#### UNITED STATES OF AMERICA 113 FERC ¶ 62, 079 FEDERAL ENERGY REGULATORY COMMISSION

Erie Boulevard Hydropower, L.P.

Project No. 7387-019

#### ORDER ON OFFER OF SETTLEMENT AND ISSUING NEW LICENSE

(October 27, 2005)

#### **INTRODUCTION**

1. On October 20, 2003, Erie Boulevard Hydropower, L.P. (Erie Boulevard) filed an application, including the Piercefield Hydroelectric Project Settlement Agreement (Settlement), for a new license pursuant to sections 4(e) and 15 of the Federal Power Act (FPA)<sup>1</sup> to continue operation and maintenance of the 2.7-megawatt (MW) Piercefield Hydroelectric Project No. 7387. The project is located on the Raquette River below the outlet of Tupper Lake, in the towns of Piercefield and Altamont, St. Lawrence and Franklin Counties, respectively, New York.<sup>2</sup> The project does not occupy any federal lands.

2. As discussed below, I am issuing a new license for the project.

#### BACKGROUND

3. The Commission issued the original license for the project to the Niagara Mohawk Power Corporation (Niagara Mohawk) on November 25, 1985.<sup>3</sup> The license was backdated to be effective on November 1, 1955, and expires on October 31, 2005. The Commission approved the transfer of the license to Erie Boulevard on July 26, 1999.<sup>4</sup>

4. Notice of the application was issued on May 28, 2004. Timely motions to intervene were filed by Adirondack Mountain Club (ADK), New York State Department of Environmental Conservation (New York DEC), and the U.S. Department of the Interior (Interior). None of the intervenors oppose the project.

<sup>2</sup> The Raquette River is a navigable waterway of the United States. See Central New York Power Corp., 8 FPC 547, 569 (1949).

<sup>3</sup> 33 FERC ¶ 62,258 (1985).

<sup>4</sup> 88 FERC ¶ 62,082 (1999).

<sup>&</sup>lt;sup>1</sup> 16 U.S.C. ' '797(e) and 808.

5. On August 12, 2004, the Commission issued a public notice that the project was ready for environmental analysis and solicited comments, recommendations, terms and conditions, and prescriptions. In response, comments and recommendations, consistent with the Settlement, were filed by the Interior, the New York DEC, and the ADK.

6. On June 23, 2005, the Commission staff issued for public comment an environmental assessment (EA). The EA contains background information, analysis of effects, support for related license articles, and the basis for a finding that issuance of the license is not a major federal action significantly affecting the quality of the human environment. Comments on the EA were received from ADK, the U.S. Geological Survey (USGS), and Erie Boulevard.

7. The motions to intervene, comments, and recommendations have been fully considered in determining whether, and under what conditions, to issue this license.

# PROJECT DESCRIPTION

8. The existing project consists of: (1) a dam with a 495-foot-long concrete retaining wall/dike on the right shoreline, a 620-foot-long concrete and masonry stone retaining wall located along the left shoreline, a 118-foot-long stanchion type stop log spillway, a 294-foot-long, 22-foot-high ogee spillway section surmounted by 2-foot-high flashboards, and a 110-foot-long concrete masonry forebay retaining wall; (2) a 370-acre reservoir; (3) a powerhouse containing three generating units having a total rated capacity of 2,700 kilowatt (kW); (4) the Piercefield-Tupper Lake No. 39 46-kilovolt transmission line; and (5) appurtenant facilities. A more detailed project description is contained in Ordering Paragraph (B)(2).

9. Erie Boulevard proposes no increased capacity, and to continue to operate the project limiting the daily impoundment fluctuations to 1.0 foot measured in a downward direction from the top of the flashboard [1,542.0 feet mean sea level (msl)] when in place or the crest of the dam (1,540.0 feet msl) when flashboards are not in place. Erie Boulevard also proposes to include two primary transmission lines as part of the project and to remove the Piercefield-Tupper Lake No. 39 transmission line from the project license.

10. The current project boundary incorporates lands occupied by project structures including the Piercefield impoundment up to elevation 1,542.0 feet msl, but does not include the existing canoe portage located on the right shoreline, northeast of the powerhouse, on lands within a state park.

## SETTLEMENT AGREEMENT

11. In conjunction with the license application, Erie Boulevard filed a Settlement with the Commission on October 20, 2003, for proposed protection, mitigation, and enhancement measures at the Piercefield Project. Signatories of the Settlement are Erie Boulevard, Adirondack Council, Adirondack Park Agency, ADK, American Rivers, American Whitewater, New York Rivers United, New York State Conservation Council, New York DEC, St. Lawrence County, the town of Altamont, the town of Piercefield, the U.S. Fish and Wildlife Service (FWS), and the National Park Service.

12. Section 1 of the Settlement states the effective date of the agreement, the agreement's continued effectiveness throughout the term of the license, and the purpose of Settlement. Section 1 also provides a set of definitions and conventions and stipulates the parties to the Settlement (Parties) intend to support issuance of a license consistent with the terms of the agreement.

13. Section 2 of the Settlement states the Parties' ability to withdraw from the Settlement if the Commission should issue a new license that significantly modifies any of the provisions in section 3 or if the water quality certification is materially inconsistent with the Settlement. Section 2 also describes the licensee's rights to seek an amendment of license and to modify project works.

14. Section 2.8 states that the licensee would develop a Historic Properties Management Plan (HPMP) in consultation with the New York State Office of Parks, Recreation, and Historic Preservation (New York SHPO), the St. Regis Band of Mohawk Indians of New York, and the Oneida Indian Nation.

15. Section 3 sets forth the measures which Erie Boulevard intends to undertake with respect to operating and maintaining the Piercefield Project once a new license is issued. As discussed below in the water quality certification section of this order, the measures proposed in section 3 are required by the WQC to be conditions of the project's new license. In addition, staff evaluated the measures proposed in section 3 of the Settlement in the EA, and concluded that the measures would adequately protect and enhance fishery, recreational, and other resources affected by the project. Section 3 includes the following provisions:

## Mode of Operation

16. In section 3.1, Erie Boulevard proposes to continue to operate the project limiting the daily impoundment fluctuations to 1.0 foot measured in a downward direction from the top of the flashboard (1,542.0 feet msl) or the crest of the dam (1,540.0 feet msl). The water storage within these pond level boundaries would not be used for pulsing or peaking operation. The proposed project operations would result in minimal effects on littoral habitat, terrestrial habitat, such as bird nesting areas, and would help maintain a stable vegetative buffer around the reservoir. Article 401 requires this operating mode.

#### Baseflow

17. In section 3.4, Erie Boulevard proposes to maintain a baseflow of 150 cubic feet per second (cfs), or inflow to the Piercefield impoundment, whichever is less, from the tailrace pond downstream of the Piercefield Project. Article 402 requires the release of the baseflow, which would provide adequate aquatic habitat conditions in the project's tailrace pool and the downstream riffle habitats. The stability of the baseflow would lessen erosion, stabilize riparian vegetation zones, protect both game and forage fish from stranding, and help maintain the water quality and normal temperature regime of the Raquette River.

#### Seasonal Fluctuation

18. In section 3.2, Erie Boulevard proposes to replace the two-foot seasonal flashboards with year-round two-foot flashboards and retrofit the project's stanchion spillway section to reduce the likelihood of flashboard failure. Reducing the likelihood of flashboard failure would improve water quality by reducing or eliminating the deposition of foreign material into the downstream Raquette River. Aquatic and terrestrial resources would benefit from the reduced frequency of dewatered wetlands and loss of vegetation from seasonal erosion. Article 404 requires the installation of year-round flashboards and the retrofitting of the spillway section.

#### Fish Movement and Protection

19. In section 3.3, Erie Boulevard proposes to place into operation a 20 cfs downstream fish movement flow from the project's retrofitted stanchion spillway<sup>5</sup> and replace the existing 2 1/8-inch trashracks (in front of unit 1) and the 2 <sup>1</sup>/<sub>2</sub>-inch trashracks (in front of Units 2 and 3) with 1-inch clear-spaced trashracks by December 31, 2012, or when the existing trashracks are replaced, whichever is sooner.<sup>6</sup> The flow would benefit and aquatic resources because it would result in the lower portion of the bypassed reach remaining wetted and reduce the potential for fish entrainment. The proposed trashracks would also reduce the potential for adult fish entrainment. Article 407 requires the flow release, while Article 406 requires the replacement of the existing trashracks.

<sup>&</sup>lt;sup>5</sup> The existing stanchion spillway section consists of four needle beam bays, each containing five hinged, trippable, wooden stoplog sections. Currently, each gate section may be lifted out by the operators or tripped, if necessary, during emergency flooding. Erie Boulevard proposes to retrofit the spillway section with one or more readily operable gates.

<sup>&</sup>lt;sup>6</sup> The downstream fish movement release is a 20-cfs flow released from the project's spillway stanchions to enable downstream fish passage.

#### Recreation

20. In section 3.5, Erie Boulevard proposes to modify the existing flow notification system to include discharge information for the Piercefield Project;<sup>7</sup> maintain the existing canoe portage, and install more permanent signage and/or blazes along the portage; and provide an annual scheduled recreational flow release on the last Saturday of June. A recreation plan requiring these measures is required by Article 409 and discussed further below.

#### Flow and Water Level Monitoring

21. In section 3.6, Erie Boulevard proposes to develop a streamflow and waterlevel monitoring plan. Article 405 requires Erie Boulevard to monitor headpond levels and stream flows to ensure that the project operations are consistent with any license issued by the Commission.

#### Non-Project Measures

22. Section 4 sets forth the measures which Erie Boulevard intends to undertake outside of any license issued by the Commission. Erie Boulevard proposes to provide a one-time fund to the town of Piercefield. Also Erie Boulevard proposes to establish a Pirecefield Project Subcommittee which would oversee the Piercefield Fund. The Piercefield Fund, to which Erie Boulevard would annually contribute \$500, would be used for projects, studies, or services within the Raquette River Basin between river miles (RM) 10 and 93. The Parties to the Settlement agreed that these measures would not be included in any license issued.

## WATER QUALITY CERTIFICATION

23. Under section 401(a)(1) of the Clean Water Act (CWA),<sup>8</sup> the Commission may not issue a license authorizing the construction or operation of a hydroelectric project unless the state water quality certifying agency has either 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 1 year. Section 401(d) of the CWA provides that the certification shall become a condition of any federal license that authorizes construction or operation of the project.<sup>9</sup>

<sup>9</sup> 33 U.S.C. § 1341(d).

<sup>&</sup>lt;sup>7</sup> The flow notification system would provide flow information for the annual recreational release in June.

<sup>&</sup>lt;sup>8</sup> 33 U.S.C. § 1341(a)(1).

24. On October 14, 2003, Erie Boulevard applied to the New York DEC for a water quality certification for the Piercefield Project, as required by section 401 of the Clean Water Act. The New York DEC received the request for a water quality certification on October 15, 2003, and issued on April 7, 2004, a water quality certification that contains four general conditions and 17 special conditions concerning administration, operating conditions, project maintenance and construction, and public access and recreation. These special conditions reflect the provisions of section 3 in the Settlement. The water quality certification is attached to this order as Appendix A, and is made part of this license by Ordering Paragraph (D) of this order.

