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# UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

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

Central Maine Power Company ) Project No. 2529-005

# ORDER ISSUING NEW LICENSE

(Issued February 26, 1998)

On December 18, 1991, Central Maine Power Company (Central Maine) filed an application for a new license pursuant to Sections 15 and 4(e) of the Federal Power Act (FPA), 1/ for a new license for the continued operation and maintenance of the 7.2megawatt (MW) Bonny Eagle Project (Bonny Eagle), located on the Saco River in York and Cumberland Counties, Maine. 2/

The Commission issued the original license for Bonny Eagle on November 19, 1970, effective as of July 1, 1955. 3/ That license expired on December 31, 1993. On January 21, 1994, an annual license was issued authorizing Central Maine to continue project operations pending disposition of its application. 4/ Central Maine proposes no change in its current capacity. For the reasons discussed below, we will issue a new license to Central Maine.

### BACKGROUND

Notice of the application for new license was published. Timely unopposed motions to intervene were filed by the U.S. Department of the Interior (Interior); the U.S. Environmental Protection Agency (EPA), the Maine State Planning office; joint petitioners American Whitewater Affiliation and New England FLOW; and the Coalition, a group of organizations comprised of the Saco River Salmon Club, American Rivers, Trout Unlimited, Maine Council-Trout Unlimited, the Atlantic Salmon Federation, and the

- The Saco River is a navigable waterway of the United States.  $\frac{2}{2}$ See Central Maine Power Company, 14 FPC 839, at p. 840 (1955).
- 44 FPC 1447 (1970). 3/
- 4/ See Section 15(a)(1) of the FPA, 16 U.S.C. § 808(a)(1) TERC DOCKETED

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<sup>16</sup> U.S.C. §§ 797(e) and 808. 1/

Maine Council-Atlantic Salmon Federation. None of the intervenors opposes issuance of a new license.

On November 23, 1994, Central Maine filed with the Commission an agreement among Central Maine, various governmental agencies and other parties, 5/ which was entitled "Saco River Fish Passage Agreement" (Fish Passage Agreement) and styled as an Offer of Settlement. The Fish Passage Agreement purports to govern fish passage at the Bonny Eagle Project, 6/ as well as at Central Maine's Cataract Project No. 2528 (Cataract), Skelton Project No. 2527 (Skelton), Bar Mills Project No. 2194 (Bar Mills), West Buxton Project No. 2531 (West Buxton), and Hiram Project No. 2530 (Hiram), and at Swans Falls Corporation's exempted Swans Falls Project No. 11365 (Swans Falls), also located on the mainstem of the Saco River. 7/

The Fish Passage Agreement was signed by Central Maine, 5/ Swans Falls Corporation; the U.S. Fish and Wildlife Service (FWS); National Marine Fisheries Service (NMFS); Maine Department of Marine Resources (Maine DMR); Maine State Planning Office; Maine Atlantic Sea Run Salmon Commission, renamed Maine Atlantic Salmon Authority (Maine Salmon Authority); Maine Department of Inland Fisheries and Wildlife (Maine Fisheries and Wildlife); Atlantic Salmon Federation; Maine Council of Atlantic Salmon Federation; Trout Unlimited; Maine Council of Trout Unlimited; New Hampshire Department of Fish and Game (New Hampshire DFG); City of Saco, Maine; City of Biddeford, Maine; American Rivers; and the Saco River Salmon Club.

Entities who participated in the meetings but who did not sign the Fish Passage Agreement include the State of Maine Department of Environmental Protection (Maine DEP), the Biddeford-Saco Water District, and the Maine Energy Recovery Company.

- The location of the Bonny Eagle Project in relation to the /٤ other projects is, from most downstream to most upstream: Cataract, Skelton, Bar Mills, West Buxton, Bonny Eagle, Hiram, and Swans Falls.
- An appendix to the Fish Passage Agreement, styled "Annex 1: 1/ Assessment Process and Criteria" (Annex), dated January 20, 1995, was filed on April 5, 1996. Although the Annex was filed after issuance of the Draft Environmental Impact Statement, it was examined in the Final Environmental Impact Statement addressing all seven projects, issued in August 1996.

Central Maine did not request approval of the Fish Passage Agreement as a whole, but rather, requested that the Commission "incorporate the appropriate terms" of the agreement into the appropriate licenses. This would entail incorporation of the terms in the new Bonny Eagle license, in a new license for the Skelton Project (for which a relicense proceeding is also pending), and amendment of the existing licenses for the Bar Mills, West Buxton, and Hiram Projects, as well as amendment of the Swans Falls exemption.  $\underline{8}/$ 

A Draft Environmental Impact Statement (Draft EIS) issued December 1, 1994, examined, in a consolidated fashion, the environmental issue pertaining to the relicensing of Bonny Eagle, and to the relicensing of Skelton, as well as examining the Fish Passage Agreement and its proposed environmental effects on Cataract, Skelton, Bar Mills, West Buxton, Bonny Eagle, Hiram, and Swans Falls. Comments on the Draft EIS were filed 2/ and considered in preparing the Final Environmental Impact Statement (Final EIS), which was issued in August, 1996.

On July 21, 1997, subsequent to the issuance of the Final EIS. Central Maine filed a second Offer of Settlement entitled "Instream Flow Agreement for the Hydroelectric Projects on the Saco River" (Instream Flow Agreement). 10/ The Instream Flow Agreement would establish instream flow requirements for Bonny Eagle and the other six projects on the mainstem of the Saco river. As with the Fish Passage Agreement, Central Maine has not requested approval of the Instream Flow Agreement, but has requested that the Commission "incorporate the appropriate terms" of the agreement into the appropriate licenses. As discussed below, the appropriate terms of both the Fish Passage Agreement

- 8/ The Swans Falls Project had not yet been issued its exemption when the agreement was filed, but was issued its exemption on July 31, 1997, subject to the Commission's reservation of authority to require amendment in accordance with the terms of the Fish Passage Agreement.
- Comments were filed by Interior, BPA, Saco River Salmon Club /2 (on behalf of American Rivers, Atlantic Salmon Federation, Maine Council of Atlantic Salmon Federation, and Trout Unlimited), and Central Maine.
- Parties to the Instream Flow Agreement include: Central 10/ Maine, Swans Falls Corporation, FWS, Maine DMR, Maine State Planning Office, Maine Fisheries and Wildlife, Maine DEP, American Rivers, Atlantic Salmon Federation, Trout Unlimited, Saco River Salmon Club, Maine Atlantic Salmon Authority, Maine Council of the Atlantic Salmon Federation, Maine Council of Trout Unlimited, New Hampshire DFG, City of Saco, Maine, and City of Biddeford, Maine.

and the Instream Flow Agreement have been adopted in the new license for Bonny Eagle. 11/

Background information, analysis of impacts, and support for related license articles are contained in the Final EIS. A Safety and Design Assessment was also prepared and is available in the Commission's public file associated with this project. We have fully considered all comments received in determining whether, and under what conditions, to issue this license.

- 4 -

### PROJECT DESCRIPTION

The existing project consists of the 784-foot-long earth and concrete Main River Dam (including a concrete intake structure which is 67 feet high and 164 feet long, an east earth dike which is 12 feet high and 250 feet long, and a west earth dike which is 13 feet high and 350 feet long); the 13-foot-high, 350-foot-long concrete gravity New River Dam; an impoundment with a surface area of 347 acres and a storage capacity of 1,150 acre-feet; a powerhouse containing four turbine generator units with a total rated capacity of 7,200 kilowatts; and other appurtenant facilities. A more detailed project description is contained in ordering paragraph B(2).

