency consultation and agency comments on the report after it has been prepared and provided to the agencies; and
- (6) specific descriptions of how the agency comments are accommodated by the report.

The Licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the report with the Commission.

Article 412. The Licensee shall implement the "Programmatic Agreement Among the Federal Energy Regulatory Commission, the Advisory Council on Historic Preservation, and the Maine State Historic Preservation Officer, for Managing Historic Properties That May Be Affected By A License Issuing To Bangor Hydro-Electric Company To Continue Operating The Stillwater Hydroelectric Project In Maine", executed on August 8, 1997, including but not limited to the Cultural Resources Management Plan for the Project. In the event that the Programmatic Agreement is terminated, the Licensee shall implement the provisions of its approved Cultural Resources Management Plan. The Commission reserves the authority to require changes to the Cultural Resources Management Plan at any time during the term of the license. If the Programmatic Agreement is terminated prior to Commission approval of the Cultural Resources Management Plan, the Licensee shall obtain Commission approval before engaging in any ground disturbing activities or taking any other action that may affect any historic properties within the Project's area of potential effect.

Article 413. (a) In accordance with the provisions of this license, the Licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands

and waters for certain types of use and occupancy, without prior Commission approval. The Licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the Licensee shall also have continuing responsibility to supervise and control the use and occupancies for which it grants permission, and to monitor the use of, and ensure compliance with the covenants of the instrument of conveyance for, any interests that it has conveyed, under this license. If a permitted use and occupancy violates any condition of this license or any other condition imposed by the Licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this license is violated, the Licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, canceling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

(b) The type of use and occupancy of project lands and water for which the Licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 watercraft at a time and where said facility is intended to serve single-family type dwellings; (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline; and (4) food plots and other wildlife enhancement.

To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the Licensee shall require multiple use and occupancy of facilities for access to project lands or waters. The Licensee shall also ensure, to the satisfaction of the Commission's authorized representative, that the use and occupancies for which it grants permission are maintained in good repair and comply with applicable state and local health and safety requirements. Before granting permission for construction of bulkheads or retaining walls, the Licensee shall: (1) inspect the site of the proposed construction; (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site; and (3) determine that the proposed construction is needed and would not change the basic contour of the reservoir shoreline.

To implement this paragraph (b); the Licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project lands and waters, which may be subject to the payment of a reasonable fee to cover

the Licensee's costs of administering the permit program. The Commission reserves the right to require the Licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (b) and to require modification of those standards, guidelines, or procedures.

(c) The Licensee may convey easements or rights-of-way across, or leases of, project lands for: (1) replacement, expansion, realignment, or maintenance of bridges or roads where all necessary state and federal approvals have been obtained; (2) storm drains and water mains; (3) sewers that do not discharge into project waters; (4) minor access roads; (5) telephone, gas, and electric utility distribution lines; (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or underground major telephone distribution cables or major electric distribution lines (69-kV or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project reservoir.

No later than January 31 of each year, the Licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.

(d) The Licensee may convey fee title to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary state and federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary federal and state water quality certification or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary federal and state approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 watercraft at a time and are located at least one-half mile (measured over project waters) from any other private or public marina; (6) recreational development consistent with an approved Exhibit R or approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from project waters at normal surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year.

At least 60 days before conveying any interest in project lands under this paragraph (d), the Licensee must submit a letter to the Director, Office of Hydropower Licensing, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked exhibit G or K map may be used), the nature of the proposed use, the identity of any federal or state agency official consulted, and any federal or state approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the Licensee to file an application for prior approval, the Licensee may convey the intended interest at the end of that period.

(e) The following additional conditions apply to any intended conveyance under paragraph (c) or (d) of this article:

(1) Before conveying the interest, the Licensee shall consult with federal and state fish and wildlife or recreation agencies, as appropriate, and the State Historic Preservation Officer.

(2) Before conveying the interest, the Licensee shall determine that the proposed use of the lands to be conveyed is not inconsistent with any approved exhibit R or approved report on recreational resources of an exhibit E; or, if the project does not have an approved exhibit R or approved report on recreational resources, that the lands to be conveyed do not have recreational value.

(3) The instrument of conveyance must include the following covenants running with the land: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; (ii) the grantee shall take all reasonable precautions to insure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project; and (iii) the grantee shall not unduly restrict public access to project waters.

(4) The Commission reserves the right to require the Licensee to take reasonable remedial action to correct any violation of the terms and conditions of this license, for the protection and enhancement of the project's scenic, recreational, and other environmental values.