## COASTAL ZONE MANAGEMENT PROGRAM

25. Under section 307(c)(3)(A) of the Coastal Zone Management Act (CZMA),<sup>10</sup> the Commission cannot issue a license for a project within or affecting a state's coastal zone unless the state CZMA agency concurs with the license applicant's certification of consistency with the state's CZMA program, or the agency's concurrence is conclusively presumed by its failure to act within 180 days of its receipt of the applicant's certification.

26. The New York Department of State, Division of Coastal Resources (New York DOS) administers the Coastal Management Program in New York. Erie Boulevard requested a coastal zone consistency determination for the Piercefield Project from the New York DOS on January 20, 2004. In a letter filed March 15, 2004, the New York DOS concluded that project is located outside the State's designated coastal area and is not likely to affect land and water uses and natural resources within the state's coastal area.

## SECTION 18 FISHWAY PRESCRIPTIONS

27. Section 18 of the FPA<sup>11</sup> provides that the Commission shall require the construction, maintenance, and operation by a licensee of such fishways as may be prescribed by the Secretary of the Interior or the Secretary of Commerce, as appropriate. By letter filed October 6, 2004, Interior requested that the Commission reserve authority to prescribe fishways. Consistent with Commission policy, Article 408 of this license reserves the Commission's authority to require fishways that may be prescribed by Interior for the Piercefield Project.

## THREATENED AND ENDANGERED SPECIES

<sup>10</sup> 16 U.S.C. § 1456(3)(A).

<sup>11</sup> 16 U.S.C. ' 811

28. Section 7(a)(2) of the Endangered Species Act of 1973<sup>12</sup> requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of federally listed threatened and endangered species, or result in the destruction or adverse modification of their designated critical habitat. By letter filed October 20, 2003, the FWS stated that, except for occasional transient individuals, no threatened or endangered species are known to exist in the in the vicinity of the project. Also, no critical habitat was designated or proposed in the vicinity of the project. The FWS stated that no further ESA coordination or consultation with them is required. In a subsequent letter filed May 12, 2004, the FWS stated that the bald eagle is a federally-listed threatened species known to occur at or in the vicinity of the project. However, there are no confirmed observations of bald eagles within or near the project and none of the proposed actions would result in the loss of potential habitat; therefore, the EA concluded that the proposed project would have no effect on bald eagles.

## NATIONAL HISTORIC PRESERVATION ACT

29. On January 18, 2005, a Programmatic Agreement (PA) for managing historic properties that may be affected by the issuance of a project license was executed between the Commission and the New York SHPO.<sup>13</sup> The executed PA satisfies the Commission's responsibilities under Section 106 of the National Historic Preservation Act.<sup>14</sup> Article 410 requires Erie Boulevard to implement the PA and to file a HPMP for Commission approval.

# RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES UNDER FPA SECTION 10(j)

30. Section 10(j)(1) of the FPA,<sup>15</sup> requires the Commission, when issuing a license, to include conditions based on recommendations by federal and state fish and wildlife agencies submitted pursuant to the Fish and Wildlife Coordination Act,<sup>16</sup> to "adequately and equitably protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat)" affected by the project.

<sup>16</sup> 16 U.S.C. §§ 661, et seq.

<sup>&</sup>lt;sup>12</sup> 16 U.S.C. § 1536(a).

<sup>&</sup>lt;sup>13</sup> The St. Regis Band of Mohawk Indians of New York, Erie Boulevard, and the Bureau of Indian Affairs also participated in the development of the PA.

<sup>&</sup>lt;sup>14</sup> 16 U.S.C. § 470s.

<sup>&</sup>lt;sup>15</sup> 16 U.S.C. §803(j)(1).

31. Interior included 10(j) recommendations in their comment letter filed on October 6, 2004. The agency-recommended measures include: (1) the limitation of the daily impoundment fluctuations as described in the Settlement (Article 401); (2) the replacement of the existing seasonal flashboards with year-round flashboards as described in the Settlement (Article 404); (3) continuance of a base flow of 150 cfs (or inflow to the Piercefield impoundment, whichever is less) as described in the Settlement (Article 402); (4) the implementation of the fish protection measures as described in the Settlement (Article 406); (5) the implementation of the downstream fish movement measures as described in the Settlement (Article 407); and (6) the development of a flow monitoring plan as described in the Settlement (Article 405). The conditions of this license are consistent with Interior's 10(j) recommendations and the Settlement.

# COMMENTS ON THE EA

32. On July 15, 2005, the USGS filed comments on the EA, noting that the period of record for the USGS streamflow gage on the Raquette River at Piercefield (USGS station number 04266500) does not end in 2002 as indicated on page 16 of the EA. Rather, data for this station and the downstream Raymondville (USGS station number 04268000) continues to be collected. On July 22, 2005, the ADK commented that they agree the canoe portage should be in the project boundary, and that the town of Altamont in Franklin County has changed its name to town of Tupper Lake.

33. On July 25, 2005, Erie Boulevard filed comments, noting that the EA did not include the Adirondack Park Agency as a signatory to the Settlement, and suggested that minor corrections were needed regarding the daily fluctuation, the geographic scope of the EA, and the ability to establish a plunge pool in the bypassed reach. Erie Boulevard objected to the recommendation to include the canoe portage in the project boundary. Erie Boulevard's objection is discussed below.

## **OTHER ISSUES**

#### Project Boundary

34. The settlement provides that Erie Boulevard will continue to maintain the existing canoe portage, which was a project recreation facility under the original license. The EA therefore recommended that the canoe portage (located northeast of the powerhouse) be included within the project boundary. Erie Boulevard does not dispute that the canoe portage is a project recreational facility, but objects to its inclusion within the boundary because part of the portage is located on state-owned lands within a state park. Standard Article 5 in the new license requires the licensee to obtain all property rights necessary to carry out project purposes,<sup>17</sup> and Erie Boulevard is concerned that it will be unable to

<sup>&</sup>lt;sup>17</sup> See Form L-3, Terms and Conditions of License For Constructed Major Project

comply with the Article 5 requirements as they pertain to the portion of the canoe portage that is on state park lands.<sup>18</sup>

35. Project boundaries are used to designate the geographic extent of the lands, waters, works, and facilities that the license identifies as comprising the licensed project and for which the licensee must hold the rights necessary to carry out the project purposes, including recreation.<sup>19</sup> Since the canoe portage is a recreational facility necessary for project purposes, it must be included within the project boundary. The state and Erie Boulevard point out that the settlement (signed by both entities) documents the agreement pursuant to which the state permits Erie Boulevard to maintain the canoe portage on such lands for the license term.<sup>20</sup> In light of the circumstances in this case,<sup>21</sup> to the extent this agreement does not meet the requirements of standard Article 5 of the license, I waive the Article 5 requirements as they pertain to the portion of the canoe portage that occupies state park lands.<sup>22</sup>

36. For the above reasons, I am ordering that the project boundary be expanded to include the existing canoe portage as part of the project's facilities. Article 203 requires Erie Boulevard to modify the project boundary.

Affecting Navigable Waters of the United States, 54 FPC 1792 at 1818-19 (1975).

<sup>18</sup> See Erie Boulevard's comments on the EA filed on July 25, 2005. Erie Boulevard notes that the provisions of the New York State Constitution prevent the state from conveying its interests in lands of the portage to Erie Boulevard. Furthermore, because it appears that these lands became state park lands sometime after 1992, absent Commission actions required by section 21 of the FPA, 16 U.S.C. § 814, Erie Boulevard would not be able to use eminent domain to acquire an interest in these lands.

<sup>19</sup> See, e.g., 18 C.F.R. § 4.41(h)(2) (2005); and Wisconsin Public Service Corporation, 104 FERC ¶ 61,295 at P 16 (2003). A project boundary does not change property rights: title to lands within the boundary can be owned by someone other than the licensee, so long as the licensee holds the necessary property interests and permits to carry out project purposes. 104 FERC ¶ 61,295 at n. 16 and P 16. Conversely, that a project facility may not be within a project boundary does not obviate a licensee's responsibility to acquire and hold sufficient property rights with respect to that facility.

<sup>20</sup> See New York DEC filing of September 16, 2005; and Erie Boulevard filings of July 25 and September 14, 2005.

<sup>21</sup> See n. 19, supra.

<sup>22</sup> See Erie Boulevard Hydropower, L.P. and Hudson River-Black River Regulating District, 102 FERC ¶ 61,133 (2003).

#### Recreation Plan

37. Erie Boulevard proposes to modify the existing flow notification system to include discharge information for the Piercefield Project,<sup>23</sup> maintain the existing canoe portage, and install more permanent signage and/or blazes along the portage. However, the Settlement does not provide a schedule for when the more permanent signage for the canoe portage would be installed and when the existing flow notification system would be revised to include the Piercefield Project. Also the Settlement does not describe the measures to maintain the canoe portage over the period of any license issued. Article 409 requires Erie Boulevard to develop a recreation plan to ensure that these proposed recreational enhancements are carried out.

# Project Modifications

38. The project features have been revised to include two primary transmission lines: a 385-foot underground transmission line that transmits power from generator number 1 to a Niagara Mohawk Power substation; and a 210-foot overhead transmission line that transmits power from generators number 2 and 3 to a Niagara Mohawk substation.

39. Erie Boulevard proposes to remove the 3.84-mile-long transmission line from Piercefield's project description. Erie Boulevard demonstrated that this transmission line delivers non-project power to a Niagara Mohawk electric substation, and therefore is not a primary transmission line for the Piercefield Project. This license does not include the 3.84-mile long transmission line.

# Administrative Conditions

# Annual Charges

40. The Commission collects annual charges from licensees for administration of the FPA. Article 201 provides for the collection of funds for administration of the FPA.

# Exhibit F and G Drawings

41. The Exhibit F drawings filed with the license application are approved and made part of the license [see Ordering Paragraph (C)]. The Commission requires the licensee to file sets of approved project drawings on microfilm and in electronic file format.

<sup>&</sup>lt;sup>23</sup> Section 3.5 of the Settlement requires that Erie Boulevard modify the flow notification system established for the Middle Raquette River Project (FERC No. 2320). While I cannot require Erie Boulevard to modify another license, this order requires the establishment of a flow notification system for the Piercefield Project.

Article 202 requires the filing of these drawings.

42. The Exhibit G drawings that were filed with the license application do not meet the current Commission requirements for project boundary maps, because a project boundary map must: (1) enclose all the principal project works (e.g., canoe portage facility) necessary for operation and maintenance of the project within the project boundary line; (2) be in a geo-referenced electronic format; (3) have three control points with latitude and longitude or state plane coordinates; and (4) be stamped by a Registered Land Surveyor. Article 203 requires the licensee to file revised Exhibit G drawings meeting the above requirements pursuant to 18 CFR sections 4.39 and 4.41.

## Amortization Reserve

43. The Commission requires that for new major licenses, licensees must set up and maintain an amortization reserve account upon license issuance. Article 204 requires the establishment of the account.

# Headwater Benefits

44. Some projects directly benefit from headwater improvements that were constructed by other licensees, the United States, or permitees. Article 205 requires the licensee to reimburse such entities for these benefits if they were not previously assessed and reimbursed.