<sup>11/</sup> Concurrently with this order, we are issuing a new license for the Skelton Project which also incorporates the relevant terms of the Fish Passage Agreement and the Instream Flow Agreement; and an order amending the licenses for the Bar Mills, West Buxton, and Hiram Projects to incorporate into their respective licenses the terms of the Fish Passage Agreement and the Instream Flow Agreement pertinent to each. A license was issued for Cataract in 1989, and the fish passage facilities for the Cataract Project described in the Fish Passage Agreement have been constructed and are operational. Central Maine has not requested amendment of the Cataract, Bar Mills, or West Buxton licenses to incorporate the Instream Flow Agreement because adoption of that agreement's instream flows at Bonny Eagle and Skelton will ensure that the flows at these other projects are in accord with the agreement. Central Maine states that it will, in the future, request amendment of the Hiram license to incorporate the terms of the Instream Flow Agreement. In addition, the Commission has retained sufficient authority in Article 13 of the Swans Falls exemption to require fish passage in accordance with the Fish Passage Agreement as well as modification of minimum flow releases if and when appropriate.

Project No. 2529-005 - 5 -

APPLICANT'S PLANS AND CAPABILITIES

In accordance with Sections 10 and 15 of the FPA, 12/ we have evaluated Central Maine's record as a licensee with respect to the following: (1) conservation efforts; (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 service; (7) cost effectiveness of plans; and (8) actions affecting the public.

#### 1. Conservation Efforts

Central Maine states that it was one of the first utilities in the United States to conduct demand-side management (DSM) studies and to implement cost-effective DSM programs. Central Maine is recognized nationally as a leader in the design, marketing, and evaluation of DSM programs. Central Maine has won national awards from Edison Electric Institute, the U.S. Department of Energy, and Renew America for its efforts in this field. The 1990 DSM programs achieved savings of 119 million kWh of electricity annually and reduced peak demand by 33 MW.

These programs show that Central Maine has made an effort to conserve electricity and reduce peak hour demands. We conclude that Central Maine is making a satisfactory good faith effort to conserve energy.

### 2. Compliance History and Ability to comply with the New License

We have reviewed Central Maine's license application and its record of compliance with the existing license. We find that Central Maine's overall record of making timely filings and compliance with its license is satisfactory. Therefore, we conclude that Central Maine can satisfy the conditions of the new license.

### 3. Safe Management, Operation, and Maintenance

During any river flow conditions which are substantially above the Bonny Eagle Project's turbine and storage capacities, the flashboards of its New River Dam will trip and release excess water into the New River Channel as described in the project's high water guidelines. Central Maine also works closely with the Maine Emergency Management Agency to notify it of flood conditions and control measures, and has an Emergency Action Plan (EAP) which includes specific notification procedures in the event of an emergency.

<sup>12/ 16</sup> U.S.C. §§ 803 and 808.

-6-

With regard to public safety upstream from the Bonny Eagle plant, Central Maine, in the fall of 1989, assessed the need for additional safety measures. As a result, safety booms have been and will be installed annually during the summer boating season upstream of the New River Dam and the project intake, in order to protect boaters using the impoundment. Central Maine also installed seven safety signs at the project, advising the public of the project and of safety considerations.

Central Maine has proposed refinements in the operation of the Bonny Eagle Project, including provisions for minimum flows and reduced reservoir level fluctuations, but these changes will not change the fundamental mode of operation of the Bonny Eagle Project. We conclude that Central Maine's plans are adequate to ensure project safety.

### 4. Efficient and Reliable Electric Service

Central Maine provides power to its customers through its own generation, purchases from cogenerators and small power producers within Maine, and purchases from outside the state. Central Maine's system includes a mix of sources including hydro, nuclear, and oil-fired generating stations. Its out-of-state purchases are made through an interconnection with power sources from Canada and membership in the New England Power Pool (NEPOOL). 13/

In its lower reaches, the Saco River is regulated by operation of the Bonny Ragle Project, which essentially is a peaking facility that regulates the river by storing and releasing inflow daily. Although it does not have long-term storage capacity, the Bonny Eagle Project is the only significant control on the main river, and thus on the storage and flows available to the downstream West Buxton, Bar Mills, Skelton, and Cataract projects. 14/ By managing the discharge volume and timing at Bonny Bagle, the flow regime of the river can be refined on a daily basis to best provide flows and power for both Central Maine's needs and the needs of other users as part of an efficient system.

<sup>13/</sup> The objective of NEPOOL is to assure both maximum reliability and economy of bulk power supply for New England.

The downstream Bar Mills, Skelton, and Cataract Projects 14/ draw their ponds down to some degree, but the fluctuations are not major (i.e., one foot, 2.5 feet, and two feet, respectively). West Buxton, also downstream of the Bonny Eagle Project, is operated as a run-of-river facility.

Project No. 2529-005 -7-

### 5. Need for Power

Central Maine is an investor-owned electric utility serving more than 520,000 customers in the central and southern counties of Maine. Its customers use nine million megawatt-hours (Mwh) of electricity annually. As licensed herein, the Skelton Project will generate an average of 97,000 Mwh of energy annually for Central Maine.

To assess the need for power, we reviewed not only Central Maine's use and need for the project power, but also the needs in the operating region in which the project is located. The Skelton Project is located in the 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 15/ on annual supply and demand projections indicates that, for the period 1995 through 2004, loads in the NEPOOL area will grow faster than planned capacity additions. The project displaces nonrenewable fossilfired generation and contributes to diversification of the generation mix in the NEPOOL area.

We conclude that the project's power, 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.

#### 6. Transmission Services

The Bonny Eagle Project's transmission equipment currently extends from the project generators, through appropriate voltage transformation, to a point of connection, within the project boundary, to Central Maine's transmission system.

Central Maine proposes no new power development at the project and contemplates the continued use of the project's lowcost power. We conclude that the existing transmission system is adequate and that licensing the project to continue operations will have no significant effect on the existing or planned transmission system.

#### 7. Cost Effectiveness of Plans

The only major changes to the project will be Central Maine's construction of fish passage facilities, implementation of operational changes mandated by the Instream Flow Agreement and the water quality certification, and periodic improvements

<sup>15/</sup> NERC's Electricity Supply and Demand Database, Data set 1995-2004.

Project No. 2529-005 - 8 -

instituted for public safety. We conclude that the project, as presently constructed and as Central Maine proposes to operate it, fully develops and uses the hydropower potential of the site.

### Actions Affecting the Public 8.

The Bonny Eagle Project generates electricity which Central Maine uses to serve its power customers and provides employment. In addition, environmental enhancement measures, new safety measures and recreation improvements included in the license will generally improve environmental quality and will have a beneficial effect on public use of project facilities for recreational purposes.

WATER QUALITY CERTIFICATION, THE FISH PASSAGE AGREEMENT, AND THE INSTREAM FLOW AGREEMENT

Under Section 401(a)(1) of the Clean Water Act (CWA), 16/ the Commission may not issue a license for a hydroelectric project unless the certifying agency either has issued water quality certification for the project or has waived certification by failing to act on a request for certification within a reasonable period of time, not to exceed one year. Section 401(d) of the Clean Water Act provides that the state certification shall become a condition on any federal license or permit that is issued. <u>17</u>/ On August 22, 1997, the Maine Department of Environmental Protection (Maine DEP) issued a Section 401 certification for Bonny Eagle, subject to certain conditions.

Maine DEP's water quality certification includes eight conditions which incorporate the provisions of the Fish Passage Agreement (addressed in detail in the fish passage discussion, below) and the Instream Flow Agreement, as well as requirements that the licensee maintain existing public recreational access facilities and evaluate the need for additional recreational facilities. The water quality certification is attached in full as Appendix A.

The Instream Flow Agreement's provisions have been adopted in Articles 401 (water levels), 402 (minimum flows), 403 (monitoring of water levels and minimum flows, and 409 (monitoring of the macroinvertebrate community). Articles 404, 405, 406, 407, and 408 address downstream and upstream fish passage which accord with the terms of the Fish Passage Agreement and require Central Maine to file a plan and schedule to monitor the effectiveness of

16/33 U.S.C. § 1341(a)(1).

<u>17</u>/ 33 U.S.C. § 1341(d).

