

ATTACHMENT A

QUESTION 3:

PROJECT DESCRIPTION

PROJECT MAP

OSWEGO RIVER PROJECT DESCRIPTIONS

The Oswego River Projects consist of six developments (Oswego Falls East, Oswego Falls West, Granby, Fulton, Minetto, and Varick) comprising three FERC-licensed hydroelectric projects along the Oswego River in Oswego County, New York. The projects are all located at locks and dams owned by the New York State Canal Corporation (NYSCC), operator of the State Barge Canal System.

The Oswego River is formed at the confluence of the Seneca and Oneida rivers and flows north approximately 23 river miles to Lake Ontario. The Oswego River first flows through the Lock 1 dam impoundment at the Phoenix Project (FERC No. 4113), which is owned by Algonquin Power. The water flow then enters the Oswego Falls impoundment formed by the Upper Fulton Dam (Lock 2, River Mile 12.6). The Oswego Falls East and Oswego Falls West developments (FERC No. 5984) are located immediately below this impoundment.

Once past the Oswego Falls Project, water flow enters the Fulton-Granby impoundment. The Granby Project (FERC No. 2837) and the Fulton Development of the Oswego River Project (FERC No. 2474) are located along opposite sides of Lower Fulton Dam (Lock 3), approximately one mile below Upper Fulton Dam. The Oswego River next enters the impoundment formed by the Minetto Development of the Oswego River Project (FERC No. 2474). The Minetto Development is located near Lock 5, approximately 6.4 miles downstream of Fulton and Granby. Next water flow enters the impoundment at Lock 6 and the High Dam Project (FERC No. 10551), which is owned by the city of Oswego, with Erie providing operation and maintenance support for the plant. Finally, once past the High Dam Project, water flow enters the Varick Development of the Oswego River Project (FERC No. 2474). The Varick Development is located near Lock 7, 1.4 miles above the mouth of Lake Ontario.

A. Oswego Falls Project (FERC No. 5984)

The dam and forebay gate structures at the Upper Fulton Dam are owned by NYSCC. The dam has a weir section and a spillway section for overflow, and the crest is equipped with a 1.5-foot-high pneumatic flashboard system installed and maintained by Erie. To the west of the weir section, there are six Tainter gates, which are owned by NYSCC. The Oswego Falls West Development is located on the left bank (looking downstream), and the Oswego Falls East Development is located on the opposite (right) bank. In accordance with the 2004 Offer of Settlement and 2006 FERC order amending the license for the Oswego Falls Project, a seasonal (June 15 to September 15) upstream eel conveyance system was installed at the Oswego Falls Project.

The existing licensed operational mode for the Oswego Falls Project is modified run-of-river operation, which allows for a 0.5-foot impoundment fluctuation. The Project generates with inflows between 652 cfs and 7,158 cfs, and flows outside of this range are spilled at the dam. The licensed bypass flow for the Oswego Falls Project is 236 cfs or inflow, whichever is less. Of this total bypass flow, 70 cfs is released at the East Development, and 166 is released through the No. 1 Tainter gate.

Oswego Falls East Development

The eastern forebay that leads to the intake for the Oswego Falls East Development is located near Lock 2. Licensed project works at the Oswego Falls East Development include the forebay, which is equipped with a trash sluice and electric-operated gate; intake structure with 1-inch trashracks; a concrete and brick powerhouse; three vertical Francis-type turbine-generator units; a tailrace channel separated from the river by a concrete gravity section and earth embankment at the lock and by a masonry and concrete retaining wall; and 2.4-kV primary transmission lines and appurtenant facilities and the 2.4-kV station tie to the West Development. The three turbine-generator units each have an installed capacity of 1.5 MW and have a combined hydraulic capacity of 4,230 cfs. Minimum flows at the Oswego Falls East Development are provided through the existing trash sluice gate.

Oswego Falls West Development

Licensed project works at the Oswego Falls West Development include NYSCC's forebay gate structure between the Tainter gates and western shore of the river that conveys water to the forebay of the powerhouse and currently acts as the 1-inch trashrack structure; forebay; intake headgates and ice and trash sluices; a concrete and brick powerhouse; a tailrace channel separated from the river by a concrete gravity section and from the river bank by a concrete retaining wall; and the 2.4-kV primary transmission lines and appurtenant facilities. As approved in FERC's September 7, 2006 order amending the license for the Oswego Falls Project, Erie recently performed a maintenance upgrade to replace Unit 3 at the Oswego Falls West Development. The Oswego Falls West Development now includes four quadruplex-type turbine-generator units (Units 1, 2, 4, and 5) and two vertical propeller turbine units (Units 6 and 7). Units 1 and 2 are inoperable, and Units 4 and 5 have an installed capacity of 0.93 MW each and have a combined hydraulic capacity of 1,860 cfs. Units 6 and 7 each have an installed generating capacity of 0.50 MW and have a combined hydraulic capacity of 832 cfs. The minimum flow at the Oswego Falls West Development is provided through Tainter gate 1, which is adjacent to the pneumatic flashboard section of the dam.



Figure 1. Downstream view of the Oswego Falls East (right) and Oswego Falls West (left) developments at Upper Fulton Dam/Lock 2.

Oswego River Project (FERC No. 2474)

The Oswego River Project is located on the Oswego River and consists of three developments: Fulton located at river mile (RM) 11.6, Minetto located at RM 5.1, and Varick located at RM 1.4. The three developments use the locks and dams owned by the New York State Canal Corporation (NYSCC).

Fulton Development

The Lower Fulton dam is a 509-foot-long and 15-foot-high concrete buttress dam topped with 6-inch flashboards. The Fulton Development is located on the right bank (looking downstream) adjacent to Lock 3, and the Granby Development is located at the left end of the dam. The Fulton-Granby impoundment has a surface area of 33 acres with a normal pool elevation of 334.5 ft msl. The bypass reach formed by the Fulton Development is 1,850 ft long.

Licensed project works at the Fulton Development include a concrete intake structure equipped with three steel gates; a 10-foot-long and 40-foot-wide forebay; 1-inch trashracks; concrete and brick powerhouse with two turbine-generator units; a switchgear building; and appurtenant facilities. The Fulton powerhouse contains two vertical fixed-propeller turbine-generator units

with generating capacities of 0.8 MW and 0.45 MW and a combined hydraulic capacity of 1,165 cfs. In accordance with the 2004 Offer of Settlement and provisions of the 2006 FERC order amending the license for the Oswego River Project, a seasonal upstream eel conveyance system was installed at the Fulton Development.

Inflow to the reservoir is essentially the same as discharge from the Oswego Falls Project, which has a combined hydraulic capacity of 6,922 cfs. The Fulton Development operates in conjunction with the Granby Project. As described in the 2004 Offer of Settlement, the Fulton Development operates in a modified run-of-river mode, which allows for a 0.5-foot impoundment fluctuation. Because Granby shares the dam with Fulton, by default Granby operates in this same modified run-of-river mode.

The licensed baseflow requirement for the Fulton Development is 300 cfs or inflow, whichever is less, and 800 cfs or inflow during walleye spawning season. The provision of this baseflow, in combination with the 75-cfs minimum flow released from the sluice gate adjacent to the Fulton powerhouse, allows the upper bypass reach formed by the Fulton-Granby developments to be backwatered by discharge from the Fulton turbines.



Figure 2. Upstream view of the Fulton (left) and Granby (right) developments at Lower Fulton Dam/Lock 3.

Minetto Development

The Minetto dam is a 500-foot-long, 22.5-foot-high concrete gravity dam topped with 10-inch flashboards. The Minetto impoundment has a surface area of 350 acres with a normal pool elevation of 307.8 ft msl. Licensed project works at the Minetto Development include a concrete intake structure equipped with nine steel gates; a 100-foot-long, 200-foot-wide forebay; trashracks; a concrete and brick powerhouse containing five vertical Francis turbine-generator units with a combined installed capacity of 8.0 MW and combined hydraulic capacity of 7,500 cfs; and appurtenant facilities. In accordance with the 2004 Offer of Settlement, a seasonal upstream eel conveyance system was installed at the Minetto Development.

The existing licensed operational mode for the Minetto Development is modified run-of-river operation, which allows for a 0.5-foot impoundment fluctuation. There are no licensed bypass or base flow requirements for the Minetto Development, but the license does include a requirement for a 25-cfs downstream fish passage flow, which is released through an unused bay within the powerhouse.



Figure 3. The Minetto Development at Minetto Dam/Lock 5.