# Use and Occupancy of Project Lands and Waters

45. Requiring a licensee to obtain prior Commission approval for every use or occupancy of project land would be unduly burdensome. Therefore, Article 410 allows the licensee to grant permission, without prior Commission approval, for the use and occupancy of project lands for such minor activities as landscape planting. Such uses must be consistent with the purposes of protecting and enhancing the scenic, recreational, and environmental values of the project.

# Review of Final Plans and Specifications

46. Article 301 requires the licensee to provide the Commission's Division of Dam Safety and Inspection (D2SI); New York Regional Engineer (D2SI-New York Regional Engineer) with final contract drawings and specifications – together with a supporting design report consistent with the Commission's engineering guidelines.

47. Article 302 requires the licensee to provide the Commission's D2SI-New York Regional Engineer with cofferdam construction drawings.

48. Where new construction or modifications to the project are involved, the Commission requires licensees to file revised drawings of project features as-built. Article 303 provides for the filing of these drawings.

#### STATE AND FEDERAL COMPREHENSIVE PLANS

49. Section 10(a)(2)(A) of the FPA<sup>24</sup> 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. <sup>25</sup> Under section 10(a)(2)(A), federal and state agencies filed 29 comprehensive plans that address various resources in New York. Of these, the staff identified and reviewed nine comprehensive plans that are relevant to this project. <sup>26</sup> No conflicts were found.

#### APPLICANT'S PLANS AND CAPABILITIES

50. In accordance with sections 10(a)(2)(C) and 15(a) of the FPA,<sup>27</sup> Commission staff evaluated Erie Boulevard's record as a licensee in these areas: (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 services; (7) cost effectiveness of plans; and (8) actions affecting the public. I accept the staff's findings in each of the following areas.

#### Conservation Efforts

51. Section 10(a)(2)(C) of the FPA requires the Commission to consider the extent of electricity consumption efficiency improvement programs in the case of license applicants primarily engaged in the generation or sale of electric power. Erie Boulevard sells all the power generated by the project on a wholesale basis to Niagara Mohawk, a National Grid Company, and does not serve any retail customers. Given the limits of its ability to influence users of electricity generated by the project, Erie Boulevard complies with section 10(a)(2)(C) of the FPA.

<sup>27</sup> 16 U.S.C. §§ 803(a)(2)(C) and 808(a).

<sup>&</sup>lt;sup>24</sup> 16 U.S.C. § 803(a)(2)(A)

<sup>&</sup>lt;sup>25</sup> Comprehensive plans for this purpose are defined at 18 C.F.R. ' 2.19.

<sup>&</sup>lt;sup>26</sup> The list of applicable plans can be found in section IX of the environmental assessment for the project.

#### Compliance History and Ability to Comply with the New License

52. Commission staff reviewed Erie Boulevard's compliance with the terms and conditions of the existing license. Staff finds that Erie Boulevard's overall record of making timely filings and compliance with its license is satisfactory. Staff concludes that Erie Boulevard has or can acquire the resources and expertise necessary to carry out its plans and comply with all articles and terms and conditions of a new license.

#### Safe Management, Operation, and Maintenance of the Project

53. Erie Boulevard owns and operates the project, which is classified in accordance with Commission standards as having a high hazard potential rating.

54. Commission staff reviewed Erie Boulevard's management, operation, and maintenance of the Piercefield Project pursuant to the requirements of 18 C.F.R. Part 12 and the Commission's Engineering Guidelines and periodic Independent Consultant's Safety Inspection Reports. Staff concludes that the dam and other project works are safe, and that the licensee has the ability to continue to safely manage, operate, and maintain these facilities over the term of a new license.

## Ability to Provide Efficient and Reliable Electric Service

55. Commission staff reviewed Erie Boulevard's plans and its ability to operate and maintain the project in a manner most likely to provide efficient and reliable electric service. Erie Boulevard has been operating the project in an efficient manner within the constraints of the existing license. Staff concludes that Erie Boulevard is capable of operating the project to provide efficient and reliable electric service in the future.

## Need for Power

56. To assess the need for power, staff looked at the needs in the operating region in which the project is located. The project is located in the Northeast Power Coordinating Council region of the North American Electric Reliability Council (NERC). According to NERC's 2004 Long-Term Reliability Assessment,<sup>28</sup> summer peak demand in the region is expected to increase at an average rate of 1.2 percent per year during the period from 2004 through 2013. Staff concludes that the region has a need for power over the near term, and that the continued operation of the Piercefield Project would be useful in meeting a small part of the regional need for power. Power generated from the project would displace non-renewable, fossil-fueled generation and contribute to a diversified generation mix.

<sup>&</sup>lt;sup>28</sup> 2004 Long-Term Reliability Assessment, The Reliability of Bulk Electric Systems in North America, NERC, December 2004.

#### Transmission Services

57. The project includes a 385-foot-long underground primary transmission line that transmits power from generator number 1 to Niagara Mohawk substation; and a 210-foot-long overhead primary transmission line that transmits power from generators number 2 and 3 to Niagara Mohawk substation.

## Cost-Effectiveness of Plans

58. Erie Boulevard proposes a number of facility and operational changes to enhance water quality, fishery, and recreation resources. Based on Erie Boulevard's record as an existing licensee, staff concludes that these plans are likely to be carried out in a cost effective manner.

# Actions Affecting the Public

59. Erie Boulevard pays taxes annually to local and state governments, and the project provides employment opportunities and attracts those interested in various forms of available recreation. Staff concludes that the various environmental and recreational enhancement measures approved in this license would benefit the public.

# **PROJECT ECONOMICS**

60. In determining whether to issue a new license for an existing hydroelectric project, the Commission considers a number of public interest factors, including the economic benefits of project power. Under the Commission's approach to evaluating the economics of hydropower projects, as articulated in Mead Corp.,<sup>29</sup> 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 of 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.

61. In applying this analysis to the Piercefield Project, we have considered two options: Erie Boulevard's proposal and the project as licensed herein. As proposed by Erie Boulevard, the levelized annual cost of operating the Piercefield Project is \$810,760, or \$52.87/megawatt-hour (MWh). The proposed project would generate an estimated average of 15,335 MWh of energy annually. When we multiply our estimate of average

<sup>&</sup>lt;sup>29</sup> 72 FERC & 61,027 (1995).

generation by the alternative power cost of \$60.12/MWh,<sup>30</sup> we get a total value of the project's power of \$921,940 in 2005 dollars. To determine whether the proposed project is currently economically beneficial, staff subtracts the project's cost from the value of the project's power.<sup>31</sup> Therefore, in the first year of operation, the project would cost \$111,180, or \$7.25/MWh, less than the likely alternative cost of power.

62. As licensed herein with the mandatory conditions and staff measures, the levelized annual cost of operating the project would be about \$811,530, or \$52.92/MWh. Based on an estimated average of 15,335 megawatt-hours as licensed, the project would produce power valued at \$921,940 when multiplied by the \$60.12/MWh value of the project's power. Therefore, in the first year of operation, project power would cost \$110,410, or \$7.20/MWh, less than the likely cost of alternative power.

63. In considering public interest factors, the Commission takes into account that hydroelectric projects offer unique operational benefits to the electric utility system (ancillary service benefits). These benefits include their capability to provide an almost instantaneous load-following response to dampen voltage and frequency instability on the transmission system, system-power-factor-correction through condensing operations, and a source of power available to help in quickly putting fossil-fuel based generating stations back on line following a major utility system or regional blackout.

# **COMPREHENSIVE DEVELOPMENT**

64. Sections 4(e) and 10(a)(1) of the FPA<sup>32</sup> respectively, require the Commission to give equal consideration to the power development purposes and to the purposes of

<sup>31</sup> Details of staff's economic analysis for the project as licensed herein and for various alternatives are included in the EA issued June 2005.

<sup>32</sup> 16 U.S.C. §§ 797(e) and 803(a)(1).

<sup>&</sup>lt;sup>30</sup> Staff's estimate of the cost of alternative power is based on the current cost of energy generation in natural gas-fueled combined cycle combustion turbine (CCCTurbine) generating plants in the Middle Atlantic Region, plus a value of \$96 per kilowatt year for the project's average annual capacity of 2,700 kW. Staff computed the regional energy value to be \$43.22 per MWh and the capacity value to be \$16.90 per MWh, for a total power value of \$60.12 per MWh. Staff's estimate of the energy value is based on the cost of fuel that would be displaced by the hydroelectric generation in a natural gas-fueled CCCTurbine generating plant, operating at a heat rate of 6,200 Btu/kWh. Staff estimated the cost of fuel based on the Energy Information Administration's reference-case estimate of average real fossil fuel costs for electric utilities, as published by the Energy Information Administration (EIA) in their <u>Annual Energy Outlook for 2005</u> and its supplemental data on the EIA Internet Homepage.

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 judgment 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.

65. The EA for the Piercefield Project contains background information, analysis of effects, support for related license articles, and the basis for a finding that the project will not result in any major, long-term adverse environmental effects. The project will be safe if operated and maintained in accordance with the requirements of this license.

66. Based on our independent review and evaluation of the Piercefield Project, recommendations from the resource agencies and other stakeholders, and the no-action alternative, as documented in the EA, I have selected the proposed Piercefield Project, with the staff-recommended measures, and find that it is best adapted to a comprehensive plan for improving or developing the Raquette River.

67. I selected this alternative because: (1) issuance of a new license will serve to maintain a beneficial, dependable, and an inexpensive source of electric energy; (2) the required environmental measures will protect and enhance fish and wildlife resources, water quality, recreational resources and historic properties; and (3) the 2.7-MW of electric energy generated from renewable resource will continue to offset the use of fossil-fueled, steam-electric generating plants, thereby conserving nonrenewable resources and reducing atmospheric pollution.

## LICENSE TERM

68. Section 15(e) of the FPA,<sup>33</sup> provides that any new license issued shall be for a term that the Commission determines to be in the public interest, but not less than 30 years or more than 50 years. The Commission's general policy is to establish 30-year terms for projects with little or no redevelopment, new construction, new capacity, or environmental mitigation and enhancement measures; 40-year terms for projects with extensive measures.

69. This license requires a moderate amount of new construction, including retrofitting the project's stanchion spillway structure with controllable discharge gates and replacing existing trashracks with 1-inch clear spacing trashracks. The license also

<sup>&</sup>lt;sup>33</sup> 16 U.S.C. § 808(e).

requires a moderate amount of environmental measures, such as providing downstream fish movement flows. Therefore, a 40-year license for the Piercefield Project is appropriate.

70. On October 6, and 7, 2004, Interior and New York DEC, respectively, filed comments requesting that the Commission issue a 30-year license for the Piercefield Project. The entities stated that the licenses for the four downstream Raquette River Projects<sup>34</sup> are due to expire on December 31, 2033, and by issuing a 30-year license to the Piercefield Project, a single basin-wide approach could be used in the future to relicense the five projects.<sup>35</sup>

71. While it is the Commission's policy generally to coordinate to a reasonable extent the license expiration dates of projects in a river basin, in order that future relicense proceedings can be coordinated, <sup>36</sup> it is not appropriate to do so in this case. To ensure that Piercefield Project's license expiration would coincide with the other four Raquette River Projects, and that a single basin-wide approach for relicensing could be used, the Commission would have to issue the Piercefield Project a 28-year license, which is prohibited by section 15(e) of the FPA. By issuing a 30-year license, the relicensing of the four Raquette River Projects would already have commenced nearly 2 years prior to the start of the Piercefield Project relicensing, limiting the effectiveness of a basin-wide approach. Therefore, because the license requires a moderate amount of new construction and environmental measures and little opportunity for a basin-wide approach as described above, a 40-year license is appropriate.