### -9-

the downstream and upstream facilities. In addition, Article 412 requires Central Maine to monitor recreation use.

We are required by the recent decision of the United States Court of Appeals in American Rivers, et. al. v. FERC 18/ to accept all conditions in a water quality certification as conditions on a license even if we believe that the conditions may be outside the scope of Section 401. 19/ While we have included certain provisions as license articles, all of the Section 401 conditions are conditions to this license. In any event, nothing in the conditions of the water quality certification shall be viewed as restricting the Commission's ability or the licensee's obligation, under the Federal Power Act, to take timely action necessary to protect human life, health, property, or the environment.

### FISH PASSAGE

Section 18 of the FPA states that the Commission shall require construction, maintenance, and operation by a licensee of such fishways as may be prescribed by the Secretary of Commerce or the Interior. By letter filed October 8, 1993, Interior prescribed that the licensee shall ensure that the design, location, installation, maintenance, and operation of fishways at Bonny Bagle conform to the specifications of the Fish and Wildlife Service, and in addition reserved authority to prescribe the construction, operation, and maintenance of fishways pursuant to Section 18 of the FPA. 20/ Interior noted that discussions between Central Maine and the federal and state fish and wildlife agencies concerning fish passage for the Saco Basin were ongoing, and stated that it would supplement its Section 18 prescription with details following further consultation with Central Maine.

# <u>18</u>/ 129 F.3d 99 (2d Cir. 1997).

- 19/ Certain aspects of the conditions in the water quality certification and the agreements could, in our opinion, create problems with the Commission's administration of its licensing problem. See Kennebec Water Power Company, 81 FERC **(61,254 at pp. 62,180-81 (1997)**. Specifically, we refer to the provisions repeated in each of the conditions stating that the Maine DEP may order modification of project facilities or operations, and requiring review and approval by the Maine DEP and other agencies of schedules set and plans submitted under the license.
- 20/ Since Interior did not specify any design, location, installation, or operation, both these statements appear actually to be reservations of prescriptive authority.

The Fish Passage Agreement, developed as a result of Central Maine's discussions with various agencies, including Interior, 21/ takes a comprehensive approach to fish passage for Central Maine's six projects and for Swans Falls. The agreement's objective is to restore the Saco anadromous fish population by establishing self-sustaining runs of Atlantic salmon above Swans Falls, and of shad and river herring (alewives and blueback herring) to the area above Bonny Eagle. To accomplish this, Atlantic salmon will be passed from the river below Cataract to an area above Swans Falls. Shad and river herring will be passed from the river below Cataract to the area between the Bonny Eagle and Hiram Projects, including tributaries below Hiram.

Because it is not clear yet whether shad will be able to pass multiple barriers, what the growth rate of the anadromous fish populations will be, whether there will be an adequate supply of suitable Atlantic salmon stocks, and whether a necessary interagency agreement on stocking will be achieved, the agreement does not define the need for, timing, and design of facilities or order of construction at all of the projects. Rather, it provides for the construction of facilities at certain projects followed by studies to determine the need for, timing, and design of facilities at the other projects. Thus, the agreement provides that Central Maine will first construct a fish lift and lock at Cataract's dams, 22/ then at Skelton, and that studies will be done to assess together, the need for, timing, and design of interim or permanent upstream facilities at Bonny Eagle and at Bar Mills, West Buxton, Hiram, and Swans Falls.

Specifically, the Fish Passage Agreement provides for state and federal agencies to develop criteria by which they will assess the need for, timing, and design of interim or permanent upstream passage facilities at this group of projects (1.e., Bar Mills, West Buxton, Bonny Eagle, Hiram, and Swans Falls), as well as their order of construction. The agencies are to conduct the assessments in 1999, 2003, 2007, and 2011. Under the agreement, the first upstream facility for this group will not be required to be operational before May 1, 2005, and such construction and operation may occur later if an assessment determines that the facility is not needed until a later date. The agreement further provides that the completion of upstream facilities at Bonny Eagle, Bar Mills, and West Buxton will not be required any less than two years apart.

21/ See note, supra.

As noted, supra, the Cataract facilities are completed and <u>22/</u> in operation.

Project No. 2529-005 -11-

Furthermore, under the Fish Passage Agreement, Central Maine is to construct permanent downstream facilities at Bonny Eagle within two years of receiving its license and, if anadromous fish are stocked or trucked above the project's dam before such facilities are constructed, Central Maine is to provide interim downstream passage in the form of controlled spills during downstream migration periods, installation of temporary facilities or other feasible measures. 23/

FWS was an active participant in the development of, and is a signatory to the Fish Passage Agreement. Furthermore, in it's comments on the Draft EIS, Interior stated that its Section 18 fishway prescription is broad enough to allow for implementation of the Fish Passage Agreement, and that it anticipates that any future Section 18 prescriptions (presumably resulting from its reservation of authority) will be fully consistent with the provisions of the agreement.

We agree that implementing the substantive provisions of the Fish Passage Agreement related to Bonny Eagle will help restore anadromous fish to the Saco River and will lessen adverse impacts to the river's existing fish resources. 24/ Therefore, Articles 405 and 406 of the license require the construction and operation of upstream and downstream fish passage facilities consistent with the Fish Passage Agreement. 25/ In addition, Article 407 and 408 require Central Maine to file a plan and schedule to monitor the effectiveness of the required upstream and downstream facilities, and Article 410 reserves Interior's authority to prescribe fishways in the future. 26/

- For a more detailed discussion of the Fish Passage Agreement 23/ as it relates to all of the projects, see the order issued contemporaneously with this one amending the licenses for Bar Mills, West Buxton, and Hiram, Project Nos. 2194, 2530, and 2531, respectively.
- See discussion in the Final EIS, Section 4.1.1.3, and <u>24</u>/ Section 4.2.2.1.2.
- 25/ As noted above, these Fish Passage Agreement terms are, in any event, required by the water quality certification which incorporates them.
- 26/ Central Maine acknowledges that Interior has authority to prescribe fishways pursuant to Section 18 of the FPA, but has requested that we limit the scope of Interior's prescriptive authority to the scope defined in the Fish Passage Agreement. However, just as Interior may both prescribe fishways and reserve Section 18 authority in a license (see Rochester Gas and Electric Corporation, 76 FERC (continued...)

RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES

Section 10(j) of the FPA 27/ requires the Commission, when issuing a license, to include license conditions based upon the recommendations of federal and state fish and wildlife agencies submitted pursuant to the Fish and Wildlife Coordination Act, 28/ to "adequately and equitably protect, mitigate damages to, and enhance, fish and wildlife (including related spawning grounds and habitat) " affected by the project.

If the Commission believes that any such recommendation may be inconsistent with the purposes and requirements of Part I of the FPA or other applicable law, Section 10(j)(2) requires the Commission and the agencies to attempt to resolve any such inconsistency giving due weight to the recommendations, expertise and statutory responsibilities of such agencies. If the Commission then does not adopt a recommendation, it must explain how the recommendation is inconsistent with applicable law and how the conditions selected by the Commission adequately and equitably protect, mitigate damages to, and enhance fish and wildlife.

On October 8, 1993, pursuant to Section 10(j), Interior filed recommendations that Central Maine: (1) operate Bonny Bagle in a run-of-river mode from May 1 through July 15 and from September 1 through October 15, release minimum flows of at least 800 cfs or inflow from July 16 through August 31 and from October 16 through April 30, and release 100 cfs into the New River Channel during the entire open water fishing season; (2) limit drawdowns in the impoundment to no more than one foot from October 15 through ice-out; (3) file with the Commission a plan for complying with the minimum flow and run-of-river requirement; (4) file with the Commission a plan for new boat launching facilities at the project; (5) monitor recreational use of the project area to determine whether existing access facilities are meeting demands for public use of fish and wildlife resources, and periodically file reports with the Commission on the monitoring results; (6) file with the Commission a plan for monitoring fish populations and adequacy of improved instream flow releases in the New River Channel; and (7) file with the

26/ (...continued) ¶ 61,182 (1996)), it may be party to an agreement and still reserve authority to prescribe fishways in the future. Nor is there any language in the Fish Passage Agreement by which Interior binds itself to do otherwise.