Varick Development

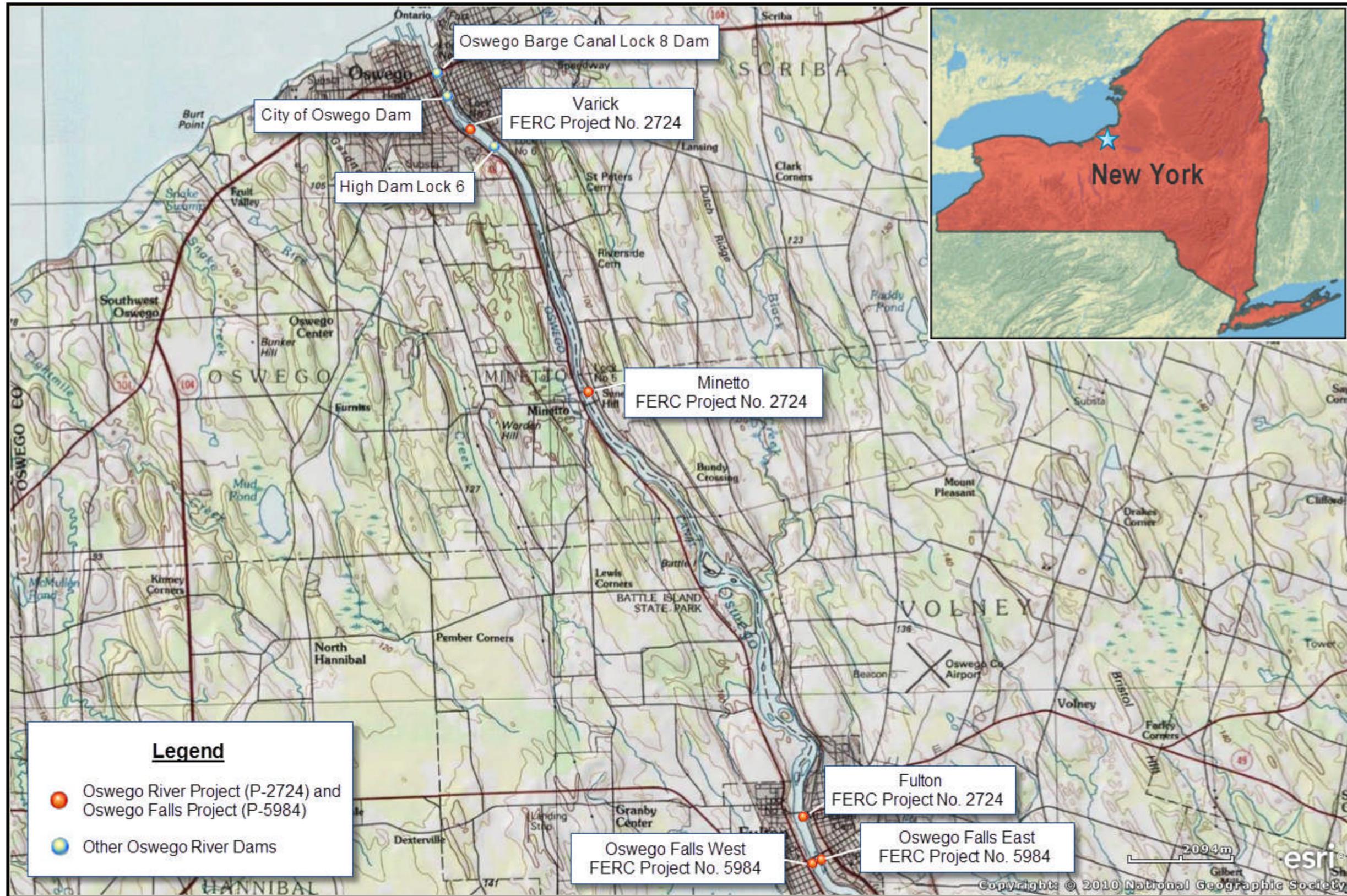
The Varick dam is the last dam on the Oswego River before the river's confluence with Lake Ontario. The Varick Development is located within the city of Oswego, so the lands around the project are relatively heavily developed. The 730-foot-long and 13-foot-high masonry gravity dam contains curved, straight, and gated sections and is topped with a series of stepped flashboards ranging in height from 10 inches to 36 inches. The Varick impoundment has a surface area of 32 acres at normal pool elevation 270.0 ft (msl), and the bypass reach is approximately 1,940 ft long.

Licensed project works include an intake structure with 24 steel gates; a 950-foot-long, 150-foot-wide forebay; trashrack structure; ice sluice; concrete and brick powerhouse containing four generating units; and appurtenant facilities. The turbine-generator units at Varick are fixed-blade propeller turbines and have a combined installed capacity of 8.8 MW and a combined hydraulic capacity of 5,600 cfs. In accordance with the 2004 Offer of Settlement, a seasonal upstream eel conveyance system was installed at the Varick Development and began operating for its first season on May 30, 2007.

The existing licensed operational mode for the Varick Development is modified run-of-river operation, which allows for an impoundment fluctuation of 1 foot from the permanent crest of the dam or top of flashboards, when in place. Licensed flow requirements include a 200 cfs downstream fish flow released adjacent to the trashracks and an additional bypass flow that varies by season, ranging from 200 cfs to 800 cfs, through an existing sluice gate adjacent to the NYSCC head gate. As required by License Article 406, Erie installed a low-level diversion structure along the western side of the Varick bypass reach, near the tailrace of the powerhouse, which allows the majority of the upper bypass reach flow to be diverted to the lower bypass reach during low flow conditions.



Figure 4. The Varick Developments at Varick Dam/Lock 7.



ATTACHMENT B

QUESTION 6:

FEBRUARY 19, 2004 SETTLEMENT AGREEMENT

OCTOBER 4, 2004 WATER QUALITY CERTIFICATION

NOVEMBER 30, 2004 ORDER ISSUING NEW LICENSE

**SEPTEMBER 7, 2006 ORDER AMENDING LICENSE AND ACCELERATING EEL
PASSAGE**

RELIANT ENERGY

LIVERPOOL, NY

OSWEGO RIVER
OFFER OF SETTLEMENT
IN CONNECTION WITH THE NEW LICENSE APPLICATION
FOR THE
OSWEGO RIVER PROJECT (FERC NO. 2474)
FULTON DEVELOPMENT
MINETTO DEVELOPMENT
VARICK DEVELOPMENT

IN CONNECTION WITH AN AMENDMENT OF
LICENSE FOR THE
OSWEGO FALLS PROJECT (FERC NO. 5984)

NOVEMBER 2003

Prepared by:

Kleinschmidt

Energy & Water Resource Consultants

RELIANT ENERGY
LIVERPOOL, NY

OSWEGO RIVER
OFFER OF SETTLEMENT

IN CONNECTION WITH THE NEW LICENSE APPLICATION FOR THE
OSWEGO RIVER PROJECT (FERC NO. 2474)
FULTON DEVELOPMENT
MINETTO DEVELOPMENT
VARICK DEVELOPMENT

IN CONNECTION WITH AN AMENDMENT OF LICENSE FOR THE
OSWEGO FALLS PROJECT (FERC NO. 5984)

NOVEMBER 2003

Prepared by:

Kleinschmidt
Energy & Water Resource Consultants

**OSWEGO RIVER
OFFER OF SETTLEMENT**

**OSWEGO RIVER PROJECT (FERC NO. 2474)
FULTON DEVELOPMENT
MINETTO DEVELOPMENT
VARICK DEVELOPMENT**

OSWEGO FALLS PROJECT (FERC NO. 5984)

TABLE OF CONTENTS

1.0	INTRODUCTION	1-1
1.1	<u>Term of the Settlement Offer</u>	1-2
1.2	<u>Agreements to Be Incorporated As License Conditions</u>	1-2
1.3	<u>Purpose, Goals and Geographic Scope</u>	1-2
1.4	<u>Project Decommissioning</u>	1-3
1.5	<u>Successors and Assigns</u>	1-3
1.6	<u>Parties To Support Regulatory Approvals</u>	1-3
1.7	<u>Agency Appropriations</u>	1-4
1.8	<u>Establishes No Precedents</u>	1-4
1.9	<u>Conventions and Definitions</u>	1-5
2.0	GENERAL AGREEMENTS OF THE PARTIES	2-1
2.1	<u>License Term</u>	2-1
2.2	<u>Enforceability and Withdrawal Rights</u>	2-1
2.3	<u>Water-Quality Certification — Withdrawal Rights</u>	2-2
2.4	<u>New York State Canal Corporation Permits</u>	2-2
2.5	<u>Rehearings</u>	2-3
2.6	<u>Reopeners</u>	2-3
2.7	<u>License Amendments</u>	2-4
2.8	<u>Oswego Falls License Amendment</u>	2-5
2.9	<u>Fish Passage and Section 18</u>	2-5
2.10	<u>Settlement Offer Amendments</u>	2-5
2.11	<u>Compliance With the National Historic Preservation Act</u>	2-6
2.12	<u>Compliance With the Endangered Species Act</u>	2-6
2.13	<u>Fulton Unit Addition</u>	2-6
2.14	<u>License Application Proposals Withdrawn</u>	2-7
	2.14.1 <u>Proposals Withdrawn</u>	2-7
3.0	MEASURES WHICH THE LICENSEE WILL UNDERTAKE WITH RESPECT TO LICENSE CONDITIONS AND OTHER NON-LICENSE PROVISIONS OF SETTLEMENT	3-1
3.1	<u>Operations</u>	3-1
	3.1.1 <u>Mode of Operation</u>	3-1
	3.1.2 <u>Impoundment Fluctuations</u>	3-1
	3.1.3 <u>Pneumatic Flashboards</u>	3-3

3.1.4	<u>Justification</u>	3-3
3.2	<u>Base-flows</u>	3-4
3.2.1	<u>Justification</u>	3-5
3.3	<u>Bypass Flows</u>	3-6
3.3.1	<u>Justification</u>	3-7
3.4	<u>Low-level Flow Diversion Structures</u>	3-9
3.4.1	<u>Justification</u>	3-9
3.5	<u>Fish Protection, Passage, and Movement</u>	3-10
3.5.1	<u>Justification</u>	3-13
3.6	<u>Flow and Water Level Monitoring</u>	3-14
3.7	<u>Recreation</u>	3-15
3.7.1	<u>Recreation Enhancements (NOT TO BE INCLUDED IN THE LICENSE)</u>	3-15

LIST OF APPENDICES

Appendix A: New York State Canal Corporation Work Permit Application

LIST OF FIGURES

Figure 1: Minetto Canoe Portage Facilities

LIST OF TABLES

Table 3-1:	Oswego River Hydroelectric Projects Normal Impoundment Fluctuations.....	3-2
Table 3-2:	Oswego River Base-Flow Schedule.....	3-5
Table 3-3:	Oswego River Bypass Flow Schedule.....	3-7
Table 3-4:	Oswego River Hydroelectric Projects Fish Movement.....	3-10
Table 3-5:	Oswego River Hydroelectric Projects Fish Protection Measures.....	3-11

**OSWEGO RIVER
OFFER OF SETTLEMENT**

**OSWEGO RIVER PROJECT (FERC NO. 2474)
FULTON DEVELOPMENT
MINETTO DEVELOPMENT
VARICK DEVELOPMENT**

OSWEGO FALLS PROJECT (FERC NO. 5984)

1.0 INTRODUCTION

The Agreement and The Parties

This agreement (the Settlement Offer) dated as of April 7, 2003, is made and entered into pursuant to Rule 602 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (FERC) (18 C.F.R. § 385.602) by and among the following entities who shall, except as otherwise noted, be referred hereafter to as a Party and collectively as “Parties”:

- Adirondack Mountain Club (ADK)
- Erie Boulevard Hydropower, L.P. (Erie) acting through its General Partner, Reliant Energy (Reliant)
- Izaak Walton League
- New York Rivers United (NYRU)
- New York State Conservation Council (NYSCC)
- New York State Department of Environmental Conservation (NYSDEC)
- Trout Unlimited (TU)
- U.S. Department of the Interior (DOI), U.S. Fish and Wildlife Service (USFWS)
- U.S. Department of the Interior (DOI), National Park Service (NPS)

----- Section 3.0 of the Settlement Offer

This Settlement Offer shall become effective when it has been executed by the above-referenced Parties and shall remain in effect, in accordance with its terms, throughout the terms of the respective licenses for the Oswego River Project and the Oswego Falls Project including any annual licenses.