#### The Director orders:

(A) This license is issued to Erie Boulevard Hydropower, L.P. (licensee), for a period of 40 years, effective November 1, 2005, to operate and maintain the Piercefield Project. This license is subject to the terms and conditions of the FPA, which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the FPA.

<sup>&</sup>lt;sup>34</sup> The four Raquette River Projects include the Carry Falls Project No. 2060, Upper Raquette River Project No. 2084, Middle Raquette River Project No. 2320, and Lower Raquette River Project No. 2330.

<sup>&</sup>lt;sup>35</sup> Erie Boulevard filed a response on November 26, 2004, arguing that the license conditions proposed in the settlement warranted a 40-year license.

<sup>&</sup>lt;sup>36</sup> In issuing new and subsequent licenses, the Commission will coordinate the expiration dates of licenses to the maximum extent possible, to maximize future consideration of cumulative impacts at the same time in contemporaneous proceedings at relicensing. See 18 C.F.R. § 2.23.

(B) The project consists of:

(1) All lands, to the extent of the licensee's interests in those lands, enclosed by the project boundary shown by Exhibit G filed October 20, 2003:

Exhibit G Drawing	FERC No. 7387	Description
Sheet G-1	1001	Project Detail Map
Sheet G-2	1002	Project Detail Map
Sheet G-3	1003	Project Detail Map
Sheet G-4	1004	Project Detail Map

(2) Project works consisting of: (a) a dam comprised of: (1) a 495-foot-long concrete retaining wall/dike on the right shoreline, having a top width of 2 feet-2inches and top elevations of varying from 1,549.0 feet mean sea level (msl) to 1,550.0 feet msl; (2) a 620-foot-long concrete and masonry stone retaining wall located along the left shoreline; (3) a 118-foot-long stanchion type stop log spillway consisting of four needle beam bays; (4) a 294-foot-long, 22-foot-high ogee spillway section with a crest elevation of 1540.0 feet msl, and surmounted by 2-foot-high flashboards; and (5) a 110-foot-long concrete masonry forebay retaining wall, having a varying width of 40 feet to 55 feet with an average depth of 17 feet; (b) a reservoir having a surface area of 370 acres at normal pool elevation of 1,542.0 feet msl; (c) a powerhouse containing three generating units having a total rated capacity of 2,700 kilowatts; (d) a 385-foot-long, 46-kilovolt (kV) underground primary transmission line; (e) a 210-foot-long, 46-kV overhead primary transmission line; and (f) appurtenant facilities.

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

Exhibit A: The following sections of exhibit A filed on October 20, 2003, and as modified on April 28, 2004:

Pages A-1 through A-10, which the applicant modified by deleting from the description of project facilities those portions describing the 3.84-mile-long, 46-kV transmission line from the Piercefield-Tupper Lake No. 39 Project to the Niagara Mohawk Substation.

Exhibit F: The following sections of exhibit F filed on October 20, 2003, and modified April 28, 2004:

Sheet F-1	1005	General Plan, Spillway, Forebay, Stanchion Spillway and Retaining Walls, Elevation and Sections
Sheet F-2	1006	Powerhouse Plans, Elevation and Sections

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

(C) The Exhibits A and F described above are approved and made part of this license. The exhibit G drawings filed as part of the application for license do not conform to Commission regulations and are not approved.

(D) This license is subject to the conditions submitted by the New York State Department of Environmental Conservation under section 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1431(a)(1), as those conditions are set forth in Appendix A to this order.

(E) This license is also subject to the articles set forth in Form L-3 (Oct. 1975), entitled Terms and Conditions of License for Constructed Major Project Affecting Navigable Waters of the United States (See 54 FPC 1792 *et seq.*), and the following additional articles:

Article 201. *Administrative Annual Charges*. The licensee shall pay the United States the following annual charges, effective the first day of the month in which the license is effective, and as determined in accordance with the provisions of the Commission's regulations in effect from time to time, for the purposes of reimbursing the United States for the cost of administration of Part I of the Federal Power Act. The authorized installed capacity for that purpose is 2,700 kilowatts.

Article 202. *Exhibit Drawings*. Within 45 days of the effective date of this license, the licensee shall file the approved exhibit drawings in aperture card and electronic file formats.

(a) Three sets of the approved exhibit drawings shall be reproduced on silver or gelatin 35mm 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 (e.g., P-7387-1001 through P-7387-1006) shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number shall be typed on the upper right

corner of each aperture card. Additionally, the Project Number, FERC Exhibit (i.e., F-1, etc.), Drawing Title, and date of this license shall be typed on the upper left corner of each aperture card.

Two of the sets of aperture cards shall be filed with the Secretary of the Commission, ATTN: OEP/DHAC. The third set shall be filed with the Commission's Division of Dam Safety and Inspections New York Regional Office.

(b) The licensee shall file two separate sets of exhibit drawings in electronic raster format with the Secretary of the Commission, ATTN: OEP/DHAC. A third set shall be filed with the Commission's Division of Dam Safety and Inspections New York Regional Office. Exhibit F drawings must be identified as (CEII) material under 18 CFR §388.113(c). Each drawing must be a separate electronic file, and the file name shall include: FERC Project-Drawing Number, FERC Exhibit, Drawing Title, date of this license, and file extension in the following format [P-7387-1001, G-1, Project Boundary, MM-DD-YYYY.TIF]. Electronic drawings shall meet the following format specification:

IMAGERY - black & white raster file FILE TYPE – Tagged Image File Format, (TIFF) CCITT Group 4 RESOLUTION – 300 dpi desired, (200 dpi min) DRAWING SIZE FORMAT – 24" X 36" (min), 28" X 40" (max) FILE SIZE – less than 1 MB desired

Article 203. *Exhibit G Drawings*. Within 90 days of the effective date of the license, the licensee shall file, for Commission approval, revised Exhibit G drawings enclosing within the project boundary all principal project works necessary for operation and maintenance of the project, including the existing canoe portage located on the right shoreline, northeast of the powerhouse and the two primary transmission lines. The Exhibit G drawings must comply with sections 4.39 and 4.410f the Commission's regulations.

Article 204. *Amortization Reserve*. Pursuant to section 10(d) of the Federal Power Act, a specified reasonable rate of return upon the net investment in the project shall be used for determining surplus earnings of the project for the establishment and maintenance of amortization reserves. The licensee shall set aside in a project amortization reserve account at the end of each fiscal year one half of the project surplus earnings, if any, in excess of the specified rate of return per annum on the net investment. To the extent that there is a deficiency of project earnings below the specified rate of return per annum for any fiscal year, the licensee shall deduct the amount of that deficiency from the amount of any surplus earnings subsequently accumulated, until absorbed. The licensee shall set aside one-half of the remaining surplus earnings, if any, cumulatively computed, in the project amortization reserve account. The licensee shall maintain the amounts established in the project amortization reserve account until further order of the Commission.

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

Article 205. *Headwater Benefits*. If the licensee's project was directly benefited 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 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 301. *Contract Plans and Specifications*. At least 60 days prior to the start of any construction, the licensee shall submit one copy of its plans and specifications and a supporting design document to the Commission's Division of Dam Safety and Inspections (D2SI) – New York Regional Engineer, and two copies to the Commission (one of these shall be a courtesy copy to the Director, D2SI). A supporting design report should be submitted for the new gates proposed and for the year-round flashboards. The report should include calculations showing at what level overtopping the year-round flashboards will fail so the project can safely pass the Inflow Design Flood. The submittal to the D2SI-New York Regional Engineer must also include as part of preconstruction requirements: a Quality Control and Inspection Program, Temporary Construction Emergency Action Plan, and Soil Erosion and Sediment Control Plan. The licensee may not begin construction until the D2SI-New York Regional Engineer has reviewed and commented on plans and specifications, determined that all preconstruction requirements have been satisfied, and authorized start of construction.

Article 302. *Cofferdam Construction Drawings*. Before starting construction, the licensee shall review and approve the design of contractor-designed cofferdams and deep excavations and shall make sure construction of cofferdams and deep excavations is consistent with the approved design. At least 30 days before starting construction of the cofferdam, the licensee shall submit one copy to the Commission's D2SI – New York Regional Engineer and two copies to the Commission (one of these copies shall be a

courtesy copy to the Commission's Director, Division of Dam Safety and Inspections), of the approved cofferdam construction drawings and specifications and the letters of approval.

Article 303. *As-built Drawings*. Within 90 days of completion of construction of the facilities authorized by this license (e.g., stanchion spillway), the licensee shall file for Commission approval, revised exhibits A, F, and G, as applicable, to describe and show those project facilities as built. A courtesy copy shall be filed with the Commission's Division of Dam Safety and Inspections – New York Regional Engineer, the Director, Division of Dam Safety and Inspections, and the Director, Division of Hydropower Administration and Compliance.

Article 401. *Mode of Operation.* As required by special condition B.7. of Appendix A and as described in section 3.1 of Appendix B of this order, and upon the effective date of the license, the licensee shall operate the Piercefield Project to minimize reservoir elevation fluctuations. The licensee shall limit daily impoundment fluctuations to a 1.0 foot operational band, measured in a downward direction from the top of the flashboard (1,542.0 feet msl) when in place or the crest of the dam (1,540.0 feet msl) when flashboards are not in place, for the protection of fish habitat in the project impoundment and downstream reaches of the Raquette River. The water storage available within this operational band shall not be used for pulsing or peaking operation.

Impoundment surface elevations higher than the top of the flashboards, or the dam crest as applicable, are outside of normal impoundment elevations and are not considered as a utilization of the allowed impoundment fluctuation. The 1.0 foot operational band shall not be used to operate in a peaking mode.

The licensee may temporarily modify normal operational mode or the impoundment elevations if required by operating emergencies beyond its control, or for short periods upon mutual agreement between the licensee, the New York State Department of Environmental Conservation, and the U.S. Fish and Wildlife Service. If the impoundment elevations are modified pursuant to section 3.1 of Appendix B to this order, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

Article 402. *Baseflows*. As required by special condition B.5. of Appendix A and as described in section 3.4 of Appendix B of this order, and upon the effective date of the license, a minimum base flow of 150 cubic feet per second or inflow, whichever is less, shall be maintained in the Raquette River below the project tailrace.

The licensee may temporarily modify these minimum flows if required by operating emergencies beyond its control, or for short periods upon mutual agreement between the licensee, the New York State Department of Environmental Conservation, and the U.S. Fish and Wildlife Service. If the impoundment elevations are modified pursuant to section 3.4 of Appendix B to this order, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

Article 403. *Installation of Gates.* As required by special condition B.7. of Appendix A and as described in section 3.2 of Appendix B of this order, the licensee shall retrofit the project's stanchion spillway section with one or more readily operated gates to provide an operable means of control for the impoundment elevation and to provide a measure of protection for the year-round flashboards required by Article 404. The gates shall be installed at the Piercefield Project within 24 months of the effective date of the license.