- <u>27</u>/ 16 U.S.C. § 803(j).
- <u>28/ 16 U.S.C. § 661 et seq</u>.

Commission a plan and schedule for monitoring aquatic invertebrate populations in downstream areas affected by Bonny Eagle's operation.

By letter issued March 27, 1995, Interior was informed, pursuant to Section 10(j)(2), of staff's preliminary determination that Interior's recommendations concerning minimum flows and run-of-river operation, limitation of impoundment drawdown, monitoring of fish populations and adequacy of instream flow releases in the New River Channel, and monitoring of invertebrate populations in areas downstream of Bonny Eagle are inconsistent with the purposes and requirements of Part I of the On July 21, 1997, the Instream Flow Agreement was filed, FPA. and subsequently, Interior filed revisions to its recommendations, requesting that the conditions in the Instream Flow Agreement replace its recommendations related to minimum flows and run-of-river operation, drawdowns, and monitoring of fish populations in the New River Channel and of invertebrate populations downstream of Bonny Eagle. The substituted Instream Flow Agreement conditions are also required by Maine DEP's water quality certification and are set out in Articles 401, 402, and 409 of the license.

In addition, Article 403 of the license contains a condition consistent with Interior's recommendation that Central Maine file with the Commission a plan for complying with minimum flow and run-of-river recommendations. 29/

# ENDANGERED SPECIES ACT

Occasional transient bald eagles and peregrine falcons are the only federally listed threatened or endangered species that may occur in the vicinity of the Bonny Eagle Project. Because bald eagles and peregrine falcons may occur only occasionally, as transients in the project area, and because the project will not adversely affect existing habitats we conclude that the project will have no effect on federally listed threatened and endangered species.

<sup>29/</sup> Interior's recommendation for monitoring recreational use at the project is outside the scope of Section 10(j) because it is not a recommendation for a specific measure to protect fish and wildlife. However, the recommendation is appropriate under Section 10(a)(1) of the FPA, and is, in any event, a term of the water quality certification. Article 413 of the license implements it.

Project No. 2529-005 -14-

### COMPREHENSIVE PLANS

Section 10(a)(2)(A) of the FPA <u>30</u>/ 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. Pursuant to this section, federal and state agencies filed a total of 14 comprehensive plans that address various resources in Maine. Of these, we identified and reviewed 11 plans relevant to Bonny Eagle <u>31</u>/ No inconsistencies were found. 32/

# <u>30</u>/ 16 U.S.C. § 803(a)(2)(A).

State plans included: Strategic Plan for Management of 31/ Atlantic Salmon in the State of Maine, July 1984, Maine Atlantic Sea-Run Salmon Commission; Maine Rivers Study -Final Report, 1982, Maine Department of Conservation; State Comprehensive Rivers Management Plan, Volume 1-3, 1987, Maine State Planning Office; State Comprehensive Rivers Management Plan, Volume 4, 1992, Maine State Planning Office; State Comprehensive Rivers Management Plan, Volume 5, 1993, Maine State Planning Office; and The Saco River: A Plan for Recreational Management, 1993, Southern Maine Regional Planning Commission.

Federal plans included: Saco River Strategic Plan for Fisheries Management, 1987, Department of the Interior; North American Waterfowl Management Plan, 1986, U.S. Fish and Wildlife Service; Fisheries USA: The Recreational Fisheries Policy of the U.S. Fish and Wildlife Service, undated, U.S. Fish and Wildlife Service; Final Environmental Impact Statement - Restoration of Atlantic Salmon to New England Rivers, 1989, Department of the Interior; and The Nationwide Rivers Inventory, 1982, National Park Service.

32/ We also reviewed federal and state plans that were relevant to the project but weren't listed as Commission-approved comprehensive plans. They included the Saco River Operational Plan for Inland Fisheries Management, 1990, Maine Department of Inland Fisheries and Wildlife; the Anadromous Fisheries River Management Plan, 1982, Maine Department of Marine Resources; the New Hampshire Wetlands Priority Conservation Plan, 1989, New Hampshire Office of State Planning; the Saco River Basin Water Quality Management Plan, 1975, New Hampshire Water Supply and Pollution Control Commission; and the Water Resources Study: Saco River Basin, 1989, Maine, U.S. Army Corps of Engineering. No inconsistencies were found.

### Project No. 2529-005 -15-

### COMPREHENSIVE DEVELOPMENT

Sections 4(e) and 10(a)(1) of the FPA require the Commission, in acting on applications for a license, to give equal consideration to the power 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 such as in the Commission's judgement will 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 Final EIS analyzed the effects associated with the issuance of a new license for the Bonny Eagle Project, and recommended a variety of measures to protect and enhance the environmental resources. The later-filed Instream Flow Agreement and Water Quality Certification proposed modifications to certain recommendations made by the Final EIS (in particular, related to minimum flows), which we adopt, as discussed herein. The various measures adopted will provide fish passage at Bonny Eagle, improve fish and wildlife resources through seasonal runof-river and minimum flow operations as well as limits on reservoir fluctuations, enhance recreational resources in the project vicinity, and protect cultural resources affected by the project.

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 a number of public interest factors, including the economic benefits of the project power.

Under the Commission's approach to evaluating the economics of hydropower projects, as articulated in Mead Corporation. Publishing Paper Division, 33/ 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.

<u>33</u>/ 72 FERC **61**,027 (1995).

Project No. 2529-005 -16-

In making its decision, the Commission has considered the project power benefits with the applicant's proposed measures; with the Commission's proposed modifications and additions to the applicant's proposal (inclusive of the adopted terms of the Fish Passage Agreement); and with the Commission's modifications and additions along with the requirements of Maine DEP's water quality certification (inclusive of both the Fish Passage Agreement and the Instream Flow Agreement terms).

If licensed in accordance with the conditions (inclusive of Central Maine's proposal based on the Fish Passage Agreement) recommended in the Final EIS, the project would produce an average of 39.625 GWh of energy, at an annual cost about \$2,025,020 (51.1 mills/kWh). The annual value of the project's power would be \$1,462,910 (36.9 mills/kWh) based on the current cost of alternative power. 34/ 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, with the recommendations stated in the Final EIS, would cost about \$562,110 annually (14.2 mills/kWh) more than the current cost of alternative power.

As licensed by the Commission, with conditions reflecting the recommendations of the Final EIS as supplemented and revised by the terms of the Instream Flow Agreement and the water quality certification, the project will produce an average of 41.4 GWh of energy, at an annual cost about \$2,025,050(48.9 mills/kWh), or about \$534,210 (12.9 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 the many public interest factors considered in determining whether or not, and under what conditions, to issue a license. Central Maine 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 review of the agency and public comments, review of the environmental and economic effects of the project and its alternatives, and analysis pursuant to Section 10(a)(1) of the FPA, we find that the Bonny Eagle Project, with the protective

<sup>34/</sup> We base this value on the cost of alternative resources, in this case, the cost of a new combined-cycle combustion turbine plant, and peak and off-peak energy values. The estimate of the value of project power is more completely described in the EIS.

Project No. 2529-005 -17-

and enhancement measures adopted by the license, will be best adapted to the comprehensive development of the Saco River for all beneficial uses.

# LICENSE TERM

Section 15 of the FPA 35/ specifies that any license issued shall be for a term that we determine to be in the public interest, but the term may not be less than 30 years nor more than 50 years. Our policy establishes 30-year terms for those projects that propose little or no redevelopment, new construction, new capacity, or enhancement; 40-year terms for those projects that proposed a moderate amount of redevelopment, new construction, new capacity or enhancement; and 50-year terms for those projects that propose extensive redevelopment, new construction, new capacity or enhancement. 36/

Central Maine did not propose redevelopment of the project, but did propose, and the license requires, downstream fish passage facilities and wetland enhancements which constitute substantial environmental enhancement. Therefore, we are issuing this license for a term of 40 years.