(f) The conveyance of an interest in project lands under this license does not in itself change the project boundaries. The project boundaries may be changed to exclude land conveyed under this license only upon approval of revised exhibit G or K drawings (project boundary maps) reflecting exclusion of that

land. Lands conveyed under this license will be excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance, flowage, recreation, public access, protection of environmental resources, and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this license from the project shall be consolidated for consideration when revised exhibit G or K drawings would be filed for approval for other purposes.

(g) The authority granted to the Licensee under this article shall not apply to any part of the public lands and reservations of the United States included within the project boundary.

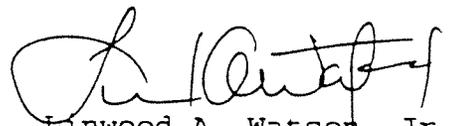
(E) The Licensee shall serve copies of any Commission filing required by this order on any entity specified in this order to be consulted on matters related to that filing. Proof of service on these entities must accompany the filing with the Commission.

(F) The motion to intervene filed by American Rivers is granted.

(G) This order is final unless a request for rehearing is filed within 30 days from the date of its issuance, as provided in Section 313(a) of the FPA. The filing of a request for rehearing does not operate as a stay of the effective date of this license or of any other date specified in this order, except as specifically ordered by the Commission. The Licensee's failure to file a request for rehearing shall constitute acceptance of this license.

By the Commission.

(S E A L)



Linwood A. Watson, Jr.,
Acting Secretary.

APPENDIX A

THEREFORE, the Department GRANTS certification that there is a reasonable assurance that the continued operation of the Stillwater Hydro Project, as described above, will not violate applicable water quality standards, SUBJECT TO THE FOLLOWING CONDITIONS:

1. INTERIM MINIMUM FLOWS

- A. Except as temporarily modified by operating emergencies beyond the applicant's control, as defined below, the facility shall be operated as run-of-river (outflow equals inflow) while passing an interim minimum flow of 20 cfs in the so-called west bypass channel and an interim minimum flow of 50 cfs in the east bypass channel.
- B. Operating emergencies beyond the applicant's control include, but may not be limited to, equipment failure or other temporary abnormal operating condition, generating unit operation or interruption under power supply emergencies, and orders from local, state, or federal law enforcement or public safety authorities.
- C. The applicant shall, in accordance with the schedule established in a new FERC license for the project, submit plans for providing and monitoring the minimum flow required by Part A of this condition. These plans shall be reviewed by and must receive approval of the DEP Bureau of Land Quality Control.

2. BERM MODIFICATION AND MINIMUM FLOW STUDY

- A. The applicant shall make physical modifications to the gravel/cobble berm separating habitat sections 1 and 3 and conduct a minimum flow study to determine habitat availability for the life stages of the target fish species previously evaluated.
- B. The applicant shall, in consultation with the Department of Inland Fisheries and Wildlife, the Department of Marine Resources, the Atlantic Sea Run Salmon Commission, and the Penobscot Indian Nation, prepare a plan to make physical modifications to the gravel/cobble berm separating section 1 and 3 as seen on Exhibit #3, and to conduct a study assessing the impact of various minimum flow releases between leakage and 190 cfs, on the habitat in sections 1, 2, and 3. The plan shall be reviewed by and must receive approval

of state and federal fisheries agencies and the DEP Bureau of Land Quality Control.

- C. The results of the minimum flow study and the applicant's proposals for maintenance of the berm and long-term minimum flow releases that will adequately maintain fish habitat in sections 1, 2, and 3 shall be submitted to the DEP Bureau of Land Quality Control within one full field season following the issuance of a new FERC license for the project. After reviewing the study results, the applicant's proposal, and agency comments, the Department shall order such continuation or modification of the interim minimum flow established by this approval as is deemed necessary to maintain adequate fish habitat in section 1, 2, and 3 and in the west bypass channel.

3. WATER LEVELS

- A. Except as temporarily modified by normal maintenance activities or by inflows to the project area or by operating emergencies beyond the applicant's control, as defined below, water levels in the Stillwater impoundment shall be maintained within one foot of normal full pond elevation of 93.65 feet (NGVD) while flashboards are in place.
- B. Operating emergencies beyond the applicant's control include, but may not be limited to, equipment failure or other temporary abnormal operating conditions, generating unit operation or interruption under power supply emergencies, and orders from local, state, or federal law enforcement or public safety authorities.
- C. The applicant shall, in accordance with the schedule established in a new FERC license for the project, submit plans for providing and monitoring the water levels in the Stillwater impoundment as required in Part A of this condition. These plans shall be reviewed by and must be receive approval of the DEP Bureau of Land Quality Control.