The plan to retrofit the gates shall be developed in consultation with the New York State Department of Environmental Conservation (New York DEC) and the U.S. Fish and Wildlife Service (FWS), and submitted for Commission approval within 6 months of the effective date of the license. The licensee shall allow a minimum of 30 days for the New York DEC and the FWS 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.

At least 12 months before retrofitting the project's stanchion spillway section with one or more gates, the licensee shall file for Commission approval functional design drawings of the gate(s). Also, the licensee shall provide a schedule for completing the installation of the gate(s). The Commission reserves the right to require changes to the gate design depicted in the drawings. Upon Commission approval, the licensee shall construct the gate(s), including any changes required by the Commission.

Article 404. *Year-round Flashboards*. As required by special condition B.7. of Appendix A and as described in section 3.2 of Appendix B of this order, the licensee shall replace the existing seasonal flashboards with year-round two-foot flashboards to reduce seasonal fluctuation of the impoundment. The licensee shall file a plan with the Commission within six months of the effective date of this license. The plan shall include measures to be taken to reinstall the flashboards when damaged by overtopping events or other incidents. The plan shall include a schedule to install the new flashboards within 24 months of the effective date of this license.

The plan to install year-round flashboards shall be developed in consultation with the New York State Department of Environmental Conservation (New York DEC) and the U.S. Fish and Wildlife Service (FWS). The licensee shall allow a minimum of 30 days for the New York DEC and the FWS 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. The licensee shall complete implementation of the plan, including any changes required by the Commission, within 12 months of Commission approval of the plan

Article 405. *Flow and Water Level Monitoring*. The streamflow and water level monitoring plan required by Special Condition B.6. of Appendix A and as described in section 3.6 of Appendix B of this order shall include the following additional measures to ensure compliance with the impoundment operational band, minimum base flow below the project, and fish movement flows required by, respectively, special conditions B.5., B.7., and B.8 of Appendix A. The plan shall be developed in consultation with the New York State Department of Environmental Conservation (New York DEC) and the U.S. Fish and Wildlife Service (FWS), and submitted for Commission approval within six months of the effective date of the license. The plan shall detail the mechanisms and structures, including any periodic maintenance and calibration necessary for any installed devices or gages, to ensure that the devices work properly, and shall specify how often impoundment elevations, minimum flows, and operational compliance will be recorded and reported to the New York DEC and FWS.

The plan shall include, at a minimum, the requirements of section 3.6 of Appendix B of this order and the following:

(1) measures to monitor instream flow releases to verify the minimum base flow release in the Raquette River below the Piercefield Project;

(2) measures to monitor impoundment elevations;

(3) measures to provide an appropriate means of independent verification of water levels by the New York DEC and the FWS;

(4) provisions for the installation of a permanent staff gage to provide verification of impoundment levels, to the nearest 0.1 foot, and a staff gage in the tailrace area, the location of the gages to be determined in consultation with the New York DEC and the FWS; the staff gages shall be visible to the general public, with access to the gages provided to the New York DEC and the FWS; all gages and other equipment shall be operational and fully calibrated within 9 months of Commission approval of the plan.

(5) measures to keep accurate and sufficient records of impoundment elevations and instream flows to the satisfaction of the New York DEC, and make the data available in a format, and at intervals, as requested by the New York DEC; (6) provisions to provide to the New York DEC a seven-day-per-week contact person to provide immediate verification of monitored flows and responses to questions about abnormal or emergency conditions; and

(7) measures to keep accurate and sufficient records of any uncontrollable station outage that causes a reduction in the required instream flows at the Piercefield Project.

The plan shall include provisions consistent with the emergency notification requirements for project operation and the instream flows required by this license. In addition, should impoundment elevations or instream flows, as measured according to the approved monitoring plan, fall below the levels required by this license, the plan shall include a provision whereby the licensee files with the Commission a report of the incident within 30 days of the incident.

The report shall, to the extent possible, identify the cause, severity, and duration of the incident, and any observed or reported adverse environmental impacts resulting from the incident. The report also shall include:

(1) operational data necessary to determine compliance with this article;

(2) a description of any corrective measures implemented at the time of the occurrence and the measures implemented or proposed to ensure that similar incidents do not recur; and

(3) comments or correspondence, if any, received from the New York DEC and FWS regarding the incident.

Based on the report and the Commission's evaluation of the incident, the Commission reserves the right to require modifications to project facilities and operations to ensure future compliance.

The licensee shall include with the streamflow and water level monitoring plan documentation of consultation with New York DEC and FWS, copies of comments and recommendations on the completed plan after it has been prepared and provided to the New York DEC and FWS, and specific descriptions of how the New York DEC and FWS's comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the New York DEC and the FWS 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. The licensee shall complete implementation of the plan, including any changes required by the Commission, within 12 months of Commission approval of the plan.

Article 406. *Trashracks*. As required by special condition B.8. of Appendix A and as described in section 3.3 of Appendix B of this order, the licensee shall, by December 31, 2012, replace the trashrack at the Piercefield Project to provide bar racks with 1-inch clear spacing between the bars. At least six months before replacing the trashracks, the licensee shall file, for Commission approval, a plan, with design drawings, to install the trashracks. The plan shall, at a minimum, include functional design drawings showing the specifications of the permanent trashracks and a schedule for the installation.

The licensee shall prepare the plans and design drawings in consultation with the New York State Department of Environmental Conservation (New York DEC) and the U.S. Fish and Wildlife Service (FWS). The licensee shall include with the plans documentation of consultation with the New York DEC and FWS, copies of comments and recommendations on the plans after they have been prepared and provided to the New York DEC and FWS, and specific descriptions of how the New York DEC and FWS's comments are accommodated by the plans. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the 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 replacement trashrack design depicted in the drawings. Upon Commission approval, the licensee shall construct the trashracks, including any changes required by the Commission.

Article 407. *Fish Movement*. As required by special condition B.8. of Appendix A and as described in section 3.3 of Appendix B of this order, the licensee shall provide a downstream fish movement facility and flow release at the Piercefield Project. The downstream movement facility shall be constructed in the stanchion spillway and shall include construction of a plunge pool and flow channel as necessary to provide safe passage for fish. The downstream fish movement facilities shall be completed within 24 months of the effective date of the license.

The licensee shall also provide a continuous minimum flow of 20 cubic feet per second, or inflow, whichever is less, through the fish movement facility when completed.

At least six months before constructing the downstream fish movement facility, the licensee shall file for Commission approval functional design drawings of the facility. Also, the licensee shall provide a schedule for completing the installation of the downstream fish movement facility.

Article 408. *Reservation of Authority to Prescribe Fishways*. Authority is reserved to the Commission to require the licensee to construct, operate, and maintain, or to provide for the construction, operation, and maintenance of such fishways as may be prescribed by the Secretary of the Interior pursuant to section 18 of the Federal Power Act.

Article 409. *Recreation Management Plan*. Within one year of the effective date of the license, the licensee shall file for Commission approval a recreation plan. The plan, at a minimum, shall include the following:

- Description of measures, including an implementation schedule to: (a) improve the flagging along the canoe portage route with more permanent signage and/or blazes as described in section 3.5 of Appendix B of this order and (b) provide a flow notification system;
- (2) measures to provide an annual scheduled recreational release on the last Saturday of June as described in section 3.5 of Appendix B of this order;
- (3) measures to manage the facilities over the term of any new license issued;
- (4) measures for soil erosion and sedimentation control during the replacement of the flagging along the canoe portage route; and
- (5) a discussion of how the needs of the disabled were considered in the planning and design of each recreation facility.

The licensee shall prepare the recreation plan after consultation with the New York State Department of Environmental Conservation (New York DEC) and the Adirondack Mountain Club (ADK). 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 New York DEC and ADK, and specific descriptions of how the New York DEC and ADK comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the New York DEC and ADK to comment and make recommendations prior to filing the plan with the Commission for approval. 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. No grounddisturbing or land-clearing activities for new recreation facilities shall begin until the licensee is notified by the Commission that the recreation plan is approved. Upon approval, the licensee shall implement the plan, including any changes required by the Commission. Article 410. *Historic Properties Management Plan.* Upon the effective date of the license, the licensee shall implement the "Programmatic Agreement Among the Federal Energy Regulatory Commission and the New York State Historic Preservation Officer (SHPO), for Managing Historic Properties that may be Affected by a License Issuing to the Erie Boulevard Hydropower, L.P., for the Continued Operation and Maintenance of the Piercefield Hydroelectric Project in St. Lawrence and Franklin Counties, New York," executed on January 18, 2005, including but not limited to the Historic Properties Management Plan (HPMP) for the project. In the event that the Programmatic Agreement is terminated, the licensee shall implement the provisions of its approved HPMP. The Commission reserves the authority to require changes to the HPMP at any time during the term of the license. If the Programmatic Agreement is terminated prior to Commission approval of the HPMP, the Licensee shall obtain approval before engaging in any ground disturbing activities or taking any other action that may affect any historic properties within the project's area of potential effect.

Article 411. Use and Occupancy. (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.

(b) The type of use and occupancy of project lands and waters 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 water craft 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 impoundment shoreline. To implement this paragraph (b), the licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project lands and waters, which may be subject to the payment of a reasonable fee to cover the licensee's costs of administering the permit program. The Commission reserves the right to require the licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (b) and to require modification of those standards, guidelines, or procedures.

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

public marina; (6) recreational development consistent with an approved Exhibit R or approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from project waters at normal surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year. At least 60 days before conveying any interest in project lands under this paragraph (d), the licensee must submit a letter to the Director, Office of Energy Projects, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G or K map may be used), the nature of the proposed use, the identity of any federal or state agency official consulted, and any federal or state approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the licensee to file an application for prior approval, the licensee may convey the intended interest at the end of that period.

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

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

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

(3) The instrument of conveyance must include the following covenants running with the land: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; (ii) the grantee shall take all reasonable precautions to ensure 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 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.

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

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

J. Mark Robinson Director Office of Energy Projects

#### **APPENDIX A**

New York State Department of Environmental Conservation Certification Under Section 401 of the Federal Power Act

Water Quality Certificate Conditions for the Piercefield Hydroelectric Project Issued April 4, 2004, Under Section 401 of the Federal Clean Water Act by the New York State Department of Environmental Conservation.

#### NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

#### Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

#### Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

#### Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights of way that may be required to carry out the activities that are authorized by this permit.

#### Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

#### **GENERAL CONDITIONS**

#### **General Condition 1: Facility Inspection by the Department**

The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department. A copy of this permit, including all referenced maps, drawings and special conditions, must he available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

# **General Condition 2: Relationship of this Permit to Other Department Orders and Determinations**

Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

#### **General Condition 3: Applications for Permit Renewals or Modifications**

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

The permittee must submit a renewal application at least:

a) 180 days before expiration of permits for State Pollutant Discharge Elimination System (SPDES), Hazardous Waste Management Facilities (HWMF), major Air Pollution Control (Alt) and Solid Waste Management Facilities (SWMF); andb) 30 days before expiration of all other permit types.