# SUMMARY OF FINDINGS

The Final EIS issued for this project contains background information, analysis of impacts, discussion of enhancement measures, and support for related license articles. The project will not result in any major, long-term adverse environmental impacts.

The design of this project is consistent with engineering standards governing dam safety. The project will be safe if operated and maintained in accordance with the requirements of this license. Analysis of related issues is provided in the Safety and Design Assessment, which is available in the Commission's public file for this project.

We conclude that issuing a license for the Bonny Eagle Project, with the required enhancement measures discussed herein, will not conflict with any planned or authorized development, and will be best adapted to a comprehensive development of the Saco River for beneficial public use.

<u>36</u>/ <u>See</u>, Montana Power Company, 56 F.P.C. 2008 (1976).

<sup>&</sup>lt;u>35/</u> 16 U.S.C. § 808(e).

## Project No. 2529-005 -18-

The Commission orders:

(A) This license is issued to the Central Maine Power Company for a period of 40 years, effective the first day of the month in which this order is issued, to operate, and maintain the Bonny Eagle Project. This license is subject to the terms and conditions of the FPA, which is incorporated by reference as part of this license, and to the regulations the Commission issues under the provisions of FPA.

(B) The project consists of:

(1) All lands, to the extent of Bonny Eagle's interests in those lands, as shown on exhibits G-1 (Sheet 1), G-2 (Sheet 2), G-3 (Sheet 3), (FERC Drawing Numbers 2527-1003, 2527-004 and 2527-1005) of the application.

(2) Project works consisting of: (a) the 784-footlong earth and concrete Main River Dam (including a 67-foothigh, 164-foot-long concrete intake structure protected by trashracks, a 12-foot-high, 370-foot-long east earth dike, and a 12-foot-high, 250-foot-long west earth dike), and the 13-foot-high, 350-foot-long concrete gravity New River Dam; (b) an impoundment having a surface area of 347 acres with a storage capacity of 1,150 acre-feet at a normal water surface elevation at 216.3 feet (local datum); <u>37</u>/ (c) eight 64-foot-long steel penstocks (six, extending to the main generating units, are 13 feet in diameter; and two, extending to the exciter units, are 4.5 feet in diameter); (d) a 159-foot by 51-foot powerhouse, constructed of structural steel and brick, containing six turbine-generator units with a total installed capacity of 7,200 kilowatts, resting on a 144-foot-long by 77-foot-wide substructure of concrete pier and arch construction; and (e) appurtenant facilities.

The project works generally described above are more specifically described in Exhibit A of the license • application and shown by Exhibit F:

### Exhibit A:

Pages A-4 through A-8, pages A-10 and A-11 describing the existing mechanical, electrical and transmission equipment, filed December 18, 1991.

<sup>37/</sup> All elevations cited are local datum; subtract 0.8 feet from elevation references to obtain the National Geodetic Vertical Datum (N.G.V.D.) of 1929.

Project No. 2529-005 -19-

<u>Exhibit F</u>	FERC No.	Showing
Sheet 1	2529-1001	Powerhouse & Dam-Plan, Elevation & Sections
Sheet 2	2529-1002	Powerhouse-Plan, Elevation & 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) Exhibits A, F and G of the license application are approved and made part of the license.

This license is subject to the articles set forth in (D) 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 an annual charge, effective as of the first day of the month in which this license is issued, for the purposes of reimbursing the cost 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 7,200 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 exhibit 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 shall be mounted on type D (3-1/4' X 7-3/8") aperture cards.

Prior to microfilming, the FERC Drawing Number (2529-1001 through 2529-1005) 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. If the Bonny Eagle Project was directly benefitted by the construction work of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement during the term of the original license (including extensions of that term by annual licenses), and if those headwater benefits were not previously assessed and reimbursed to the owner of the headwater improvement, the licensee shall reimburse the owner of the headwater improvement for those benefits, at such time as they are assessed, in the same manner as for benefits received during the term of this new license.

Article 204. 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 reserved 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 includible in the licensee's longterm 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 301. Within 90 days of completion of construction of the facilities authorized by this license(fishways, etc.), the licensee shall file with the Commission for its approval, a revised Exhibit F and G, to show those project facilities as built (as-builts).

Article 401. The licensee shall maintain water levels in the Bonny Eagle impoundment in accordance with the following schedule:

(a) From April 1 through June 30, no more than one foot below normal full pond elevation when the New River Channel dam flashboards are in place, and no more than one foot below the New River Channel dam spillway crest elevation when the flashboards are not in place; and

(b) From July 1 through March 31, no more than 4.5 feet below the normal full pond elevation when the New River Channel dam flashboards are in place, and no more than 4.5 feet below the New River Channel dam spillway crest when the flashboards are not in place.

This water level regime may be temporarily modified by: (1) Commission approved maintenance activities; (2) operating emergencies beyond the control of the licensee that may include, but are not limited to, equipment failure or other temporary abnormal operating conditions resulting from extremes in inflows to the project, power supply emergencies, and for public health and safety reasons; or (3) for short periods upon mutual agreement among the licensee, the U.S. Fish and Wildlife Service, the Maine Department of Environmental Protection, and the Maine Department of Inland Fisheries and Wildlife. If the water level regime is so modified, the licensee shall notify the Commission and the resource agencies as soon as possible, but no later than ten days after each such incident.

Article 402. The licensee shall operate the Bonny Eagle Project and release minimum flows annually as follows:

(a) From April 1 through June 30, operate run-of-river with outflow approximately equal to inflow, with up to one foot drawdown of the project impoundment;

(b) From July 1 through September 30, release an instantaneous minimum flow of 400 cubic feet per second (cfs) or inflow, whichever is less;

(c) From October 1 through November 15, or for an alternate six week period mutually agreed upon by the licensee, the U.S. Fish and Wildlife Service, the Maine Department of Inland Fisheries and Wildlife, the Maine Department of Marine Resources, and the Maine Atlantic Salmon Authority, release an instantaneous minimum flow of 600 cfs or inflow, whichever is less; this fall flow period shall be no less and no more than six weeks except upon mutual agreement among the licensee and fisheries agencies and shall start no sooner than September 1 and no later than October 1;

# -22-

(d) From November 16 through March 31, release an instantaneous minimum flow of 250 cfs or inflow, whichever is less; and

(e) Year-round, release an instantaneous minimum flow of 25 cfs from the New River Channel dam. This minimum flow to the New River Channel shall be included in the total minimum flows required above.

This flow regime may be temporarily modified by: (1) Commission-approved maintenance activities; (2) operating emergencies beyond the control of the licensee that may include, but are not limited to, equipment failure or other temporary abnormal operating conditions resulting from extremes in inflows to the project, power supply emergencies, and for public health and safety reasons; or (3) for short periods upon mutual agreement among the licensee, the U.S. Fish and Wildlife Service, the Maine Department of Environmental Protection, the Maine Department of Marine Resources, the Maine Atlantic Salmon Authority, and the Maine Department of Inland Fisheries and Wildlife. If the minimum flow regime is so modified, the licensee shall notify the Commission and the resource agencies as soon as possible, but no later than ten days after each such incident.

Article 403. The licensee shall, within 180 days from the date of issuance of this license, file with the Commission, for approval, a plan to the monitor reservoir water levels required by Article 401 and minimum flows required by Article 402 to ensure that the fish resources in the Bonny Eagle reservoir and downstream are adequately protected under the required reservoir water level regime and the minimum flow release regime, respectively. The licensee shall prepare the plan after consultation with the U.S. Fish and Wildlife Service (FWS), the Maine Department of Environmental Protection (Maine DEP), and the Maine Department of Inland Fisheries and Wildlife (Maine Fisheries and Wildlife).