4. FISH PASSAGE FACILITIES

- A. The applicant shall install and operate permanent upstream and downstream fish passage facilities at the Stillwater Project as proposed in the application.
- B. The applicant shall, in accordance with the schedule established in a new FERC license for the project, submit functional design drawings, a construction

schedule, and operating and maintenance plans for all fish passage facilities required by Part A of this condition, prepared in consultation with state and federal fisheries agencies and the Penobscot Indian Nation. These submittals shall be reviewed by and must receive approval of state and federal fisheries agencies, FERC and the DEP Bureau of Land Quality Control prior to facilities construction.

5. FISH PASSAGE STUDIES

- A. The applicant shall, in consultation with state and federal fisheries agencies and the Penobscot Indian Nation, conduct a study to monitor and evaluate the effectiveness of all fish passage facilities constructed pursuant to Condition 4 of this certification.
- B. The applicant shall, within 1 year following the issuance of a new FERC license for the project, submit a fish passage study plan and schedule, prepared in consultation with state and federal fisheries agencies and the Penobscot Indian Nation. This plan and schedule shall be reviewed by and must receive approval of state and federal fisheries agencies, FERC, and the DEP Bureau of Land Quality Control.
- C. The applicant shall, in accordance with the schedule established in a new FERC license for the project, submit the results of the fish passage study, along with any recommendations for structural, operational changes, or additional fishways, based on the results of the study, to the DEP Bureau of Land Quality Control and to all consulting agencies. The Department reserves the right, after opportunity for hearing, and after reviewing the comments and recommendations for the consulting fishery agencies and the Penobscot Indian Nation, to require reasonable structural and/or operational changes to the existing fish passage facilities, or require additional fishways, as may be necessary to effectively pass anadromous fish through the project area. Any such changes or new fishways must also be approved by FERC.

6. RECREATIONAL FACILITIES AND ACCESS

- A. The applicant shall: provide fencing around the parking area on the east bank of the Stillwater Dam and provide warning signs; provide gravel fill and surfacing materials as agreed to in the Memorandum of Understanding between the applicant and the University

of Maine; designate a visitor's parking area at the Stillwater powerhouse; continue to maintain the portage trail around the Stillwater Dam; continue to provide safety booms and hazard warning signs in the vicinity of the Stillwater Dam; and continue to assess the demand for additional recreational opportunities.

- B. The applicant shall, in accordance with the schedule established in a new FERC license for the project, submit a schedule for implementing Part A of this condition. This schedule shall be reviewed by the Department of Conservation and must receive approval of the DEP Bureau of Land Quality Control.

7. LIMITS OF APPROVAL

This approval is limited to and includes the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. All variances from the plans and proposals contained in said documents are subject to the review and approval of the Board or Department prior to implementation.

8. COMPLIANCE WITH ALL APPLICABLE LAWS

The applicant shall secure and appropriately comply with all applicable federal, state and local licenses, permits, authorizations, conditions, agreements and orders required for the operation of the project.

9. EFFECTIVE DATE

This water quality certification shall be effective on the date of issuance of a new hydropower project license by the Federal Energy Regulatory Commission (FERC) and shall expire with the expiration of this FERC license.

Attachment – Section 21

INTERCONNECTION AGREEMENT

INTERCONNECTION AGREEMENT, dated as of [*], 1998 (this "Agreement"), by and between BANGOR HYDRO-ELECTRIC COMPANY (the "Seller"), a Maine corporation with a principal place of business located at 33 State Street, Bangor, Maine 04401, and PP&L GLOBAL, INC., (the "Buyer"), a Pennsylvania corporation with a principal place of business located at 11350 Random Hill Road, Suite 400, Fairfax, Virginia 22030.

WITNESSETH:

WHEREAS, Seller and Buyer have entered into an Asset Purchase Agreement (the "APA") dated as of September 25, 1998 for the sale of, among other things, certain of Seller's generating assets;

WHEREAS, Seller intends to continue to operate its transmission and distribution business from its present locations;

WHEREAS, in the APA, Seller agreed to transfer to Buyer certain of the Purchased Assets, including certain designated real and personal properties, contracts, and licenses pertaining to Seller's generating assets and to retain certain designated real and personal properties, contracts and licenses;

WHEREAS, Buyer needs certain Interconnection Services from Seller for the generation units constituting Purchased Assets (the "Generation Units"), as provided in this Agreement;

WHEREAS, Buyer also wishes to obtain from Seller, and Seller wishes to provide to Buyer certain T&D Services over Seller's T&D System from Buyer's Generation Units, as provided in this Agreement;

WHEREAS, Seller needs access to parts of the Buyer's Purchased Assets, and Buyer needs access to parts of the Seller's retained assets; and

WHEREAS, the Parties have agreed in the APA to execute this mutually acceptable Interconnection Agreement in order to provide certain Interconnection Service and certain T&D Service to Buyer and to define the continuing responsibilities and obligations of the Parties with respect to the use of the other Party's property, assets and facilities;

NOW THEREFORE, in order to carry out the transactions contemplated by the Separation Document, the APA and this Agreement, and in consideration of the mutual representations, covenants and agreements hereinafter set forth, and intending to be legally bound hereby, the Parties hereto agree as follows:

ARTICLE 1.