Submission of applications for permit renewal or modification are to be submitted

to:

NEW YORK DEC Chief Permit Administrator 625 Broadway Albany, NY 12233 1750 Telephone (518)402 9167

# **General Condition 4: Permit Modifications, Suspensions and Revocations by the Department**

The Department reserves the right to modify, suspend or revoke this permit in accordance with 6 NYCRR Part 621. The grounds for modification, suspension or revocation include:

a) materially false or inaccurate statements in the permit application or supporting papers;

b) failure by the permittee to comply with any terms or conditions of the permit;c) exceeding the scope of the project as described in the permit application;d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;

e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

#### CERTIFICATION

1. The New York State Department of Environmental Conservation ("Department" or "NYS DEC") hereby certifies:

• the Department has reviewed the certificate holder's Application for Federal Hydroelectric License (hereafter referred to as "the Application") and all other available pertinent information, including the Settlement Agreement filed with the Federal Energy Regulatory Commission (FERC) in October, 2003;

• the project will comply with Sections 301, 302, 303, 306 and 307 of the Federal Water Pollution Control Act as amended and as implemented by the limitations, standards and criteria of the state statutory and regulatory requirements set forth in 6NYCRR Section 608.9(a); and

• the project will comply with applicable New York State effluent limitations, water quality standards and thermal discharge criteria set forth in 6NYCRR Parts 700-706.

This Water Quality Certification is issued pursuant to Section 401 of the Federal Water Pollution Control Act (33 USC 1341).

**CONTACTS**: Except as otherwise specified, all contacts with the Department concerning this certificate shall be addressed to:

New York State Department of Environmental Conservation Regional Permit Administrator 317 Washington Street, Watertown, NY 13601

Written submissions to the Department must include five (5) complete copies of the submission.

#### SPECIAL CONDITIONS

#### A. ADMINISTRATION

1. This certificate includes and incorporates the Piercefield Hydroelectric Project Settlement Agreement ("Settlement") dated August 19, 2003.

2. <u>Inspections:</u> The project, including relevant records, is subject to inspection at reasonable hours and intervals, upon reasonable notice to the certificate holder, by an authorized representative of the Department to determine whether the applicant is complying with this certification. A copy of this certification, including the Settlement dated August 19, 2003, as well as the FERC license and all pertinent maps, drawings and special conditions must be available for inspection by Department staff during such inspections at the project.

3. <u>Emergencies</u>: With the exception of emergency provisions described in the Settlement (see subsections 3.1, 3.2, 3.3 and 3.4), the following procedures shall apply to activities conducted at the Project in response to an emergency:

Prior to commencement of emergency activities, the NYS DEC must be notified and must determine whether to grant approval. If circumstances require that emergency activities be taken immediately such that prior notice to the NYS DEC is not possible, then the NYS DEC must be notified by the Certificate Holder(s) within 24 hours of commencement of the emergency activities. In either case, notification must be by certified mail, telegram, or other written form of communication, including fax and electronic mail. This notification must be followed within 3 weeks by submission of the following information:

a) a description of the action;

- b) location map and plan of the proposed action;
- c) reasons why the situation is an emergency.

All notifications, requests for emergency authorizations and information submitted to support such requests shall be sent to the Regional Permit Administrator at the address listed above.

4. <u>Modifications and Revocations:</u> The DEC reserves the right to modify or revoke this certificate when:

a) the scope of the authorized activity is exceeded or a violation of any condition of this certificate or provisions of the ECL and pertinent regulation is found;

b) the certificate was obtained by misrepresentation or failure to disclose relevant facts;

c) new material information is discovered;

d) environmental conditions, relevant technology, or applicable law or regulation have materially changed since the certificate was issued.

#### **B. OPERATING CONDITIONS**

5. <u>Base Flows</u>: The certificate holder shall maintain a baseflow in accordance with the Settlement, in particular, Section 3.4.

6. <u>Flow Monitoring</u>: The certificate holder shall develop a stream flow and water level monitoring plan consistent with the Settlement, in particular, Section 3.6.

7. <u>Impoundment Fluctuations</u>: The project reservoir shall be operated in accordance with the Settlement (see Sections 3.1 and 3.2). Alternate impoundment operating plans must be reviewed and approved by NYS DEC prior to being implemented. Emergencies shall be dealt with in accordance with Special Condition #3 of this Certificate.

8. <u>Fish Protection and Downstream Fish Movement</u>: Fish protection provisions and downstream fish movement provisions shall be provided in accordance with the Settlement (see Section 3.3).

#### **B. PROJECT MAINTENANCE AND CONSTRUCTION**

note: All matters pertaining to "Project Maintenance and Construction" shall be addressed to:

Regional Permit Administrator New York, State Department of Environmental Conservation 317 Washington Street Watertown, NY 13601

9. <u>Maintenance Dredging</u>: The certificate holder shall install and maintain appropriate turbidity control structures while conducting any maintenance dredging activities in the intake/forebay area of the Project.

10. <u>Sediment Analysis and Disposal</u>: The certificate holder must sample any sediments to be disturbed or removed from the project waters and teat them for contaminants. Sampling and testing shall be accomplished according to a protocol submitted to and approved by the Department prior to sampling. Prior to dredging or other excavation, the certificate holder must secure Department approval for all disposal or interim holding locations for any sediments to be removed from the project waters.

11. <u>Erosion and Sediment Control</u>: The certificate holder shall ensure that the following erosion and sediment/contaminant control measures, at a minimum, are adhered to during routine maintenance and construction that may result in sediments/contaminants entering the project reservoir or the Raquette River:

a) Isolate in-stream work from the flow of water and prevent discolored (turbid) discharges and sediments caused by excavation, dewatering and construction activities from entering the waters of the Raquette River.

b) Prohibit heavy construction equipment from operating below the mean high water level of the project reservoir and the Raquette River until the work area is protected by a watertight structure and dewatered.

c) Minimize soil disturbance, grade so as to prevent or minimize erosion and provide temporary and/or permanent stabilization of all disturbed areas and stockpiles to minimize the potential for erosion and subsequent sedimentation within the project reservoir or the Raquette River.

d) Protect all waters from contamination by deleterious materials such as wet concrete, gasoline, solvents, epoxy resins or other materials used in construction, maintenance and operation of the project.

e) Install and maintain erosion control structures on the down slope of all disturbed areas to prevent eroded material from entering the project reservoir or the Raquette River. Erosion control structures must be installed before commencing any activities involving soil disturbance and all erosion control structures must be maintained in a fully functional condition.

f) Ensure complete removal of all dredged/excavated material and construction

debris from the bed and banks of the project reservoir and the Raquette River in the vicinity of the Project.

g) Ensure that all temporary fill and other materials placed in the waters of the river are completely removed, immediately upon completion of construction, unless otherwise directed by the Department.

12. <u>Placement of cofferdams, construction of temporary access roads or ramps or other</u> temporary structures which encroach upon the bed or banks of the Raquette River or the project reservoir: The design of all such structures must be approved by the Department prior to installation.

13. <u>River Flow</u>: During any period of maintenance and/or construction activity, the certificate holder shall continuously maintain adequate flows immediately downstream of work sites consistent with the provisions of this certificate.

14. <u>Construction Drawdowns</u>: Whenever construction and/or maintenance activities require that the water level of project reservoirs be lowered, it shall not be drawn down more than I foot per hour. During refill, the water level of the impoundment shall not be allowed to rise more than I foot per hour.

15. <u>Turbidity Monitoring</u>: During maintenance or construction-related activities in or near the Raquette River or the project reservoir, the certificate holder will monitor the turbidity of project waters at a point immediately upstream of the work area and at a point no more than 100 feet downstream from the work area. The certificate holder specifically agrees that if, at any time, turbidity measurements from the downstream locations exceed the measurements from the upstream locations, all related construction on the project will cease until the source of the turbidity is discovered and the situation is corrected.

16. <u>Notifications:</u> The Regional Permit Administrator must be notified in writing at least two weeks prior to commencing any project maintenance or construction work performed under the authority of this certificate.

# D. PUBLIC ACCESS AND RECREATION

17. Public access and recreational opportunities shall be provided in conformance with the Settlement, (see Section 3.5).

### **APPENDIX B**

## SECTIONS 1.0, 1.9, AND 3.0 OF THE PIERCEFIELD HYDROELECTRIC PROJECT SETTLEMENT AGREEMENT

## 1.0 INTRODUCTION

#### The Agreement and the Parties

This agreement (Settlement Agreement) dated as of August 19, 2003, is made and entered into by and among the following entities who shall, except as otherwise noted, be referred hereafter to as a Party and collectively as "Parties":

- Adirondack Council (AC)
- Adirondack Mountain Club (ADK)
- Adirondack Park Agency (APA)
- American Rivers
- American Whitewater (AW)
- Erie Boulevard Hydropower, L.P. (Erie)
- New York Rivers United (NYRU)
- New York State Conservation Council (NYSCC)
- New York State Department of Environmental Conservation (NYSDEC)
- St. Lawrence County
- Town of Altamont
- Town of Piercefield

• U.S. Department of the Interior (DOI): U.S. Fish and Wildlife Service (USFWS) and National Park Service (NPS)

#### 1.9 <u>Conventions and Definitions</u>

The Parties agree that the following conventions and definitions should have the meanings so noted throughout this Settlement Agreement.

**Baseflow:** The required minimum instantaneous instream flow, measured in cubic feet per second (cfs), to be continuously released from the naturally ponded portion of the Raquette River (the tailrace pond) downstream of the Piercefield Project, including, where applicable, dam leakage where an accurate estimate exists, and bypass flows.

**Bypass Flow**: The instream flow intentionally and continuously released into a bypass reach.

**Bypass Reach**: The portion of original riverbed fully or partially dewatered as a result of the diversion of water to the powerhouse.

Elevation: Vertical distance, measured in feet, above mean sea level using USGS datum.

**Impoundment Fluctuation**: Defined within this agreement as a specific range of impoundment elevations associated with normal project operation that is measured in the downward direction from a specific reference point such as permanent crest of dam or crest of flashboards.

Left/Right Bank: The left or right bank as seen looking downstream.

**License Issuance and Acceptance**: For purposes of this Settlement Agreement, "License Issuance and Acceptance" means that the FERC issues a new license consistent with the terms of the Settlement Agreement relative to the particular enhancement being considered.

Licensee: Erie Boulevard Hydropower, L.P. (Erie), or its successor.

**Normal Operation**: The daily operation of the Piercefield Project that may involve utilization of allowable impoundment fluctuations as needed to produce energy.

**Raquette River Projects**: The collective reference to the Carry Falls Project, Upper Raquette River Hydroelectric Project, Middle Raquette River Hydroelectric Project, and Lower Raquette River Hydroelectric Project (FERC No's. 2060, 2084, 2320, and 2330, respectively).

# 3.0 MEASURES THAT THE LICENSEE WILL UNDERTAKE WITH RESPECT TO LICENSE CONDITIONS

# 3.1 Daily Impoundment Fluctuation as Part of Normal Operations

Consistent with the project's current license, and upon license issuance and acceptance, the Licensee shall limit daily impoundment fluctuations as part of normal operation within the Piercefield impoundment as specified in Table 3-1.

Permanent Crest of Dam (USGS)	Flasbboards	Normal Impoundment Fluctuation
1,540.0	2.0 foot high flashboards	1.0 foot measured in downward direction from top of flashboards or
		crest of spillway.

# Table 3-1Piercefield Hydroelectric ProjectNormal Impoundment Fluctuation

Normal impoundment fluctuations specified in Table 3-1 shall be defined as the maximum drawdown limit associated with the operating range necessary to achieve normal operation. The normal impoundment fluctuation limit shall be measured in the downward direction from the crest of dam (1,540.0 USGS) or top of flashboards (1,542.0 USGS). Water surface elevations higher than the elevation from which any downward fluctuation is measured are considered outside of the normal impoundment fluctuation zone, and variations of such elevations are not considered as a utilization of the normal impoundment fluctuation.