The plan shall include: (1) the location and a description of the equipment used for monitoring; (2) a schedule for installation; (3) the method and frequency of data collection; and (4) a provision for providing the data to FWS, Maine DEP, and Maine Fisheries and Wildlife within 30 days from the date of the request from these agencies.

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

-23-Project No. 2529-005

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 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 reservoir water levels or minimum flow releases, are necessary to protect the fish resources, the Commission may direct the licensee to modify project structures or operations.

Article 404. The licensee shall, within 60 days from the date of issuance of this license, file with the Commission for approval a plan and schedule for the construction and operation of interim downstream fish passage facilities. These facilities shall become operational at such time as anadromous fish have been released upstream, and shall continue to be operational until permanent downstream fish passage facilities have been constructed and become operational under this license.

The licensee shall prepare the plan after consultation with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the Maine Department of Marine Resources, the Maine Atlantic Salmon Authority, and the Maine Department of Inland Fisheries and Wildlife. The licensee shall include with the plan, documentation of consultation, copies of comments on the plan and schedule after they have been prepared and provided to the agencies, and specific descriptions of how agencies' comments are accommodated by the licensee's plan. The licensee shall allow a minimum of 30 days for the agencies to comment and 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. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 405. The licensee shall, within 180 days from the date of issuance of this license, file with the Commission for approval, functional design drawings of downstream fish passage facilities. The downstream fish passage facilities shall be constructed and operational within two years from the date of issuance of this license. The licensee shall include with the design drawings: (1) site locations; (2) quantification of flows to operate the facilities; (3) operation and maintenance

schedules; and (4) measures to control erosion and sedimentation during construction.

The licensee shall prepare the drawings and plans after consultation with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the Maine Department of Marine Resources, the Maine Atlantic Salmon Authority, and the Maine Department of Inland Fisheries and Wildlife. The licensee shall include with the drawings documentation of consultation, copies of comments and recommendations on the drawings and schedule after they have been prepared and provided to the agencies, and specific descriptions of how agencies' comments are accommodated by the licensee's facilities. The licensee shall allow a minimum of 30 days to comment and make recommendations before filing the drawings 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. Upon Commission approval, the licensee shall implement the proposal, including any changes required by the Commission.

As-built drawings of the downstream fish passage facilities shall be filed in accordance with the requirements of Article 301. At the same time the licensee files as-built drawings with the Commission, as-built drawings shall also be filed with the resource agencies.

Article 406. The licensee shall file with the Commission, for its approval, a plan and schedule for the construction, operation, and maintenance of such interim, permanent, or both interim and permanent upstream facilities as are determined to be necessary based upon assessments conducted by the Maine Atlantic Salmon Authority (Maine Salmon Authority), the Maine Department of Marine Resources (Maine DMR), the Maine Department of Inland Fisheries and Wildlife (Maine Fisheries and Wildlife), the U.S. Fish and Wildlife Service (FWS), and the National Marine Fisheries Service (NMFS) pursuant to the Saco River Fish Passage Agreement (filed with the Commission on November 23, 1994) and Annex 1: Assessment Process and Criteria (filed with the Commission on April 5, 1996), or as may be prescribed by the U.S. Department of Interior (Interior) under Section 18 of the Federal If it is determined, based upon the agencies' Power Act. assessments, that such fish passage facilities are necessary, and/or such facilities are prescribed by Interior:

(a) The licensee shall file a plan and schedule for interim upstream fish passage facilities at least 90 days prior to implementation of such interim passage;

-25-

(b) The licensee shall file functional design drawings for permanent upstream passage facilities at least 180 days prior to the commencement of construction of such The licensee shall include with the drawings: facilities. (1) site locations; (2) quantification of flows to operate the facilities; (3) an operation and maintenance schedule; and (4) measures to control erosion and sedimentation during construction.

(c) Any requirement for construction of permanent upstream fish passage facilities at the Bonny Eagle Project will provide for completion at least two years before or two years after completion of such facilities at the Bar Mills Project No. 2194, West Buxton Project No. 2531, and Hiram Project No. 2530; and no permanent upstream passage facilities will be required to be operational at the Bonny Eagle Project before May 1, 2005.

The licensee shall prepare the plan and drawings required in (a) and (b) above, after consultation with FWS, NMFS, Maine DMR, Maine Salmon Authority, and Maine Fisheries and Wildlife. The licensee shall include with the plan and drawings, as appropriate, documentation of consultation, copies of comments and recommendations on the plan or drawings and schedule after they have been prepared and provided to the agencies, and specific descriptions of how agencies' comments are accommodated by the licensee's facilities. The licensee shall allow a minimum of 30 days to comment and make recommendations before filing the plan or drawings 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 any proposed facilities. Upon Commission approval, the licensee shall implement the proposal, including any changes required by the Commission.

As-built drawings of any permanent upstream fish passage facilities shall be filed in accordance with the requirements of Article 301. At the same time the licensee files as-built drawings with the Commission, as-built drawings shall also be filed with the above listed resource agencies.

Article 407. The licensee shall, within 180 days from the date of issuance of this license, file for Commission approval, a plan and schedule to monitor the effectiveness of the downstream fish passage facilities required in Article 405.

The licensee shall design the monitoring plan after consultation with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the Maine Department of Marine Resources, the Maine Atlantic Salmon Authority, and the Maine

-26-Project No. 2529-005

Department of Inland Fisheries and Wildlife. The licensee shall include with the plan, documentation of consultation, copies of comments and recommendations on the plan and schedule after they have been prepared and provided to the agencies, and specific descriptions of how agencies' comments are accommodated by the licensee's plan. The licensee shall allow a minimum of 30 days to comment and 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.

The results of the monitoring must be submitted to the Commission according to the approved schedule, along with comments from the consulted agencies on the results. If the monitoring results indicate that further measures are necessary to effectively pass anadromous fish, the licensee shall provide, for Commission approval, these measures and an implementation schedule. These measures shall include structural and operational changes necessary to ensure that anadromous fish effectively pass the project.

Article 408. The licensee shall, at least 180 days prior to commencement of construction of upstream fish passage facilities, file for Commission approval, a plan and schedule to monitor the effectiveness of the upstream fish passage facilities required in article 406.

The licensee shall design the monitoring plan after consultation with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the Maine Department of Marine Resources, the Maine Atlantic Salmon Authority, and the Maine Department of Inland Fisheries and Wildlife. The licensee shall include with the plan, documentation, copies of comments and recommendations on the plan and schedule after they have been prepared and provided to the agencies, and specific descriptions of how agencies' comments are accommodated by the licensee's The licensee shall allow a minimum of 30 days to comment plan. and 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 projectspecific 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.

-27-Project No. 2529-005

The results of the monitoring plan must be submitted to the Commission according to the approved schedule, along with comments from the consulted agencies on the results. If the monitoring results indicate that further measures are necessary to effectively pass anadromous fish, the licensee shall provide, for Commission approval, these additional measures and an implementation schedule. The additional measures shall include structural and operational changes necessary to ensure that anadromous fish may effectively pass the project.

Article 409. The licensee shall, within 180 days from the date of issuance of this license, file for Commission approval, a plan to monitor the macroinvertebrate community downstream of the West Buxton Project No. 2531 to determine whether the macroinvertebrate community is meeting applicable aquatic life standards under the minimum flow regime required by Article 402.

The licensee shall include with the plan: (1) an implementation schedule with duration of monitoring; (2) a description of the sampling sites; (3) sampling methodology and frequency of sampling; and, (4) a description of how data will be analyzed. The licensee shall provide a report to the consulting resource agencies listed in the paragraph below, and to the Commission, within 120 days of completion of the monitoring. The report shall include recommendations for any measures necessary to protect and enhance the macroinvertebrate community.