1.2 Agreements to Be Incorporated As License Conditions

The agreements in the Settlement Offer are a comprehensive, integrated, and indivisible set of measures intended to address non-power and power values relating to the licensing of the Oswego River Project and to the previously issued license for the Oswego Falls Project. The Parties agree that each term of this Settlement Offer is in consideration and support of every other term and that it is essential that the FERC, except where expressly noted to the contrary in this Offer of Settlement, incorporate as license conditions in the new license, each of the commitments which the Licensee has agreed to undertake in Section 3.0 of this Settlement Offer. "License conditions" are intended to mean numbered articles of the license.

1.3 Purpose, Goals and Geographic Scope

The purpose of this Settlement Offer is to document the agreements that have been reached as the result of comprehensive discussions among the Parties with regard to the referenced hydroelectric developments with a pending license application before the FERC and a pending application for a 401 Water Quality Certification (401 WQC) before the NYSDEC for the Oswego River Project exclusively.

The goal of the Settlement Offer is to provide for the continued operation of the subject projects with appropriate long-term environmental and recreational protection and mitigation measures that will meet diverse objectives for maintaining a balance of non-power and power values in the Oswego River.

The geographic scope of the agreements includes the Oswego River from immediately below the Phoenix Hydroelectric Development (FERC No. 4113) to the mouth of the Oswego River at its entrance to Lake Ontario.

The Parties, having given careful and equal consideration to non-power and power values, provide in this Settlement Offer the terms and conditions for the resolution of operational, fisheries, wildlife, water quality, and recreational issues raised by and analyzed by the Parties as they are applicable to the issuance of a license and 401 WQC for the subject project.

1.4 Project Decommissioning

This Settlement Offer does not include any provisions relating to decommissioning or dam removal of the subject project in whole or part. With or without amendment of this Settlement Offer, any Party may seek such further relief from the FERC regarding such decommissioning as the FERC may order, recognizing that no Party to this Settlement Offer has, or is advocating decommissioning of any project facilities at this time, nor does evidence currently exist which would suggest the need to advocate for decommissioning during the term of the license. If and when the subject project is decommissioned or retired during the term of any new license, the disposition of any enhancements associated with said project pursuant to this Settlement Offer will be determined in decommissioning proceedings at that time.

1.5 Successors and Assigns

The Settlement Offer shall be binding on the Parties and on their successors and assigns.

1.6 Parties To Support Regulatory Approvals

The Parties agree to support the issuance of a license and 401 WQC that is consistent with the terms of this Settlement Offer. This support shall include reasonable efforts to expedite the National Environmental Policy Act (NEPA) process to be

... , as well as any regulatory approvals that may be needed to implement provisions of the Settlement Offer. For those issues addressed herein, the Parties agree not to propose or otherwise communicate to the FERC or to any other federal or state resource agency with jurisdiction directly related to the relicensing process any comments, certification, or license conditions other than those consistent with the terms of this Settlement Offer. However, this Settlement Offer shall not be interpreted to restrict any Party's participation or comments in future relicensing of the subject developments.

1.7 Agency Appropriations

Nothing in this Settlement Offer shall be construed as obligating any federal, state, or local government to expend in any fiscal year any sum in excess of appropriations made by Congress to state or local legislatures or administratively allocated for the purpose of this Settlement Offer for the fiscal year or to involve the DOI, USFWS, or NPS in any contract or obligation for the future expenditure of money in excess of such appropriations or allocations.

1.8 Establishes No Precedents

The Parties have entered into the negotiations and discussions leading to this Settlement Offer with the explicit understanding that all offers of settlement and the discussions relating thereto are privileged, shall not prejudice the position of any Party or entity that took part in such discussions and negotiations, and are not to be otherwise used in any manner in connection with these or any other proceedings. The Parties understand and agree that this Settlement Offer establishes no principles or precedents with regard to any issue addressed herein or with regard to any Party's participation in future relicensing proceedings and that none of the Parties to this Settlement Offer will cite this Offer or its approval by the FERC, or the NYSDEC, as establishing any principles or precedents except with respect to the matters to which the Parties have herein agreed.

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

Base Flow: The required minimum instantaneous instream flow, measured in cfs, to be continuously released into the river channel below the powerhouse, including, where applicable, dam leakage where an accurate measurement 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.

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

Execution of the Offer of Settlement: For purposes of this Settlement Offer "Execution of the Offer of Settlement" means the date on which the Licensee files the final signed version of the Settlement Offer with the FERC.

Impoundment Fluctuation: Defined within this agreement as a specific range of impoundment elevations associated with normal project operation, as measured in the downward direction from a specific reference point.

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

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

Licensee: Erie Boulevard Hydropower, L.P., and limited partner of Reliant Energy.

Normal Operation: The daily operation of the Oswego River Project and the Oswego Falls Project that may involve utilization of allowable impoundment fluctuations as needed to produce energy.

Thalweg Depth: The deepest part of the river channel in a cross-section of the river profile.

2.0 *GENERAL AGREEMENTS OF THE PARTIES*

2.1 License Term

The Parties agree, based upon and in consideration of the Settlement Offer provisions identified in Section 2.2, that the license for the Oswego River Project should be for a term of 40 years from the date of license issuance, and agree to join in a request for rehearing if a license is issued for less than 40 years from the date of license issuance.

2.2 Enforceability and Withdrawal Rights

The Parties agree that it is their intent, and this Settlement Offer is based upon, and in consideration of their expectation that Sections 3.1, 3.2, 3.3, 3.4, 3.5, and 3.6 will be included in any license issued as numbered license articles and that the Commission will enforce these provisions. If, in making its licensing decision, the Commission determines that any of the sections identified herein are not within its jurisdiction to enforce, it will so expressly and clearly notify the Parties in the licensing order. If the Commission does not so expressly identify any of the provisions of the sections identified herein, then the Parties will, in reliance thereon, proceed as though each of the sections identified herein are enforceable by the FERC.

In the event that the FERC should, contrary to the integrated and indivisible nature of this Settlement Offer described herein in Section 1.2, issue a new license that omits or reduces any of the commitments identified in Sections 3.1, 3.2, 3.3, 3.4, 3.5 and 3.6 which the Licensee has agreed to undertake as part of this Settlement Offer and in the event that the new license is not thereafter satisfactorily modified as the result of the filing of a request for rehearing as provided in Section 2.5, and in the event any Party thereafter determines that its interests will be materially and adversely affected by the change or changes so made by the FERC, it may after first providing written notice of its intention to do so to the other Parties together with a written explanation of its reasons for doing so, withdraw from this Settlement Offer and thereafter the Settlement Offer shall have no force and effect and the Parties shall in any subsequent administrative and

judicial proceedings take the position that the basis upon which the Commission's public interest determination was made in connection with the issuance of the new license and the new license should have no force and effect and should be considered null and void.

2.3 Water-Quality Certification — Withdrawal Rights

The Parties agree that they will support the issuance by the NYSDEC of a Section 401-WQC that is consistent with the provisions of this Settlement Offer for the Oswego River Project. If the NYSDEC should issue a 401-WQC certification for the project that is materially inconsistent with the provisions of this Settlement Offer, any Party can withdraw from this Settlement Offer by providing written notice of its intention to do so to the other Parties within 60 days from the date of issuance of any such certification or, in the event any Party seeks judicial or agency review, 60 days from the date of the denial of such review. The NYSDEC will distribute to the Parties copies of the 401 -WQC that is issued.

2.4 New York State Canal Corporation Permits

The Parties understand that certain modifications to structures and/or lands under the jurisdiction of the New York State Canal Corporation (Canal Corp) will be necessary for the Licensee to complete the settlement measures described in Sections 3.1, 3.3, 3.4, 3.5 and 3.7 of this Settlement Offer and that the Canal Corp must issue appropriate Canal Work Permits to the Licensee, pursuant to the Canal Work Permit Application form shown in Appendix A, before the Licensee can proceed with such modifications. The Licensee agrees to apply for the requisite permits in a timely manner so as to not impact the implementation schedules identified in Tables 3-1, 3-2, 3-3, 3-4, and 3-5. The Canal Corp agrees to cooperate in issuing the requisite permits and to not unreasonably withhold issuance of the requisite permits to proceed with the modifications and subsequent operations of the settlement measures pertaining to those modifications.

The Parties understand that the execution and implementation of this Settlement Offer is not intended to give the FERC jurisdiction over the Canal Corp's canal and lock operations in the vicinity of the Oswego River Project and the Oswego Falls Project.

The issuance of such permits to the Licensee to proceed with implementation of the settlement measures described in Sections 3.1, 3.3, 3.4, 3.5, and 3.7 will be without prejudice to any issue regarding the acquisition of any property rights that the Licensee may need to obtain from the Canal Corp pursuant to FERC Standard License Article 5.

2.5 Rehearings

The Parties agree that none of them will file a request for rehearing of any new license unless the license contains conditions which are materially inconsistent with the terms of this Settlement Offer, which omits as license conditions terms of the Settlement Offer which the Parties have agreed should be included as license conditions, or if the FERC determines that it will not enforce any of the provisions of the Settlement Offer that the Parties have agreed should become enforceable conditions of the new license, as expressly identified in Section 2.2. In the event that any Party decides to file a request for rehearing in accordance with the terms of this provision, it will provide written notice of its intention to do so to the other Parties at the earliest practicable time and thereafter the other Parties will join in the rehearing request or file an appropriate and supportive rehearing request of their own. Thereafter, if any Party, following the issuance of a FERC Order on Rehearing, elects to file a petition for judicial review with respect to the matters covered by this provision, the other Parties will not oppose such a petition.