Impoundment fluctuation limitations may be curtailed or suspended if required by operating emergencies beyond the control of the Licensee, including security, and for short periods upon prior mutual agreement between the Licensee and NYSDEC. If the limitations are so modified, the Licensee shall notify the FERC as soon as possible, but no later than ten (10) business days after each such incident.

#### 3.2 Seasonal Impoundment Fluctuation

Within 24 months of license issuance and acceptance, the Licensee will replace the existing seasonal 2-foot-high flashboards with 2-foot-high flashboards intended to remain in place on a year-round basis. In addition, within 24 months of license issuance and acceptance, the Licensee will retrofit the project's stanchion spillway section with one or more readily operable gates in order to reduce the likelihood of flashboard failure and to maintain adequate spill capacity. The year round flashboards will be designed to fail when overtopping in excess of 2.0 feet occurs. The scheduling of this work will be performed in consultation with the NYSDEC, USFWS, and APA. Seasonal impoundment fluctuation limitations, or the provision of the year round flashboards, may be curtailed or suspended if required or caused by, high water events or operating emergencies beyond the control of the Licensee, including security, and for short periods upon prior mutual agreement between the Licensee and NYSDEC. If the limitations are so modified, the Licensee shall notify the FERC as soon as possible, but no later than ten (10) business days after each such incident.

#### 3.3 Fish Movement and Protection

Within 24 months of license issuance and acceptance, the Licensee shall construct and place into operation a 20 cfs downstream fish movement release from the Project's retrofitted stanchion spillway (section 3.2). Upon license issuance and acceptance, the Licensee will no longer be required to maintain an 8 cfs bypass flow.

The Licensee will replace the project's existing trashracks with trashracks with 1inch clear spacing by December 31, 2012, or when the existing trashracks are replaced, whichever is sooner. The Licensee shall not be required to provide upstream fish passage facilities at this time.

The Licensee shall not be required to: 1) test the effectiveness of any, or all, components of the fish movement or protection measures and/or structures, 2) make qualitative or quantitative determinations of fish entrainment and/or mortality, and/or 3) provide compensation for any fish entrainment or mortality.

The Licensee shall not be required to increase the level of protection or movement as agreed to by this Settlement Agreement for the term of the license, unless prescribed by the U.S. Department of the Interior under section 18 of the FPA (see section 3.7).

The requirements of this commitment may be curtailed or suspended if required by operating emergencies beyond the control of the Licensee, including security, and for limited periods upon prior mutual agreement between the Licensee, USFWS, and NYSDEC. If the requirements of this commitment are so modified, the Licensee shall notify the FERC as soon as possible, but no later than (10) business days after each such incident.

## 3.4 <u>Baseflow</u>

The Licensee shall maintain a baseflow of 150 cfs (or inflow to the Piercefield impoundment, whichever is less) from the ponded portion of the Raquette River (the tailrace pond) downstream of the Piercefield Project.

The requirements of this commitment may be curtailed or suspended if required by operating emergencies beyond the control of the Licensee, including security, and for limited periods upon prior mutual agreement between the Licensee, USFWS, and NYSDEC. If the requirements of this commitment are so modified, the Licensee shall notify the FERC as soon as possible, but no later than (10) business days after each such incident

# 3.5 Recreation and Recreational Releases

Within 24 months of license issuance and acceptance, the Licensee shall modify the flow notification system established for the Middle Raquette River Project (FERC No. 2320) to include discharge information for the Piercefield Project.

Within 12 months of license issuance and acceptance, the Licensee shall replace flagging along the Project canoe portage with more permanent signage and/or blazes. In addition, the Licensee shall continue to maintain the canoe portage for the term of a new FERC license for the Piercefield Hydroelectric Project.

Beginning the first June following license issuance and acceptance, the Licensee shall provide an annual scheduled recreational release on the last Saturday of June. The release, which will be measured by the USGS gauge located immediately downstream of the Project tailrace, shall consist of a 750 cfs continuous release (either from the Piereeflald turbine units or spillway discharge facilities), lasting five hours. If inflow to the Project falls below 350 cfs during the 24 hours prior to the day of the scheduled release, the release will be cancelled and not rescheduled.

Following modification of the flow notification system, the Licensee shall post the release on the flow notification system. On the day of the release, the Licensee shall provide a sign-in register at the Town of Piercefield Beach for users of the release. The Licensee will be responsible for collecting the contents of the register. If the release is cancelled, the Licensee will post the cancellation on the flow notification system. Seventy-two hours prior to the scheduled release, the Licensee will post information on the flow notification system regarding the status of the scheduled release (e.g., given the current flow, there is a possibility that the release will be cancelled).

To the extent allowed by law, the Licensee shall not be held liable for injuries or death incurred by any persons during a scheduled release or spill event. The Licensee shall not be responsible for conducting rescue efforts.

#### 3.6 Flow and Water Level Monitoring

The Licensee shall develop a stature-flow and water-level monitoring plan in consultation with the NYSDEC and USFWS within six months of license issuance and acceptance. The monitoring plan shall include all gages and/or equipment to:

- Determine headpond elevations as needed, and
- Provide an appropriate means of independent verification of water levels by the NYSDEC, USFWS, and APA.

The baseflow will be monitored using the USGS gauging station (USGS gage 04266500) located on the Raquette River immediately downstream of the ponded area.

All gages and ancillary equipment required by the monitoring, including headpond gages, shall be made operational and fully calibrated within fifteen months of license issuance and acceptance.

The monitoring plan shall contain provisions for the installation of binary staff gages at appropriate locations to permit independent verification of headpond water levels. Binary staff gages will be visible to the general public. Access to staff gages shall be provided to the NYSDEC, USFWS, and/or their authorized representatives.

The Licensee shall keep accurate and sufficient records of the impoundment elevations and all project flows to the satisfaction of the NYSDEC and shall provide such data in a format and at intervals as required by the NYSDEC. All records will be made available for inspection at the Licensee's principal business office within New York State within five business days or will be provided in written form within 30 days of the Licensee's receipt of a written request for such records by the NYSDEC. Furthermore, the Licensee will provide to the NYSDEC a seven-day-per-week contact person to provide immediate verification of monitored flows and responses to questions about abnormal or emergency conditions.

The Licensee shall keep accurate and sufficient records of any uncontrollable station outage that causes a reduction in the required baseflow from the Piercefield Project. The Licensee will consult with the NYSDEC to develop a plan for reporting these types of incidents. The reporting plan shall be finalized within twelve months of license issuance and acceptance.

#### 3.7 Fish Passage and Section 18

The new FERC license for the project shall include the standard license article in which the Secretary of the Interior exercises § 18 authority, by reserving the Secretary's authority to prescribe the construction, operation and maintenance of such fishways as deemed necessary.

#### FEDERAL ENERGY REGULATORY COMMISSION

#### TERMS AND CONDITIONS OF LICENSE FOR CONSTRUCTED MAJOR PROJECT AFFECTING NAVIGABLE WATERS OF THE UNITED STATES

<u>Article 1</u>. The entire project, as described in this order of the Commission, shall be subject to all of the provisions, terms, and conditions of the license.

<u>Article 2</u>. No substantial change shall be made in the maps, plans, specifications, and statements described and designated as exhibits and approved by the Commission in its order as a part of the license until such change shall have been approved by the Commission: Provided, however, That if the Licensee or the Commission deems it necessary or desirable that said approved exhibits, or any of them, be changed, there shall be submitted to the Commission for approval a revised, or additional exhibit or exhibits covering the proposed changes which, upon approval by the Commission, shall become a part of the license and shall supersede, in whole or in part, such exhibit or exhibits theretofore made a part of the license as may be specified by the Commission.

Article 3. The project area and project works shall be in substantial conformity with the approved exhibits referred to in Article 2 herein or as changed in accordance with the provisions of said article. Except when emergency shall require for the protection of navigation, life, health, or property, there shall not be made without prior approval of the Commission any substantial alteration or addition not in conformity with the approved plans to any dam or other project works under the license or any substantial use of project lands and waters not authorized herein; and any emergency alteration, addition, or use so made shall thereafter be subject to such modification and change as the Commission may direct. Minor changes in project works, or in uses of project lands and waters, or divergence from such approved exhibits may be made if such changes will not result in a decrease in efficiency, in a material increase in cost, in an adverse environmental impact, or in impairment of the general scheme of development; but any of such minor changes made without the prior approval of the Commission, which in its judgment have produced or will produce any of such results, shall be subject to such alteration as the Commission may direct.

<u>Article 4</u>. The project, including its operation and maintenance and any work incidental to additions or alterations authorized by the Commission, whether or not conducted upon lands of the United States, shall be subject to the inspection and supervision of the Regional Engineer, Federal Energy Regulatory Commission, in the region wherein the project is located, or of such other officer or agent as the Commission may designate, who shall be the authorized representative of the Commission for such

purposes. The Licensee shall cooperate fully with said representative and shall furnish him such information as he may require concerning the operation and maintenance of the project, and any such alterations thereto, and shall notify him of the date upon which work with respect to any alteration will begin, as far in advance thereof as said representative may reasonably specify, and shall notify him promptly in writing of any suspension of work for a period of more than one week, and of its resumption and completion. The Licensee shall submit to said representative a detailed program of inspection by the Licensee that will provide for an adequate and qualified inspection force for construction of any such alterations to the project. Construction of said alterations or any feature thereof shall not be initiated until the program of inspection for the alterations or any feature thereof has been approved by said representative. The Licensee shall allow said representative and other officers or employees of the United States, showing proper credentials, free and unrestricted access to, through, and across the project lands and project works in the performance of their official duties. The Licensee shall comply with such rules and regulations of general or special applicability as the Commission may prescribe from time to time for the protection of life, health, or property.

Article 5. The Licensee, within five years from the date of issuance of the license, shall acquire title in fee or the right to use in perpetuity all lands, other than lands of the United States, necessary or appropriate for the construction maintenance, and operation of the project. The Licensee or its successors and assigns shall, during the period of the license, retain the possession of all project property covered by the license as issued or as later amended, including the project area, the project works, and all franchises, easements, water rights, and rights or occupancy and use; and none of such properties shall be voluntarily sold, leased, transferred, abandoned, or otherwise disposed of without the prior written approval of the Commission, except that the Licensee may lease or otherwise dispose of interests in project lands or property without specific written approval of the Commission pursuant to the then current regulations of the Commission. The provisions of this article are not intended to prevent the abandonment or the retirement from service of structures, equipment, or other project works in connection With replacements thereof when they become obsolete, inadequate, or inefficient for further service due to wear and tear; and mortgage or trust deeds or judicial sales made thereunder, or tax sales, shall not be deemed voluntary transfers within the meaning of this article.