The licensee shall prepare the plan after consultation with the U.S. Fish and Wildlife Service, the Maine Department of Environmental Protection, and the Maine Department of Inland Fisheries and Wildlife. 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 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 and enhance the macroinvertebrate community, the Commission may direct the licensee to modify project structures or operations.

Article 410. Authority is reserved to the Commission to require the licensee to construct, operate, and maintain, or to

-28-Project No. 2529-005

provide for the construction, operation, and maintenance of such fishways as may be prescribed by the Secretary of the Interior.

Article 411. Within 180 days after the issuance of the license, the licensee shall file with the Commission for its approval, a plan to enhance wetlands at sites 1, 2, and 4, totaling 15 acres in area, as identified in Central Maine Power Company's July 1, 1993 response to the Commission's information request of May 29, 1992, and Central Maine Power Company's associated report entitled "Wetland Assessment and Enhancement Opportunity Evaluation of the Bonny Eagle Hydroelectric Project," (Wetland Report) by Eco-Analysts, Inc. The plan shall include, at a minimum:

(a) details of the final design of wetlands enhancement measures, which shall include, but be not limited to: (1) creation of a buffer, at least 100 feet wide, along the impoundment shoreline to keep agricultural activity (e.g., crops and livestock) away from the water; (2) seeding of disturbed and eroded shoreline with suitable plants; and (3) protection of the buffer areas from disturbance to allow natural vegetation to become established;

(b) a monitoring program which: (1) evaluates the effectiveness of the wetlands enhancement measures at sites 1, 2 and 4; and (2) sets out steps to be taken if the wetland enhancement measures at these sites are not effective (such as, but not limited to, modifying the enhancement measures at sites 1, 2, and 4, or enhancing other sites identified in the Wetland Report);

(c) a procedure to provide recommendations to the agencies and the Commission for alternative wetland enhancement if monitoring indicates that the implemented wetland enhancement is not successful;

schedules for: (1) implementing wetlands (d) enhancements; (2) conducting and filing the results of the monitoring program; and (3) filing recommendations for alternative wetlands enhancement measures, including schedules for implementation and monitoring.

The licensee shall prepare the plan after consultation with the U.S. Fish and Wildlife Service and the Maine Department of Inland Fish and Wildlife. The licensee shall include with the plan documentation of consultation with the agencies before preparing the plan, copies of agency comments or recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how all the agency comments were accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make

Project No. 2529-005 -29-

recommendations prior to filing plans 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 plan. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 412. The licensee, after consultation with the Maine Department of Conservation, the Maine Atlantic Salmon Authority, the Maine Department of Marine Resources, the Maine Department of Inland Fisheries and Wildlife, the Maine Department of Transportation, the National Park Service, and the U.S. Fish and Wildlife Service, shall monitor recreational use of the project area to determine whether existing recreation facilities are meeting recreation needs. Monitoring studies shall begin within six years of the issuance of this license and be reported to the Commission in accordance with Section 8 of the Commission's regulations (18 C.F.R. § 8.11), which requires the filing of "FERC Form No. 80." The report shall include:

- (1) annual recreation use figures;
- (2) a discussion of the adequacy of the Licensee's recreation facilities at the project site to meet recreation demand, including a discussion regarding the need for a hard surface boat launch along the impoundment;
- (3) a discussion regarding the adequacy of the Limington Rips recreation area, which is currently maintained by the Maine Department of Transportation;
- (4) a description of the methodology used to collect all study data;
- (5) if there is a need for additional facilities, a recreation plan proposed by the licensee to accommodate recreation needs in the project area;
- (6) documentation of agency consultation and agency comments on the report after it has been prepared and provided to the agencies; and
- (7) 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 and to make recommendations prior to filing the report with the Commission.

-30-Project No. 2529-005

Article 413. At least 180 days from the date of issuance of this license, the licensee shall file with the Commission, for approval, a finalized plan to provide a new canoe portage at the Bonny Eagle Project's Main River Dam in accordance with the provisions outlined in Central Maine Power Company's conceptual plan filed on February 22, 1995. The final plan shall include, at a minimum, detailed design drawings and a schedule for installing the enhancement measures described in the conceptual plan.

The licensee shall prepare the aforementioned plan after consultation with the Maine Department of Conservation and the National Park Service. 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 plan. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission. The measures implemented shall be shown on the as-built drawings filed pursuant to Article 301 of this license.

Article 414. At least 180 days from the date of issuance of this license, the licensee shall file with the Commission, for approval, a plan to provide a barrier-free picnic facility on Eagle Island off Route 35 and adjacent to the New River Channel.

The facility shall include, at a minimum, parking, picnic tables, grills, signs, portable toilets, and angling and whitewater boating access routes to the upper reach of the New River Channel. The Licensee shall design these facilities to meet the Architectural and Transportation Barriers Compliance Board standards to the maximum extent possible. The final plan shall include, at a minimum, detailed design drawings and a schedule for installing the enhancement measures.

The licensee shall prepare the aforementioned plan after consultation with the Maine Department of Conservation, the Maine Department of Transportation, the Maine Department of Inland Fisheries and Wildlife, the National Park Service, and the U.S. Fish and Wildlife Service. 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

Project No. 2529-005 -31-

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 plan. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission. The measures implemented shall be shown on the as-built drawings filed pursuant to Article 301 of this license.

Article 415. The licensee, within one year of receiving a license, shall install signs in the project area that identify all project recreation areas open to the public and shall install an interpretive sign near the Bonny Eagle Project's powerhouse describing its historic features. The installed signs shall include, at a minimum, directional signs on Route 35 and Route 25 to the Bonny Eagle Project recreational facilities, signs identifying the informal boat launch access areas, and signs identifying the new cance portage around the dam. The Licensee shall design the interpretive sign describing the project's historic features in consultation with the Maine Historic Preservation Commission. The final Exhibit F and Exhibit G drawings required by Article 301 should show the location of the installed signs in the project area. In addition, the licensee shall maintain or arrange for the maintenance of the signs during the term of the license.

Article 416. The licensee shall implement the provisions of the "Programmatic Agreement Among the Federal Energy Regulatory Commission, the Advisory Council on Historic Preservation, and the Maine State Historic Preservation Officer for the Management of Historic Structures and Bligible Archaeological Sites That May Be Affected By New Licenses Issuing To Central Maine Power Company and Kennebec Water Power Company For Ten Hydroelectric Or Storage Projects In Maine, " executed on October 27, 1993, including but not limited to any Cultural Resources Management Plan for the Bonny Eagle 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.

# -32-

Article 417. (a) In accordance with the provisions of this article, 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 article. If a permitted use and occupancy violates any condition of this article 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 article 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.

The type of use and occupancy of project lands and (b) 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

### Project No. 2529-005 -33-

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. If no conveyance was made during the prior calendar year, the Licensee shall so inform the Commission and the Regional Director in writing no later than January 31 of each year.

(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 onehalf 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.

-34-

The following additional conditions apply to any (e) 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 article, 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 article does not in itself change the project boundaries. The project boundaries may be changed to exclude land conveyed under this article only upon approval of revised exhibit G or K drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be excluded from

Project No. 2529-005 -35-

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

By the Commission.

(SEAL)

David P. Boeyers

David P. Boergers, Acting Secretary.

# -36-

## APPENDIX

### WATER QUALITY CERTIFICATION

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

#### 1. WATER LEVELS

- The applicant shall maintain water levels at the Bonny Α. Eagle Project in accordance with the provisions of the "Instream Flow Agreement for Hydroelectric Projects on the Saco River." Specifically, except as temporarily modified by (1) approved maintenance activities, (2) inflows to the project area, (3) flashboard release or maintenance, (4) operating emergencies beyond the applicant's control, as defined below, or (5) agreement between the applicant and appropriate state and/or federal agencies, water levels in the project impoundment shall be maintained as follows:
  - From April 1 through June 30 annually, no more than one foot below normal full pond elevation (flashboard crest) when the flashboards are in place, and no more than one foot below the "New Channel Dam" spillway crest elevation when the flashboards are not in place; and
  - From July 1 through March 31 annually, no more . than 4.5 feet below normal full pond elevation (flashboard crest) when the flashboards are in place, and no more than one foot below the "New Channel Dam" spillway crest elevation when the flashboards are not in place.
- Operating emergencies beyond the applicant's control в. 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.
- The applicant shall, in accordance with the schedule C. established in a new FERC license for the project, submit plans for providing and monitoring the water levels in the impoundment as required by Part A of this condition. These plans shall be reviewed by and must receive approval of the DEP Bureau of Land and Water Quality.