2.6 Reopeners

The Parties agree that, except as provided herein, this Settlement Offer is not intended to limit or restrict the ability of any Party to petition the FERC pursuant to any reopener condition contained in the new license, including any exercise by the Secretary of DOI relating to the Secretary's fishway prescription authority under § 18 of the FPA. No such petition, including the exercise of § 18 authority, may be filed which would, if

granted, be materially inconsistent with this Settlement Offer, or cause other portions of the Settlement Offer to be reopened, unless the Party who files the petition has substantial evidence that a change in circumstances has occurred including any material change made by the Commission to the terms of this Settlement Offer which provides good cause for the filing of the petition. Before any Party files such a petition with the FERC, it shall provide at least 60 days written notice of its intention to do so to all other Parties and, promptly following the giving of notice, has consulted with the other Parties regarding the need for and the purpose of the petition. In the event such a petition is filed, the filing Party shall include with its filing documentation of its consultation with the other Parties and a summary of their recommendations and its response to those recommendations. The filing Party shall also serve a copy of its petition on all the other Parties.

2.7 License Amendments

The Parties agree that, except as provided herein, nothing in this Settlement Offer is intended to limit or restrict the ability of the Licensee to seek amendments of any new license. The Licensee may only seek a license amendment which would be materially inconsistent with the provisions of this Settlement Offer if it has substantial evidence that a change in circumstances has occurred which provides good cause for the filing of the amendment and has provided the Parties at least 60 days written notice of its intention to do so and, promptly following the giving of notice, has consulted with the Parties regarding the need for and the purpose of the amendment. For other license amendments which just relate to the license terms set forth in this Settlement Offer, the Licensee shall provide all Parties at least 30 days notice of the proposed amendment and, if requested to do so by any Party, shall consult with the Parties regarding the amendment and defer the filing for another 30 days. In any application for an amendment which relates to any of the terms and conditions of this Settlement Offer, the Licensee shall document its consultation, summarize the positions and recommendations of the Parties, and provide its response to those positions and recommendations. The Licensee shall serve a copy of any application for amendment upon the Parties at the time of the filing. The Licensee will not oppose an intervention request filed in a timely manner by any Party in an amendment proceeding involving the license.

2.8 Oswego Falls License Amendment

Within ninety (90) days of the execution of this Offer of Settlement the Licensee agrees to prepare and file with the FERC an application to amend the existing Oswego Falls Project license (FERC Project No. 5984) which incorporates the proposed changes in the existing Oswego Falls License conditions affected by Subsections 3.1.2, 3.1.3, 3.3, and 3.5 of this agreement. The Parties agree that the discussions and meetings which have been held in connection with the negotiation of this Settlement Offer have afforded sufficient pre-filing consultation in connection with the aforementioned amendments of the license for the Oswego Falls Project and the Parties agree to support those amendment requests by the Licensee.

2.9 Fish Passage and Section 18

The Parties agree that fish passage measures as described in Section 3.5 will be implemented, but the new FERC license for the Oswego River Project should include the standard license article reserving the ability of the FERC to require fish passage in the future and should include the full reservation of the Secretary of the Interior's § 18 authority, by reserving the Secretary's authority to prescribe the construction, operation, and maintenance of such fishways as deemed necessary. The existing § 18 prescription submitted for the Oswego River Project will be modified to be consistent with this Settlement Offer.

2.10 Settlement Offer Amendments

The Parties agree that, except as provided herein, nothing in this Settlement Offer is intended to limit or restrict the ability of any Party to seek an amendment to this Settlement Offer during the effective period of the license with respect to matters not addressed in the license. Any Party seeking such an amendment may do so upon presenting substantial evidence that a material change in circumstances has occurred that provides good cause for seeking the amendment. Any such amendment proposal shall not be materially inconsistent with any license articles or the obligations of the Licensee

pursuant to the license. Any Party proposing such an amendment to this Settlement Offer shall provide all Parties with at least 30 days written notice of the proposed amendment and, if requested to do so by any Party, shall consult with the Parties regarding the proposed amendment for at least another 30 days. No amendment will be effective if any Party objects to the amendment. Any Party that abstains may not object to and will be bound by any amendment in which all other Parties concur. After such notice and consultation, if all Parties either concur with or do not object to the proposed amendment, the Party making the proposal shall secure signed agreements to the amendment from all Parties who concur with the proposal. The Licensee will file the amendment with the FERC for informational purposes.

2.11 Compliance With the National Historic Preservation Act

The Licensee agrees to develop a Cultural Resources Management Plan, as needed, in consultation with the New York State Office of Parks, Recreation and Historic Preservation, and Federally-recognized Indian tribes.

2.12 Compliance With the Endangered Species Act

Consultation with the NYSDEC and the USFWS has established that, except for some transient individuals, there are no federally- or state-listed threatened or endangered species in the area of the Oswego River Projects at this time.

2.13 Fulton Unit Addition

The Parties agree to cooperate with the Licensee in any future amendment the Licensee may pursue in installing any additional generating unit(s) to the Fulton Development of the Oswego River Project (FERC No. 2474) during the term of any new license provided such an amendment is consistent with the terms and conditions of this Settlement Offer and includes the installation of seasonal 1-inch clear-spaced trashrack overlays or seasonal 1.5-inch diameter punchplates to be placed seasonally from May 1 or when flows permit safe installation (whichever is later) through November 30 or when

the temperature of the river decreases to 7° C or less (whichever is sooner) as a fish protection measure.

2.14 License Application Proposals Withdrawn

The Parties agree that all license application proposals preceding this Settlement Offer are withdrawn and superceded by those specified in this Offer of Settlement. The withdrawn proposals include:

2.14.1 Proposals Withdrawn

- Operate all three developments in ROR mode with the impoundment water level at or near the top of flashboards or dam crest, as superceded by Section 3.1;
- Release a minimum flow of 475-cfs to the upper Varick development bypassed reach during the walleye spawning season, 300-cfs during the fall upstream salmonid migration period; and 200-cfs for the remainder of the year, as superceded by Section 3.3;
- Release a minimum flow of 200-cfs to the lower Varick development bypassed reach during the walleye spawning season, 150-cfs during the fall upstream migration period, and 75-cfs for the remainder of the year, as superceded by Section 3.3;
- Install low-cost, 1-inch, clear-spaced trashrack fish protection systems with downstream passage at all three developments by 2010(contingent on finalizing Atlantic salmon restoration goals), as superceded by Section 3.5;
- Conduct downstream fish passage effectiveness studies for installed passage facilities at all three developments, as superceded by Section 3.5

- Provide upstream passage for Atlantic salmon by constructing an interim trap and truck facility at the Varick development, as superceded by Section 2.8;
- Implement aesthetic improvements at all three developments;
- Provide pedestrian and angler access to the Canal Lock No. 3 island downstream of the Fulton development by establishing a woodchip trail and installing fences and signs;
- Assist NYSTA(Canal Corp) in improving shoreline fishing at the Canal Lock No. 2 island, upstream of the Fulton development;
- Assist with the city of Fulton's Granby Trail from the Granby Project to the Oswego Falls Project ;
- Assist with the development of the city of Oswego's planned Varick Impoundment Trail

3.0 MEASURES WHICH THE LICENSEE WILL UNDERTAKE WITH RESPECT TO LICENSE CONDITIONS AND OTHER NON-LICENSE PROVISIONS OF SETTLEMENT

3.1 Operations

3.1.1 Mode of Operation

Within eighteen (18) months of license issuance and acceptance, the Licensee will begin to operate the Oswego River Project in a Modified Run-of-River (MROR) mode. The Licensee will also continue to operate the Oswego Falls Project in the same MROR mode according to the existing license for the Oswego Falls Project, which is consistent with Sections 3.1.1 and 3.1.2 of this Settlement Offer. This MROR mode more closely matches the outflow from the projects with the inflow to the projects by limiting the impoundment fluctuations as described in Section 3.1.2 below while allowing a minimum buffer to compensate for changes in inflow to the project.

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

3.1.2 Impoundment Fluctuations

Within eighteen (18) months of license issuance and acceptance, the Licensee shall limit impoundment fluctuations in the Fulton, Minetto, and Varick developments as specified in Table 3-1. The Licensee will also limit impoundment fluctuations at the Oswego Falls Project to 0.5 feet as described in FERC's "Order Modifying and Approving Run-Of-River Monitoring Plan" for the Oswego Falls Project and specified in Table 3-1.

Normal impoundment fluctuations 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 permanent crest of each dam or from the top of the flashboards (when in place). 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 same are not considered as a utilization of the normal impoundment fluctuation.

Development	Permanent Crest of Dam (feet, USGS)	Flashboards	Normal Impoundment Fluctuation
Oswego Falls	351.8	18"	0.5 feet (year-round) measured in a downward direction from the permanent crest of dam or the top of flashboards when in place.
Fulton	334.0	6"	
Minetto	307.0	10"	
Varick	267.5	30"*	1.0-foot (year-round) measured in a downward direction from the permanent crest of dam or the top of flashboards when in place.
		32"*	
		34"*	
		36"*	
	268.5	10"*	

* The Varick dam is currently fitted with a system of stepped flashboards with a maximum height of 36" from permanent crest elevation of the dam and may be adjusted as needed by the Licensee. The current system is designed to fail at approximately 15" of overtopping. Under normal operating conditions, the water level is maintained at 30" above crest (Elev. 270.0).

These 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 mutual agreement between the Licensee and the 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.

3.1.3 Pneumatic Flashboards

The Licensee will install partial pneumatic flashboards as described in the Oswego Falls "Order Issuing License", on the sections of the spillway from near the non-overflow section to the first taintor gate (Taintor Gate No. 6) support wall of the Oswego Falls Dam to facilitate pond level control. As the pneumatic flashboards were required in the license for the Oswego Falls Project, no license amendment is necessary for the implementation of this protective measure. Installation of the pneumatic flashboards will be completed by December 31, 2003.