DEFINITIONS

POINT(S) OF RECEIPT

Same as point of connection.

IV. UNIT LOCATION: Stillwater Station, System Diagram Sheet 10A (Annex I)

NET CAPACITY

4 Hydro-Electric Units 1.9 MW

POINT OF INTERCONNECTION

Tie to overhead distribution line from Buyer's Stillwater Hydro substation structure.

POINT(S) OF RECEIPT

Same as point of connection.

V. UNIT LOCATION: Orono Station, System Diagram Sheet 10A (Annex I)

NET CAPACITY

4 Hydro-Electric Units 2.332 MW

POINT OF INTERCONNECTION

None available.

POINT(S) OF RECEIPT

None available.

VI. UNIT LOCATION: Veazie Station, System Diagram Sheet 11A (Annex I)

NET CAPACITY

17 Hydro-Electric Units 8.4 MW

POINT OF INTERCONNECTION

Tie to overhead transmission line from Buyer's 46kV Veazie Hydro substation structure.

Attachment – Section 23

Unit ID	Plant - Unit	Account Holder	State	Vintage	Name Plate		GIS Registration Date	ME Class I	ME Class II	ME CO2				
					Capacity	Fuel Type				Netting	NH Class I	NH Class II	NH Class III	NH Class IV
MSS405	ELLSWRTH - ELLSWORTH HYDRO	Black Bear Hydro Partners, LLC	MAINE	1/1/1919	8.9	Hydroelectric/Hydropower	4/27/2002 0:01	No	Yes	No	No	No	No	No
MSS16296	GRAHAM - MILFORD HYDRO	Black Bear Hydro Partners, LLC	MAINE	1/1/1906	6.4	Hydroelectric/Hydropower	7/15/2009 16:40	No	Yes	No	No	No	No	No
MSS16525	UNDER5MW - MEDWAY	Black Bear Hydro Partners, LLC	MAINE	1/1/1923	3.44	Hydroelectric/Hydropower	7/15/2009 16:40	No	Yes	No	No	No	No	No
MSS14695	UNDER5MW - ORONO	Black Bear Hydro Partners, LLC	MAINE	1/1/2009	3.6	Hydroelectric/Hydropower	1/15/2009 18:52	Yes	No	No	Yes	No	No	No
MSS16523	UNDER5MW - STILLWATER	Black Bear Hydro Partners, LLC	MAINE	1/1/1932	1.95	Hydroelectric/Hydropower	7/15/2009 16:40	No	Yes	No	No	No	No	No

Attachment – Section 26

STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

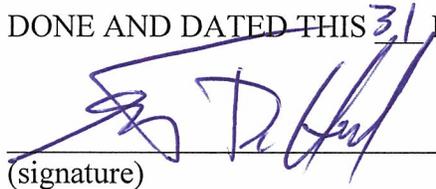
APPLICATION OF BLACK BEAR HYDRO PARTNERS, LLC
FOR CLASS IV RENEWABLE ENERGY SOURCE ELIGIBILITY
OF STILLWATER HYDROELECTRIC PROJECT (FERC No. 2712)

Pursuant to New Hampshire Admin. Code Puc 2500 Rules

Application Section 26. Owner Affidavit Attesting to Accuracy of the Contents of Black Bear Hydro Partners, LLC's Application for Class IV Renewable Energy Source Eligibility of Stillwater Hydroelectric Project (FERC No. 2712)

I certify under penalty of law that I have personally examined the information submitted in this Application and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true and accurate.

DONE AND DATED THIS 31 DAY OF MARCH, 2010.



(signature)

Scott D. Hall

(print or type name)

Mgr Env Svcs

(title of responsible official)

STATE OF MAINE
COUNTY OF Penobscot, ss.

Personally appeared the above-named Scott D Hall, Mgr Env Svcs of Black Bear Hydro Partners, LLC, and subscribed and made oath to the statements contained herein on this 31st day of March, 2010.



Name:
My Commission Expires:

NANCY L. BLANCHARD
Notary Public, Maine
My Commission Expires January 12, 2014