Project No. 2529-005 -37-

#### 2. MINIMUM FLOWS

- The applicant will provide flow releases from the Bonny Α. Eagle Project in accordance with the provisions of the "Instream Flow Agreement for Hydroelectric Projects on the Saco River." Specifically, except as temporarily modified by (1) approved maintenance activities, (2) inflows to the project area, (3) flashboard release or maintenance, (4) operating emergencies beyond the applicant's control, as defined below, or (5) agreement between the applicant and appropriate state and/or federal agencies, the following minimum flows shall be released from the project:
  - From April 1 through June 30 annually, run-ofriver operation, with outflow approximately equal to inflow, while allowing for up to a one foot drawdown of the impoundment;
  - From July 1 through September 30 annually, an instantaneous minimum flow of 400 cfs or inflow, whichever is less;
  - From October 1 through November 15 annually, or for such alternate six week period as may be mutually agreed to by the applicant and state and federal fisheries agencies, as described below, an instantaneous minimum flow of 600 cfs or inflow, whichever is less;
  - From November 16 through March 31 annually, an . instantaneous minimum flow of 250 cfs or inflow, whichever is less; and
  - An instantaneous year-round minimum flow of 25 cfs ٠ from the diversion dam into the "New River Channel."

All required flows, except for the minimum flow required in the "New River Channel," shall be the sum of flows from the powerhouse and the "New River Channel."

- в. 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. As provided in the "Instream Flow Agreement for Hydroelectric Projects on the Saco River, " the start of

-38-

the fall flow period may be changed during any year by mutual agreement among the applicant, U.S. Fish and Wildlife Service, Department of Inland Fisheries and Wildlife, the Department of Marine Resources, and the Atlantic Salmon Authority based on the following considerations: (1) expected flow and weather conditions; (2) biological factors such as fish migration or spawning periods; and/or (3) anticipated electrical need for or value of CMP's generation.

The fall flow period shall be no less and no more than six weeks, except upon mutual agreement among the parties listed above, and shall start no sooner than September 1 and no later than October 1. Any changes in the timing of the fall flow period will change the ending date of the summer flow period and the beginning date of the winter flow period accordingly for that year.

The applicant shall, in accordance with the schedule D. established in a new FERC license for the project, submit plans for providing and monitoring the minimum flows required by Part A of this condition. These plans shall be reviewed by and must receive approval of the DEP Bureau of Land and Water Quality.

#### FISH PASSAGE 3.

The applicant shall provide fish passage at the Bonny Eagle Project in accordance with the provisions of the "Saco River Fish Passage Agreement." Specifically:

Α. Interim Downstream Fish Passage

> The applicant shall provide interim downstream passage (e.g. controlled spills during downstream migration periods, installation of temporary downstream fish passage facilities or other feasible measures) necessary to allow downstream fish passage at the Bonny Eagle Project when anadromous fish have been stocked or trucked above the project dam. The applicant shall continue such measures until permanent downstream fish passage facilities are installed and operational in accordance with Part B of this condition.

#### в. Permanent Downstream Fish Passage

The applicant shall construct permanent downstream passage at the Bonny Eagle Project within 2 years of receipt of a new FERC license for the project.

Project No. 2529-005 -39-

# C. Downstream Fish Passage Design Plans

The applicant shall, at least 60 days prior to the construction of downstream fish passage facilities required in Parts A and B of this condition, submit final design and operational plans for these facilities, prepared in consultation with state and federal agencies. These plans shall be reviewed by and must receive approval of the fisheries agencies, the Department and FERC prior to construction of the facilities.

### D. <u>Upstream Fish Passage Facilities</u>

The applicant shall construct interim, permanent or, under appropriate circumstances, both interim and permanent upstream passage facilities at the Bonny Eagle Project in accordance with the schedule and conditions contained in Paragraphs 7 and 14 of the "Saco River Fish Passage Agreement".

### E. <u>Upstream Fish Passage Design Plans</u>

The applicant shall, at least 60 days prior to the construction of the permanent upstream fish passage facilities required in Part D of this condition, submit final design and operational plans for these facilities, prepared in consultation with state and federal fisheries agencies. These plans shall be reviewed by and must receive approval of the fisheries agencies, the Department, and FERC prior to construction of the facilities.

# F. Fish Passage Study

The applicant shall, in consultation with state and federal fisheries agencies, conduct a fish passage study or studies to determine the effectiveness of the upstream and downstream fish passage facilities required pursuant to Parts B & D of this condition.

# G. Fish Passage Study Plan

The applicant shall, at least 60 days prior to the commencement of operation of the upstream and downstream fish passage facilities required by Parts B & D of this condition, submit a fish passage study plan or plans, prepared in consultation with state and federal fisheries agencies. These plans shall be reviewed by and must receive approval of the fisheries agencies, the Department, and FERC prior to its implementation.

### Project No. 2529-005 -40-

#### H. Fish Passage Study Results

The applicant shall submit the results of any fish passage studies and any recommendations for changes in the design and/or operation of fish passage facilities to the consulting agencies and the Department within 6 months following completion of the study. The Department reserves the right, after notice and opportunity for hearing, to require reasonable changes in the design and/or operation of the fish passage facilities as may be deemed necessary to adequately pass anadromous fish (specifically, Atlantic salmon, American shad and river herring) through the project site. Any such changes must be approved by the Department and FERC prior to their implementation.

#### I. Salmon Restoration Efforts

In accordance with Paragraph 8 of the "Saco River Fish Passage Agreement, " all parties to the Agreement will use their best efforts to expedite such agreements as are necessary for restoring Atlantic salmon to the New Hampshire portion of the Saco River basin.

### MACROINVERTEBRATE STUDY 4.

- The applicant shall, in accordance with the "Instream Α. Flow Agreement for Hydroelectric Projects on the Saco River," and in consultation with the DEP, conduct a study to determine whether the macroinvertebrate community in the 1,000 foot-long reach of the Saco River immediately below the West Buxton Project is meeting applicable water quality standards following the implementation of the minimum flow requirements of this certification. The applicant shall submit the details of a study plan within one year of the issuance of a new FERC license for the Bonny Eagle Project. This plan shall be reviewed by and must receive the approval of the DEP Bureau of Land and Water Quality.
- в. The results of the macroinvertebrate study shall be submitted to the Department in accordance with the schedule established in the study plan. After reviewing the study results and comments from the applicant, and after notice and opportunity for hearing, the Department may order such modification of the minimum flows established in this certification as may be deemed necessary to meet applicable aquatic life standards in the 1,000 foot-long reach of the Saco River immediately below the West Buxton Project, in accordance with established biological assessment criteria.

Project No. 2529-005 -41-

### 5. RECREATION

- The applicant shall maintain existing public Α. recreational access and use facilities which are currently within its ownership and shall evaluate the need for and, where deemed necessary, modify existing recreational facilities and/or develop and maintain additional recreational facilities as described in Section 7 of this Order.
- 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 Maine Department of Conservation and the DEP Bureau of Land and Water Quality and must be approved by the Bureau of Land and Water Quality.
- 6. 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.

7. 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.

EFFECTIVE DATE 8.

> This water quality certification shall be effective on the date of issuance of a new hydropower project license by the Federal Energy Regulatory Commission.

Document Content(s)
3137289.TIF