3.1.4 Justification

The Party's agreement to operate the Oswego River Projects in a MROR mode significantly reduces the normal daily impoundment fluctuations associated with normal project operations. Review of pertinent historical USGS stream flow data indicates river flow periodically exceeds the total hydraulic capacity of each development's turbines. Furthermore, impoundment fluctuations are currently limited during the navigation season (approximately mid-May through November) as required by the Canal Corp. As such, normal daily impoundment fluctuations due to hydropower operations are limited to those periods when river flow is less than the hydraulic capacity (including any base flows or bypass flows) of each development and/or during the navigation season.

The normal daily impoundment fluctuations coalesced with the MROR operation agreed upon for the Oswego Falls Project and the Fulton and Minetto developments allows for a subtle buffer needed to approximate outflow in response to the dynamics of river inflow. This creates a smoothing effect to the flow regime while at the same time decreases the amount of area impacted by the impoundment fluctuations as described in Table 3-1.

The MROR operations and the normal daily impoundment fluctuations for the Varick development will provide this same buffering capacity as well as providing an additional safety buffer for recreational users of the river. The impoundment fluctuation at the Varick Development as described in Table 3-1 is greater than for the other developments of the Oswego River Project due to the small size and steep-sided slopes of the impoundment and surrounding shoreline. This operating regime will also enhance the existing shallow water littoral zone and adjacent wetland habitat by decreasing the amount of impacted area.

At each of the Oswego River developments, the normal daily impoundment fluctuations and MROR operations described above will reduce the size of the fluctuation zone, potentially resulting in improved primary production. This improvement in primary production should result in improved benthic invertebrate production and improvements to fish diet, growth, and reproduction.

3.2 Base-flows

Within eighteen (18) months of license issuance and acceptance, the Licensee shall begin to release the base-flow as specified in Table 3-2. The base-flow(s) as described in Table 3-2 shall be maintained in the river immediately downstream of the development's powerhouse. No base-flow is provided at the Minetto Development due to the back watering effect created by the dam at Lock # 6. The base flow at the Varick Development is provided for via the bypass flow as described in Table 3-3.

These base-flow requirements may be curtailed or suspended if required by operating emergencies beyond the control of the Licensee, including security, and for limited periods upon mutual agreement between the Licensee and the NYSDEC. If the flows 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.

Table 3-2: Oswego River Base-Flow Schedule

Site	Flow Magnitude	Location	Season		Implementation Schedule
			From	To	
Fulton	800-cfs or inflow} (whichever is less) for walleye spawning	Below powerhouse through generation or over the spillway during non-generation periods.	The beginning of Walleye spawning season which begins when water temperature $\geq 4^{\circ}\text{C}$ for 4 consecutive days after March 15 th of each year.	The end of Walleye spawning season which ends 30 days after the water temperature $\geq 10^{\circ}\text{C}$ for 4 consecutive days.	Within 18 months of license issuance and acceptance.
	300-cfs or inflow} (whichever is less)		At the end of the walleye spawning season.	To cease at the beginning of walleye spawning season.	

‡ Inflow is approximately equal to the gross river inflow less the flow volume used for canal lockage operations.

3.2.1 Justification

The agreed upon base-flows below the Fulton development as described above in Table 3-2 will be maintained for the protection of: fish habitat, benthic invertebrate production, sustained riparian wetland vegetation, walleye spawning, fishing opportunities, and water quality considerations. These base flows for the Fulton development will increase the amount of wetted area in the tailrace below the Fulton powerhouse, in the bypass reach, and that portion of the Oswego River downstream of the Fulton Development.

The base-flow below the Fulton development during the walleye-spawning season creates over 9,000 ft.² of relatively high-quality walleye spawning habitat. In addition, this flow provides at least 90% of the Weighted Usable Area (WUA) for the invertebrate Hydropsychid species and results in a high proportion of the bypass reach providing high quality habitat for certain life stages of this species.

The base-flow below the Fulton development during that portion of the year not covered by the walleye spawning season offers approximately 90% of the maximum possible WUA for juvenile longnose-dace, an important forage species.

In addition, it provides riverine habitat for other forage fish, several life stages of sport fish, and benthic invertebrates.

The provision of these base flows for the Fulton development as evident by multiple site visits will allow the upper bypass reach to be backwatered by discharge from the turbines. This backwatering effect, in combination with a 75-cfs fish friendly flow for downstream fish movement (as described in Section 3.3 below), substantially increases the amount of available wetted area in the upper bypass reach and creates habitat for resident and migratory fish species while providing enhanced fishing opportunities.

3.3 Bypass Flows

Within eighteen (18) months of license issuance and acceptance, the Licensee shall begin to release the bypass flows as specified in Table 3-3.

These bypass flows are considered to be nominal flows. That is, it is recognized that the actual release at any given time may be slightly above or slightly below the agreed-upon value. The degree to which a flow will be greater than or less than the nominal value indicated is a function of impoundment surface elevation as a result of normal daily impoundment fluctuations (see Section 3.1) as shown in parenthesis in Table 3-3. The Licensee shall derive appropriate structural designs for the provision of the bypass flows at the Oswego River and Oswego Falls projects.

The Parties have agreed upon the bypass flows for the Varick development as described in Table 3-3 with the understanding that these flows will achieve agency management goals when coupled with the addition of low-level flow diversion structures to the lower bypass reach as described in Section 3.4 below. The Parties further agree that at a minimum of (5) five years after license issuance and acceptance, at the request of the Licensee, that the Licensee and the resource agencies will reevaluate the 400-cfs seasonal flow from September 16 through the beginning of walleye spawning season in

an attempt to decrease this bypass flow while continuing to meet the agencies management objectives.

Site	Flow Magnitude		Location	Season	Timing of Implementation
Oswego Falls	236-cfs or inflow,† whichever is less	70-cfs (61-79) fish friendly flow	release at the east-side sluice gate	Year-round	Within 6 months of FERC's approval of an amendment to the Oswego Falls License
		166-cfs (164-168) fish friendly flow	through tainter gate 6		
Fulton	75-cfs (65-86) fish friendly flow		Release from the sluice gate adjacent to the Fulton powerhouse		
Varick	800-cfs (782-818) or inflow‡, whichever is less*		Existing sluice gate(s) adjacent to the State head gate	Walleye spawning season (see Conventions & Definitions Section).	Within 18 months of license issuance and acceptance
	400-cfs (389-410) or inflow‡, whichever is less*			End of walleye spawning season through May 31	
	200-cfs (192-207) or inflow‡, whichever is less*			June 1 through September 15	
	400-cfs (389-410) or inflow‡, whichever is less*†			September 16 through the beginning of walleye spawning season	

* Note. Throughout the entire year the first 200-cfs released at the Varick development will be made fish friendly as described in Section 3.5.
 † The Parties agree that the Licensee and the resource agencies will reevaluate this seasonal flow if so requested by the Licensee at a minimum of 5 years after license issuance and acceptance with the intention of determining if implementing decreased bypass flows will meet agency management objectives.
 ‡ Inflow is approximately equal to the gross river inflow less the flow volume used for canal lockage operations.

3.3.1 Justification

The Parties have carefully reviewed alternative flows to the bypass reaches of the Oswego River and Oswego Falls projects. The bypass flows agreed upon by the Parties result in an increase in wetted area in the Oswego Falls, Fulton, and Varick bypass reaches. The agreed upon bypass flows, including low-level flow diversion devices, will maintain and increase aquatic habitat for many species and life stages of forage, pan, and game fish and benthic invertebrates which are an important source of forage for many aquatic species. These flows will also benefit wildlife (raccoon, waterfowl, wading birds) and associated riparian vegetation. Bypass flows allocated to the Varick development

will also provide large salmonids, walleye, and other species that migrate into the bypass reach from Lake Ontario with sufficient depth for movement, added protection from predation and excessive illegal harvest, and will enhance opportunities for fishing, including safe recreational ingress and egress to the bypass reach.

The agreed upon bypass flow releases to the Oswego Falls Project will result in an increase of wetted area in the bypass reach immediately downstream of the dam. Riffle areas will provide habitat for various life stages of smallmouth bass, riffle dwelling species, darters, and aquatic insects and spawning habitat for white sucker and walleye.

The agreed upon bypass flow at the Fulton development will wet the upper portion of the bypass reach immediately downstream of the Fulton Dam. Additional flow to the lower portion of this reach will be provided by the base flow through the Fulton Powerhouse (see Table 3.2). The bypass and base flows will increase wetted area and habitat for aquatic organisms similar to that described for the Oswego Falls bypass reach. In addition, higher spring base flow in the lower portion of the reach will provide habitat for walleye spawning.

The agreed upon bypass flows at the Varick development will increase habitat for juvenile, adult and spawning life stages of riffle dwelling species and white sucker, walleye spawning, and juvenile and spawning smallmouth bass. The bypass flow will enhance the use of riffle habitats by larger game fish and will provide thalweg depths that allow larger adult fish species to traverse the bypass reach relatively unimpeded, thus decreasing stranding or harassment of fish by illegal fishing practices. The bypass flow will afford the fishing public ample opportunity to harvest fish legally and promote safe recreational ingress and egress to and from the bypassed reach via access to Linear Park.

3.4 Low-level Flow Diversion Structures

Within eighteen (18) months of license issuance and acceptance the Licensee will install low-level flow diversion structures along a portion of the western side of the bypass reach near the tailrace of the Varick powerhouse. The Licensee agrees to consult with the NYSDEC and the USFWS prior to the design and installation of these low-level flow diversion structures.

These structures will be field located just upstream of the existing tailrace training wall. The licensee will construct these low level flow diversion structures with minimal height and length to avoid any unnecessary impact to the river or fish. These modifications will attempt to divert approximately 70% of the upper bypass reach flow, during the 200-cfs bypass flow release period from June 1 through September 16, to the lower bypass reach. Minor reductions agreed upon by the Parties for the bypass flows released into the bypass reach of the Varick development are in consideration of the implementation of these low-level flow diversion structures.