<u>Article 6</u>. In the event the project is taken over by the United States upon the termination of the license as provided in Section 14 of the Federal Power Act, or is transferred to a new licensee or to a nonpower licensee under the provisions of Section 15 of said Act, the Licensee, its successors and assigns shall be responsible for, and shall make good any defect of title to, or of right of occupancy and use in, any of such project property that is necessary or appropriate or valuable and serviceable in the maintenance and operation of the project, and shall pay and discharge, or shall assume responsibility

for payment and discharge of, all liens or encumbrances upon the project or project property created by the Licensee or created or incurred after the issuance of the license: Provided, That the provisions of this article are not intended to require the Licensee, for the purpose of transferring the project to the United States or to a new licensee, to acquire any different title to, or right of occupancy and use in, any of such project property than was necessary to acquire for its own purposes as the Licensee.

<u>Article 7</u>. The actual legitimate original cost of the project, and of any addition thereto or betterment thereof, shall be determined by the Commission in accordance with the Federal Power Act and the Commission's Rules and Regulations thereunder.

Article 8. The Licensee shall install and thereafter maintain gages and streamgaging stations for the purpose of determining the stage and flow of the stream or streams on which the project is located, the amount of water held in and withdrawn from storage, and the effective head on the turbines; shall provide for the required reading of such gages and for the adequate rating of such stations; and shall install and maintain standard meters adequate for the determination of the amount of electric energy generated by the project works. The number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, shall at all times be satisfactory to the Commission or its authorized representative. The Commission reserves the right, after notice and opportunity for hearing, to require such alterations in the number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, as are necessary to secure adequate determinations. The installation of gages, the rating of said stream or streams, and the determination of the flow thereof, shall be under the supervision of, or in cooperation with, the District Engineer of the United States Geological Survey having charge of stream-gaging operations in the region of the project, and the Licensee shall advance to the United States Geological Survey the amount of funds estimated to be necessary for such supervision, or cooperation for such periods as may mutually agreed upon. The Licensee shall keep accurate and sufficient records of the foregoing determinations to the satisfaction of the Commission, and shall make return of such records annually at such time and in such form as the Commission may prescribe.

<u>Article 9</u>. The Licensee shall, after notice and opportunity for hearing, install additional capacity or make other changes in the project as directed by the Commission, to the extent that it is economically sound and in the public interest to do so.

<u>Article 10</u>. The Licensee shall, after notice and opportunity for hearing, coordinate the operation of the project, electrically and hydraulically, with such other projects or power systems and in such manner as the Commission any direct in the interest of power and other beneficial public uses of water resources, and on such conditions concerning the equitable sharing of benefits by the Licensee as the Commission may order.

Article 11. Whenever the Licensee is directly benefited by the construction work

of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement, the Licensee shall reimburse the owner of the headwater improvement for such part of the annual charges for interest, maintenance, and depreciation thereof as the Commission shall determine to be equitable, and shall pay to the United States the cost of making such determination as fixed by the Commission. For benefits provided by a storage reservoir or other headwater improvement of the United States, the Licensee shall pay to the Commission the amounts for which it is billed from time to time for such headwater benefits and for the cost of making the determinations pursuant to the then current regulations of the Commission under the Federal Power Act.

Article 12. The United States specifically retains and safeguards the right to use water in such amount, to be determined by the Secretary of the Army, as may be necessary for the purposes of navigation on the navigable waterway affected; and the operations of the Licensee, so far as they affect the use, storage and discharge from storage of waters affected by the license, shall at all times be controlled by such reasonable rules and regulations as the Secretary of the Army may prescribe in the interest of navigation, and as the Commission may prescribe for the protection of life, health, and property, and in the interest of the fullest practicable conservation and utilization of such waters for power purposes and for other beneficial public uses, including recreational purposes, and the Licensee shall release water from the project reservoir at such rate in cubic feet per second, or such volume in acre-feet per specified period of time, as the Secretary of the Army may prescribe in the interest of navigation, or as the Commission may prescribe in the interest of navigation.

Article 13. On the application of any person, association, corporation, Federal agency, State or municipality, the Licensee shall permit such reasonable use of its reservoir or other project properties, including works, lands and water rights, or parts thereof, as may be ordered by the Commission, after notice and opportunity for hearing, in the interests of comprehensive development of the waterway or waterways involved and the conservation and utilization of the water resources of the region for water supply or for the purposes of steam-electric, irrigation, industrial, municipal or similar uses. The Licensee shall receive reasonable compensation for use of its reservoir or other project properties or parts thereof for such purposes, to include at least full reimbursement for any damages or expenses which the joint use causes the Licensee to incur. Any such compensation shall be fixed by the Commission either by approval of an agreement between the Licensee and the party or parties benefiting or after notice and opportunity for hearing. Applications shall contain information in sufficient detail to afford a full understanding of the proposed use, including satisfactory evidence that the applicant possesses necessary water rights pursuant to applicable State law, or a showing of cause why such evidence cannot concurrently be submitted, and a statement as to the relationship of the proposed use to any State or municipal plans or orders which may have been adopted with respect to the use of such waters.

<u>Article 14</u>. In the construction or maintenance of the project works, the Licensee shall place and maintain suitable structures and devices to reduce to a reasonable degree the liability of contact between its transmission lines and telegraph, telephone and other signal wires or power transmission lines constructed prior to its transmission lines and not owned by the Licensee, and shall also place and maintain suitable structures and devices to reduce to a reasonable degree the liability of any structures or wires falling or obstructing traffic or endangering life. None of the provisions of this article are intended to relieve the Licensee from any responsibility or requirement which may be imposed by any other lawful authority for avoiding or eliminating inductive interference.

<u>Article 15</u>. The Licensee shall, for the conservation and development of fish and wildlife resources, construct, maintain, and operate, or arrange for the construction, maintenance, and operation of such reasonable facilities, and comply with such reasonable modifications of the project structures and operation, as may be ordered by the Commission upon its own motion or upon the recommendation of the Secretary of the Interior or the fish and wildlife agency or agencies of any State in which the project or a part thereof is located, after notice and opportunity for hearing.

<u>Article 16</u>. Whenever the United States shall desire, in connection with the project, to construct fish and wildlife facilities or to improve the existing fish and wildlife facilities at its own expense, the Licensee shall permit the United States or its designated agency to use, free of cost, such of the Licensee's lands and interests in lands, reservoirs, waterways and project works as may be reasonably required to complete such facilities or such improvements thereof. In addition, after notice and opportunity for hearing, the Licensee shall modify the project operation as may be reasonably prescribed by the Commission in order to permit the maintenance and operation of the fish and wildlife facilities constructed or improved by the United States under the provisions of this article. This article shall not be interpreted to place any obligation on the United States to construct or improve fish and wildlife facilities or to relieve the Licensee of any obligation under this license.

<u>Article 17</u>. The Licensee shall construct, maintain, and operate, or shall arrange for the construction, maintenance, and operation of such reasonable recreational facilities, including modifications thereto, such as access roads, wharves, launching ramps, beaches, picnic and camping areas, sanitary facilities, and utilities, giving consideration to the needs of the physically handicapped, and shall comply with such reasonable modifications of the project, as may be prescribed hereafter by the Commission during the term of this license upon its own motion or upon the recommendation of the Secretary of the Interior or other interested Federal or State agencies, after notice and opportunity for hearing.

<u>Article 18</u>. So far as is consistent with proper operation of the project, the Licensee shall allow the public free access, to a reasonable extent, to project waters and

adjacent project lands owned by the Licensee for the purpose of full public utilization of such lands and waters for navigation and for outdoor recreational purposes, including fishing and hunting: Provided, That the Licensee may reserve from public access such portions of the project waters, adjacent lands, and project facilities as may be necessary for the protection of life, health, and property.

<u>Article 19</u>. In the construction, maintenance, or operation of the project, the Licensee shall be responsible for, and shall take reasonable measures to prevent, soil erosion on lands adjacent to streams or other waters, stream sedimentation, and any form of water or air pollution. The Commission, upon request or upon its own motion, may order the Licensee to take such measures as the Commission finds to be necessary for these purposes, after notice and opportunity for hearing.

Article 20. The Licensee shall clear and keep clear to an adequate width lands along open conduits and shall dispose of all temporary structures, unused timber, brush, refuse, or other material unnecessary for the purposes of the project which results from the clearing of lands or from the maintenance or alteration of the project works. In addition, all trees along the periphery of project reservoirs which may die during operations of the project shall be removed. All clearing of the lands and disposal of the unnecessary material shall be done with due diligence and to the satisfaction of the authorized representative of the Commission and in accordance with appropriate Federal, State, and local statutes and regulations.

<u>Article 21</u>. Material may be dredged or excavated from, or placed as fill in, project lands and/or waters only in the prosecution of work specifically authorized under the license; in the maintenance of the project; or after obtaining Commission approval, as appropriate. Any such material shall be removed and/or deposited in such manner as to reasonably preserve the environmental values of the project and so as not to interfere with traffic on land or water. Dredging and filling in a navigable water of the United States shall also be done to the satisfaction of the District Engineer, Department of the Army, in charge of the locality.

<u>Article 22</u>. Whenever the United States shall desire to construct, complete, or improve navigation facilities in connection with the project, the Licensee shall convey to the United States, free of cost, such of its lands and rights-of-way and such rights of passage through its dams or other structures, and shall permit such control of its pools, as may be required to complete and maintain such navigation facilities.

<u>Article 23</u>. The operation of any navigation facilities which may be constructed as a part of, or in connection with, any dam or diversion structure constituting a part of the project works shall at all times be controlled by such reasonable rules and regulations in the interest of navigation, including control of the level of the pool caused by such dam or diversion structure, as may be made from time to time by the Secretary of the Army.

<u>Article 24</u>. The Licensee shall furnish power free of cost to the United States for the operation and maintenance of navigation facilities in the vicinity of the project at the voltage and frequency required by such facilities and at a point adjacent thereto, whether said facilities are constructed by the Licensee or by the United States.

<u>Article 25</u>. The Licensee shall construct, maintain, and operate at its own expense such lights and other signals for the protection of navigation as may be directed by the Secretary of the Department in which the Coast Guard is operating.

Article 26. If the Licensee shall cause or suffer essential project property to be removed or destroyed or to become unfit for use, without adequate replacement, or shall abandon or discontinue good faith operation of the project or refuse or neglect to comply with the terms of the license and the lawful orders of the Commission mailed to the record address of the Licensee or its agent, the Commission will deem it to be the intent of the Licensee to surrender the license. The Commission, after notice and opportunity for hearing, may require the Licensee to remove any or all structures, equipment and power lines within the project boundary and to take any such other action necessary to restore the project waters, lands, and facilities remaining within the project boundary to a condition satisfactory to the United States agency having jurisdiction over its lands or the Commission's authorized representative, as appropriate, or to provide for the continued operation and maintenance of nonpower facilities and fulfill such other obligations under the license as the Commission may prescribe. In addition, the Commission in its discretion, after notice and opportunity for hearing, may also agree to the surrender of the license when the Commission, for the reasons recited herein, deems it to be the intent of the Licensee to surrender the license.

<u>Article 27</u>. The right of the Licensee and of its successors and assigns to use or occupy waters over which the United States has jurisdiction, or lands of the United States under the license, for the purpose of maintaining the project works or otherwise, shall absolutely cease at the end of the license period, unless the Licensee has obtained a new license pursuant to the then existing laws and regulations, or an annual license under the terms and conditions of this license.

<u>Article 28</u>. The terms and conditions expressly set forth in the license shall not be construed as impairing any terms and conditions of the Federal Power Act which are not expressly set forth herein.