3.4.1 Justification

These modifications will augment the agreed upon bypass flows by providing increased levels of habitat for invertebrates; spawning for riffle dwelling species, walleye, white sucker, and smallmouth bass; juvenile habitat for longnose dace, white sucker and smallmouth bass; and adult habitat for longnose dace and white sucker. The low-level flow diversion structures will provide adult salmonids migrating upstream to the powerhouse a location to ascend the bypass reach in order to reach areas for sport harvest, increase the prevention of illegal harvesting of large adult fish by providing relatively deep and fast moving water, and assist in providing additional flows to the east side of the bypass reach to maintain waterfowl habitat and to improve the aesthetics of the bypassed reach.

3.5 Fish Protection, Passage, and Movement

The Licensee shall implement the fish-protection, passage, and movement measures as specified in Table 3-4 and 3-5. The Licensee shall be required to provide the following measures and structures to facilitate fish movement at the respective Oswego River Projects.

Table 3-4: Oswego River Hydroelectric Projects Fish Movement				
Development	Downstream Movement Routes		Upstream Eel Conveyance System	
	Location	Implementation Schedule	Upstream Eel Conveyance System	Implementation Schedule
Oswego Falls	70-cfs fish friendly release from an existing sluice gate adjacent to the east side powerhouse, 166-cfs through a tainter gate near the west side powerhouse.	Within 18 months of license issuance and acceptance	An upstream eel conveyance system will be field located in consultation with the USFWS, the NYSDEC and the Canal Corp. Each conveyance system will be installed seasonally from June 15 through September 15.	Within two (2) years of the scheduled Fulton upstream eel ramp installation
Fulton	75-cfs fish friendly release through the existing sluice gate adjacent to the Fulton powerhouse			Within six (6) years of license issuance and acceptance
Minetto	25-cfs fish passage release through an existing unused bay within the Minetto powerhouse			Within four (4) years of license issuance and acceptance.
Varick	200-cfs fish friendly release through a location adjacent to the newly installed trashrack overlays			Within two (2) years of license issuance and acceptance.

At the Oswego Falls Project, the Licensee shall be required to install protective measures within two (2) years of the execution of this "Offer of Settlement". Should the FERC fail to approve the amendment to the Oswego Falls license (as described in Section 2.7) within eighteen (18) months of this execution, the Licensee shall be required to install protective measures within one (1) year of FERC's approval of this amendment(whichever is later). These protective measures include 1.0-inch clear-spaced

trashrack overlays or 1.5-inch diameter perforated plates to be placed seasonally from May 1 or when flows permit safe installation (whichever is later) through November 30 or when the temperature of the river decreases to 7° C or less (whichever is sooner) as described in Table 3-5. Within six (6) months of the Commission's approval of the amendment to the Oswego Falls license, the Licensee shall provide a year-round 70-cfs minimum "fish friendly" flow release located at a sluice gate adjacent to the east-side powerhouse and a 166-cfs "fish friendly" release through taintor gate six (6). The Licensee shall also install an upstream eel conveyance system at the Oswego Falls Project to be placed seasonally from June 15 through September 15 within two (2) years of the scheduled installation date for an upstream eel conveyance system at the Fulton development as described in Table 3-4.

Development	Protection Measure	Implementation Schedule	Location	Seasonality
Oswego Falls	Seasonal overlays in the form of 1" clear-spaced trashracks or 1.5" diameter perforated plates	Within 2 years of execution of this "Offer of Settlement" or within 1 year of FERC's approval of the amendment for the Oswego Falls Project (whichever is later).	At the same location as the existing trashracks	To be placed seasonally from May 1 or when flows permit safe installation through November 30 or when the water temperature reaches 7 degrees C or less (whichever is sooner)
Fulton		Within 2 years of license issuance and acceptance for the Oswego River Project.		
Minetto		Within 4 years of license issuance and acceptance for the Oswego River Project		
Varick		Within 6 years of license issuance and acceptance for the Oswego River Project.	To be located at the "State Head Gates" adjacent to the dam.	

At the Fulton Development, the Licensee shall be required to install protective measures within two (2) years of license issuance and acceptance that includes 1.0-inch clear-spaced trashrack overlays or 1.5-inch diameter perforated plates to be placed seasonally from May 1 or when flows permit safe installation (whichever is later) through November 30 or when the temperature of the river decreases to 7° C or less (whichever is

sooner) as described in Table 3-5. The Licensee shall provide a year-round 75-cfs minimum “fish friendly” flow release located at a sluice gate adjacent to the powerhouse, and shall install an upstream eel conveyance system at the Fulton Development to be placed seasonally from June 15 through September 15 within six (6) years of license issuance and acceptance as described in Table 3-4.

At the Minetto Development, the Licensee shall be required to install protective measures within four (4) years of license issuance and acceptance that include 1.0-inch clear-spaced trashrack overlays or 1.5-inch diameter perforated plates to be placed seasonally from May 1 or when flows permit safe installation (whichever is later) through November 30 or when the temperature of the river decreases to 7° C or less (whichever is sooner) as described in Table 3-5. The Licensee shall provide a year-round 25-cfs minimum “fish friendly” flow release located within one of the existing unused bays at the Minetto powerhouse, and install an upstream eel conveyance system at the Minetto development to be placed seasonally from June 15 through September 15 within four (4) years of license issuance and acceptance as described in Table 3-4.

At the Varick Development, the Licensee shall be required to install protective measures within six (6) years of license issuance and acceptance that include 1.0-inch clear-spaced trashrack overlays or 1.5-inch diameter perforated plates to be placed seasonally from May 1 or when flows permit safe installation (whichever is later) through November 30 or when the temperature of the river decreases to 7° C or less (whichever is sooner) as described in Table 3-5. This measure will be located at the “State Head Gate” structure adjacent to the dam. The Licensee shall provide a year-round 200-cfs minimum “fish friendly” flow release located at the Varick dam. The Licensee shall also install an upstream eel conveyance system at the Varick development to be placed seasonally from June 15 through September 15 within two (2) years of license issuance and acceptance as described in Table 3-4.

The Licensee shall not be required to test the effectiveness of any, or all, components of existing and future protection or passage measures and/or structures, make

qualitative or quantitative determinations of fish entrainment and/or mortality, or provide compensation for any fish entrainment and/or mortality.

The Licensee shall not be required to increase the level of protection and passage as agreed to by this Settlement Offer for the term of the license, unless prescribed by the Secretary of the U.S. Department of the Interior under Section 18 of the Federal Power Act (see Section 2.7).

The Licensee may curtail or suspend the requirements of this commitment if required by operating emergencies beyond the control of the Licensee, including security, and for limited periods upon mutual agreement between the Licensee, the USFWS, and the NYSDEC. If the requirements of this commitment 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.

3.5.1 Justification

The fish protection measures and fish friendly minimum flow release structures agreed upon by the parties and described above will provide riverine and migratory species with additional routes to freely move downstream and seasonal protection from turbine entrainment. Fish movement currently is accomplished through turbine generation, canal lockages during the navigation season, and flow over the spillway. The protection measures and movement flows will both physically deter larger fish and behaviorally deter smaller fish from entering the turbine intakes while simultaneously enhancing downstream fish friendly movement by providing an escape route adjacent to the turbine intakes near each of the Oswego River Projects. The upstream eel conveyance systems will aid in the upstream migration of American eels to enable them to utilize additional habitat.

3.6 Flow and Water Level Monitoring

The Licensee shall develop a stream-flow and water-level monitoring plan in consultation with the NYSDEC and the USFWS within fifteen (15) months of the FERC's license issuance and acceptance. The monitoring plan shall include all gages and/or equipment to:

- Measure the base-flow releases at the Fulton development of the Oswego River Project at appropriate locations.
- Measure the bypass flow releases at the Fulton and Varick developments of the Oswego River Project at the appropriate locations.
- Measure headpond and tailwater elevations as needed.
- Provide an appropriate means of on-site visual verification of water levels.
- At the Oswego Falls Project, perform monitoring as outlined in the Oswego Falls "Order Modifying and Approving Run-of-River Monitoring Plan".

All gaging and ancillary equipment required by the monitoring plan, including headpond and tailwater gages, shall be made operational and fully calibrated within eighteen (18) months of license issuance and acceptance.

The monitoring plan will contain provisions for the installation of binary staff gages at selected locations to permit on-site visual verification of headpond, tailwater, and/or bypass reach water levels to the nearest 0.1-foot. Binary staff gages will be visible to the general public. Access to staff gages shall be provided to the NYSDEC, the 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 in New York State within five (5) 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 may cause a reduction in the required baseflow at or below the Fulton powerhouse and bypass flow at or below the Fulton and Varick dams. The Licensee will consult with the NYSDEC to include a plan for reporting these types of incidents within the stream flow and water level monitoring plan.

3.7 Recreation

The recreational opportunities provided by this Settlement Offer supplement the existing recreational opportunities on the Oswego River which provide public access to, and use of, the impoundments, bypass reaches, and adjacent lands associated with the Fulton, Minetto, and Varick developments.

The Licensee shall allow public access to all lands within the FERC project boundary associated with each development covered by this Settlement Offer, with the exception of those lands and facilities specifically related to hydroelectric generation where public safety or site security would be a concern. Lands and facilities where public access will be precluded may include, but are not necessarily limited to, dams, dikes, gates, intake structures, water conveyance structures, powerhouses, substations, transmission lines, and certain access roads leading to such facilities.

3.7.1 Recreation Enhancements (NOT TO BE INCLUDED IN THE LICENSE)

Within eighteen (18) months of license issuance and acceptance, the Licensee shall implement the recreation enhancement commitments specified below.

- (a) **Canoe Portage around Minetto Dam.** Canoe navigation around the dams and hydro facilities at each development will continue to be primarily provided through the adjacent canal lock facilities. At the Minetto Development alternative canoe portage accommodations have been requested for use during high flow periods when canoe navigation can be difficult due to river currents near the upstream entrance to the lock. Alternative canoe portage will be accommodated as follows: upstream canoe take-out is available at the existing public boat launch on the west side of the Oswego River upstream of the Minetto Bridge; the portage trail will be situated between the western edge of the Oswego River and Route 48; and the downstream canoe put-in access will be located on Canal Corp owned land downstream of the powerhouse. (See attached Figure 1 showing these facilities). Within eighteen (18) months of license issuance and acceptance the Licensee will construct a canoe portage put-in facility and appropriate portage trail signage on the west side of the Oswego River downstream of the Minetto Development on land owned by the Canal Corp. Prior to constructing these facilities, the Licensee will consult with the Canal Corp concerning final design and location. The Canal Corp agrees to dedicate the use of its land in question for the development and maintenance of these canoe portage facilities by the Licensee.
- (b) **Dispute Resolution:** In the event that a dispute arises relative to the canoe portage enhancement at Minetto Development specified in this Section 3.7.2, signatories agree to engage in good faith negotiations for a period of at least 90 days, if necessary, in an effort to resolve the dispute, with said negotiations to be initiated by the aggrieved party. A minimum of two meetings, scheduled and organized by the objecting party, shall be held to attempt to

resolve the dispute during the 90-day period, if necessary. In the event that resolution cannot be reached within the 90-day negotiating period, any signatory may seek relief in an alternate forum with jurisdiction and authority to address recreational enhancement commitments not included in the license.

J:\826-001\91-15\Oswego RIVER OFFER OF SETTLEMENT.doc

Organization: Adirondack Mountain Club

By: Betty Lou Bailey
Betty Lou Bailey

Title: Chairman, Canoe Route Subcommittee
Conservation Committee

Date: June 13, 2003

OSWEGO RIVER OFFER OF SETTLEMENT

Organization: Erie Boulevard Hydropower, L.P
Acting through its General Partner,
Reliant Energy

Note: Erie's execution of this Offer of Settlement is premised on the Canal Corp.'s October 20, 2003 letter (filed with the FERC on November 11, 2003) advising that it does not object to the obligations imposed on Erie by this Offer of Settlement which provides reasonable assurances that the Canal Corp will cooperate in issuing requisite Canal Work Permits consistent with Section 2.4 of this Offer of Settlement.

By: David J. Youlen
David J. Youlen

Title: Managing Director, Hydro Generation

Date: 1/29/04

OSWEGO RIVER OFFER OF SETTLEMENT

Organization: Izaak Walton League

By: Leslie G. Monostory
Leslie Monostory

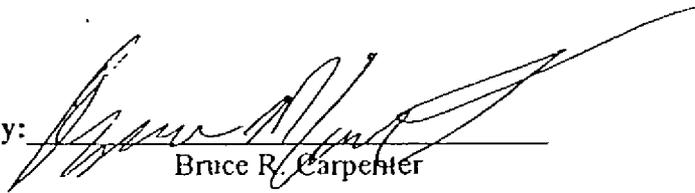
Title: Vice President, CNY Chapter

Date: April 14, 2003

OSWEGO RIVER OFFER OF SETTLEMENT

Organization: New York Rivers United

By:

A handwritten signature in black ink, appearing to read "Bruce R. Carpenter", is written over a horizontal line. The signature is fluid and cursive.

Bruce R. Carpenter

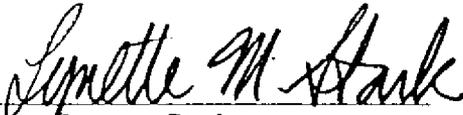
Title: Executive Director

Date:

4/10/03

OSWEGO RIVER OFFER OF SETTLEMENT

Organization: New York State Department of Environmental
Conservation

By: 
Lynette Stark

Title: Deputy Commissioner

Date: 4/29/03

Organization: New York State Conservation Council

By: Howard Cushing Jr.
Howard Cushing Jr.

Title: President

Date: 8/26/03

Organization: Trout Unlimited

By: Thomas R. Matias
Thomas R. Matias

Title: Counsel to the Committee on Hydro Relicensing
New York State Council, Trout Unlimited

Date: 4/17/03

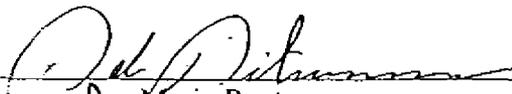
Organization: United States Department of the Interior
U. S. Fish and Wildlife Service

By: 
Dr. Mamie Parker

Title: Regional Director

Date: 4-18-03

Organization: U. S. Department of the Interior,
National Park Service

By: 
Marie Rust

Title: Regional Director, Northeast Region

Date: 4/29/03



John L. Buono
Chairman

**New York State Thruway Authority
New York State Canal Corporation**

200 Southern Blvd., P.O. Box 189, Albany, NY 12201-0189

www.thruway.state.ny.us



Michael R. Flöischer
Executive Director
OFFICE: 518-485-2744

FILED
OCT 11 11 51 AM '03
NEW YORK STATE CANAL CORPORATION

October 20, 2003

Mr. Jerry L. Sabattis
Hydro License Coordinator
Reliant Energy
225 Greenfield Parkway, Suite 201
Liverpool, New York 13088

Re: Oswego River Settlement Agreement
FERC License Nos. 2474 and 5984

Dear Mr. Sabattis:

This is to inform you that the New York State Canal Corporation does not object to the terms and conditions imposed upon the licensee under the above described FERC licenses, as described in the Oswego River Offer of Settlement and Appendices. Also, the Canal Corporation will not oppose nor object to the NYSDEC 401 Water Quality Certification. On the advice of counsel, the Canal Corporation will not be a signatory to the Settlement Agreement.

As stated in our letter dated October 10, 2003 to Mr. Jeffrey M. Auser, P. E., (copy enclosed), we will be directly negotiating with Reliant for the hydropower easements and operating & maintenance agreements which are necessary at the Licensed sites.

Sincerely,

Lawrence J. Frame, P.E.
Deputy Director



Gerald C. Goldstein
Assistant General Counsel

July 8, 2003

Mr. Jerry Sabattis
Hydro Licensing Coordinator
Reliant Energy
225 Greenfield Parkway, Suite 201
Liverpool, NY 13088

Subject: Erle Boulevard Hydropower
Oswego River Project Settlement Offer
FERC Project No. 2474

Dear Mr. Sabattis:

The Power Authority has received the final settlement offer dated April 2003 for the Oswego River Project. As a party to these proceedings and though not opposed to the Project, the Power Authority has not executed the final settlement agreement.

The Authority's interest in these proceedings is focused principally on the School Street Project, located on the Mohawk River, downstream from two of the Authority's projects.

Thank you for your consideration.

Very truly yours,

A handwritten signature in cursive script that reads "Gerald C. Goldstein".

Cc: Hon. Kevin J. Casutto
W. Little, NYSDEC
J. Osinski, NYPA
J. Suloway, NYPA

APPENDIX A
NEW YORK CANAL CORPORATION WORK PERMIT APPLICATION



NEW YORK STATE CANAL CORPORATION

INSTRUCTIONS TO APPLICANTS FOR COMMERCIAL CANAL WORK PERMITS

An applicant requesting a Canal Work Permit must complete those forms and/or follow the instructions, which have been checked below or otherwise provide the following information.

- Canal Work Permit Application.
- Proof of Liability Insurance Coverage:
- Certificate of Insurance for Occupancy Permits (FORM TA-951333).
The Canal Corporation requires liability insurance coverage in the amount of \$2,000,000 on all commercial permits. Please submit proof of this amount of insurance coverage with your permit application form. Please have your insurance company complete the enclosed form and return it to us along with your permit application.
- New York State Thruway Authority/Canal Corporation Statement of Self-Insurance form to be filled out if Self-Insured.

The New York State Canal Corporation reserves the right to specify the amount of insurance coverage required on all permits that it issues.
- Seed to the Property adjacent to New York State Canal Lands to be permitted.
- Maps, plans and specifications pertaining to the proposed work.

Please provide ___ ___ sets of plans and specifications.
- Permit Fee:

A non-refundable application fee of \$ 25.00 must be submitted by check or money order.

An additional charge of \$250 per day shall be imposed for any approved work on the Canal system requiring an onsite inspection by Corporation staff of one-half day or more.

Checks or money orders must be made out to the New York State Canal Corporation and submitted with your application form to:
NEW YORK STATE CANAL CORPORATION
ATTENTION: CREDITS & COLLECTIONS
P.O. BOX 22058
ALBANY, NEW YORK 12201-2058
- Appendix C - State Environmental Quality Review - Short Environmental Assessment Form Part I-Project Information. Please fill out and return with your Canal Work Permit application.

NO WORK PURSUANT THIS APPLICATION SHALL COMMENCE UNTIL A CANAL WORK PERMIT IS ISSUED BY THE NEW YORK STATE CANAL CORPORATION.



New York State Canal Corporation
CANAL PERMIT APPLICATION

FOR CANAL USE ONLY
Please enclose non-refundable fee of
\$25.00

WORK PERMIT
 LEASE

NAME	WORK PHONE NUMBER	HOME PHONE NUMBER
------	-------------------	-------------------

ADDRESS

TOWN/VILLAGE/CITY	STATE	ZIP CODE
-------------------	-------	----------

USE AND OCCUPANCY PERMIT NO. (if pre-existing)	CANAL PLATE NO. (if pre-existing)
--	-----------------------------------

PERMISSION REQUESTED TO:

DURATION OF WORK (if applicable) FROM _____ THROUGH _____

DESCRIPTION OF CANAL PROPERTY (including existing structures and map or sketch showing adjacent owners, streets, etc.)

LOCATION OF CANAL PROPERTY

APPLICANT'S SIGNATURE	DATE
-----------------------	------

SECOND APPLICANT'S SIGNATURE (if joint application)	DATE
---	------

APPLICANT WAIVES THEIR RIGHT TO DENY A CREDIT HISTORY CHECK.

FOR OFFICIAL USE ONLY

PARCEL NUMBER	TAX MAP PARCEL NUMBER
---------------	-----------------------

CPM/BLM NUMBER	CENTER LINE STATION
----------------	---------------------

APPROVAL RECOMMENDED: _____
Division Canal Permit Engineer _____
Date

DIVISION APPROVAL: _____
Division Canal Maintenance Engineer _____
Date

COMMENTS: _____

**CERTIFICATE OF INSURANCE
FOR OCCUPANCY PERMITS**



(NAME OF INSURANCE COMPANY)

NAME OF INSURED:		AGENCY NAME & ADDRESS:	
ADDITIONAL INSURED: People of the State of New York New York State Canal Corporation New York State Thruway Authority		PERMIT NO.:	
		DATE OF CERTIFICATE:	

MINIMUM LIMITS OF LIABILITY REQUIRED

TYPE OF INSURANCE	BODILY INJURY LIABILITY		PROPERTY DAMAGE LIABILITY	
	Each Occurrence	Aggregate	Each Occurrence	Aggregate
Comprehensive General Liability				
OR	Combined Single Limit of \$ 2,000,000			

The subscribing insurance company, licensed to do business in the State of New York, certifies that insurance of the kinds and types and for the limits of liability herein stated, has been procured by and furnished on behalf of the insured and is in full force and effect for the period listed below. The insurance company further agrees to furnish the New York State Canal Corporation a complete copy of the policy upon request.

KIND OF INSURANCE	POLICY NUMBER	EFFECTIVE DATE	EXPIRATION DATE		LIMITS OF LIABILITY (in thousands)	
					Each Occurrence	Aggregate
Comprehensive General Liability				B.I.		
				P.D.		
Excess Liability						

The policy described above contains the following endorsement(s):

- An endorsement naming, the "People of the State of New York, the New York State Canal Corporation and the New York State Thruway Authority" as additional insureds and covering the liability of the Permittee, the People of the State of New York, the Canal Corporation, the Authority and their officers, employees and agents, with respect to all acts or omissions under the permit whether or not authorized thereby, including any entry upon or use of Canal Corporation lands, as well as the maintenance of any facility by the permittee or anyone acting in its behalf, and including omissions and supervisory acts of the Canal Corporation, the Authority, their officers, employees or agents.
- An endorsement with the following description of policy coverage:

"The naming of the People of the State of New York, the New York State Canal Corporation, and the New York State Thruway Authority as additional insureds does not exclude the liability of the permittee, and does not exclude the liability of any one acting by, through or for the permittee, for damages to the property or facilities of the New York State Canal Corporation or the New York State Thruway Authority."
- An endorsement providing for 30 days advance notice before cancellation or material change of coverage provided will be mailed to the New York State Canal Corporation, P.O. Box 22058, Albany, New York 12201-2058.

NAME OF
INSURANCE COMPANY _____

BY _____

CORPORATE TITLE _____

* Signature must be that of an officer or an authorized individual employed by the insurance company. An agent's signature is not acceptable. This signature also warrants that the certificate fairly describes the coverage of the policy and that there are not material or substantial limitations to either the limits of coverage or the object to be covered.

STATE OF _____

CITY OR
COUNTY OF _____

} ss:

On this _____ day of _____ 19____, before me personally came _____, to me known, who being duly sworn, did depose and say that he/she resides in _____, that he/she is the _____ of the _____

the corporation described in and which executed the foregoing instrument; that he/she knew the seal of said corporation; that the seal affixed to said instrument was such corporate seal; that it was so affixed by the authority of the Board of Directors of said corporation, and that he/she signed his/her name thereto by like order.

(Notary Public)

PROJECT ID. NUMBER

SHORT ENVIRONMENTAL ASSESSMENT FORM

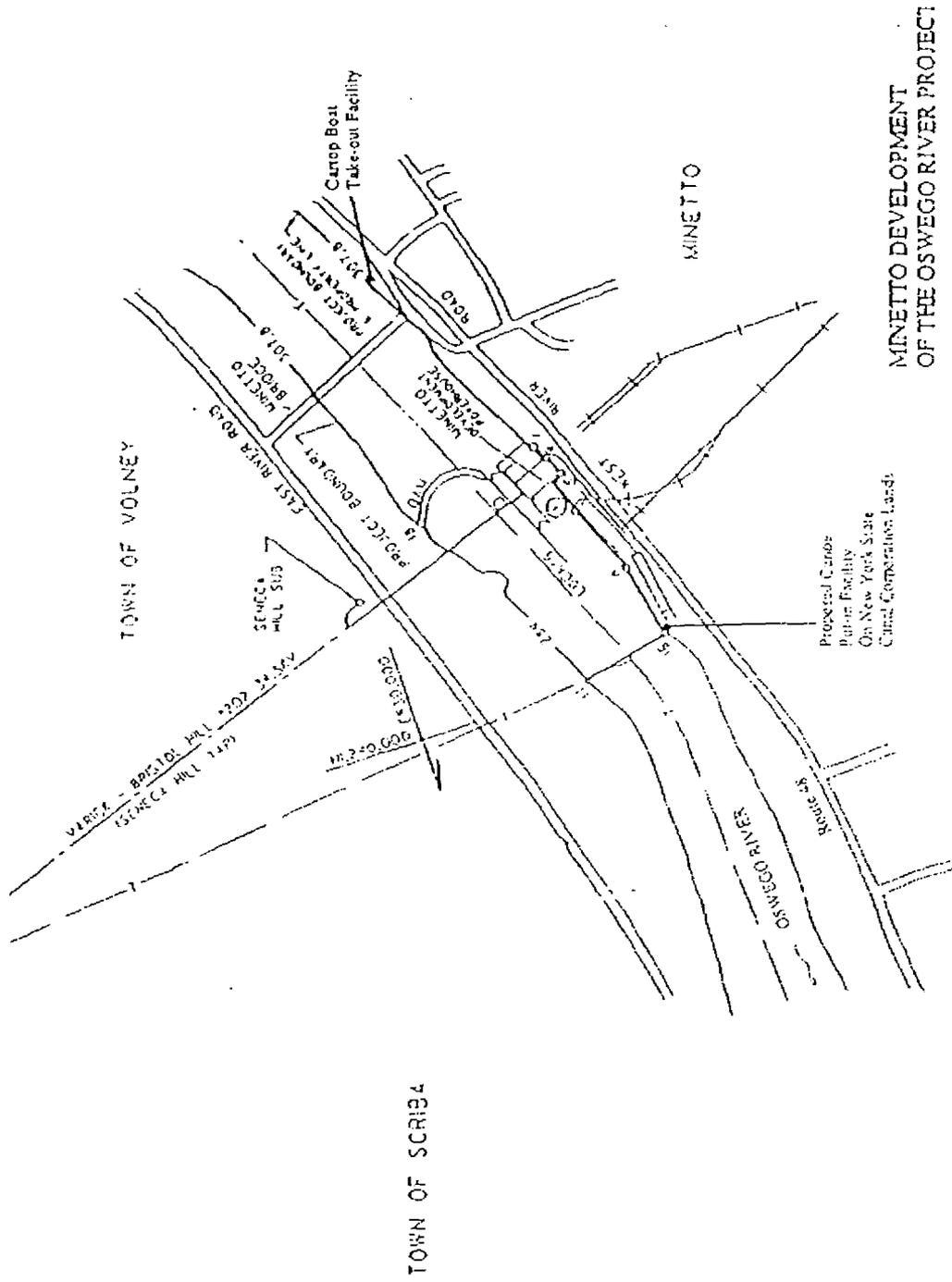
For UNLISTED ACTIONS Only

PART I - PROJECT INFORMATION (To be completed by Applicant or Project sponsor)

1. APPLICANT / SPONSOR	2. PROJECT NAME
3. PROJECT LOCATION Municipality _____ County _____	
4. PRECISE LOCATION (Street address and road intersections, prominent landmarks, etc. or provide map)	
5. IS PROPOSED ACTION: <input type="checkbox"/> New <input type="checkbox"/> Expansion <input type="checkbox"/> Modification/alteration	
6. DESCRIBE PROJECT BRIEFLY:	
7. AMOUNT OF LAND AFFECTED: Initially _____ acres Ultimately _____ acres	
8. WILL PROPOSED ACTION COMPLY WITH EXISTING ZONING OR OTHER EXISTING LAND USE RESTRICTIONS? <input type="checkbox"/> Yes <input type="checkbox"/> No If No, describe briefly:	
9. WHAT IS PRESENT LAND USE IN VICINITY OF PROJECT? <input type="checkbox"/> Residential <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Agriculture <input type="checkbox"/> Park/Forest/Open space <input type="checkbox"/> Other	
10. DOES ACTION INVOLVE A PERMIT APPROVAL OR FUNDING, NOW OR ULTIMATELY FROM ANY OTHER GOVERNMENTAL AGENCY (FEDERAL, STATE OR LOCAL)? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, list agency(ies) and permit/approval:	
11. DOES ANY ASPECT OF THE ACTION HAVE A CURRENTLY VALID PERMIT OR APPROVAL? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, list agency name and permit/approval:	
12. AS A RESULT OF PROPOSED ACTION WILL EXISTING PERMIT/APPROVAL REQUIRE MODIFICATION? <input type="checkbox"/> Yes <input type="checkbox"/> No	
I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE TO THE BEST OF MY KNOWLEDGE	
ADDRESS/ADDRESSOR NAME _____	Date: _____
Signature: _____	

If the action is in the Coastal Area, and you are a state agency, complete the Coastal Assessment Form before proceeding with this assessment

FIGURE 1
MINETTO CANOE PORTAGE FACILITIES



MINNETTO DEVELOPMENT OF THE OSWEGO RIVER PROJECT

FIGURE 1



PERMIT
Under the Environmental Conservation Law (ECL)

Permittee and Facility Information

Permit Issued To:
ERIE BOULEVARD HYDROPOWER LP
225 GREENFIELD PARKWAY

SUITE 201
LIVERPOOL, NY 13088
(315) 413-2787

Facility:
OSWEGO RIVER HYDRO PROJECT
MINETTO, VARICK AND FULTON
DEVELOPMENTS
OSWEGO COUNTY, NY

Facility Location: In MULTIPLE TOWNS in OSWEGO COUNTY

Facility Principal Reference Point: NYTM-E: NYTM-N:

Project Location: Minetto, Varick and Fulton Developments

Authorized Activity: Operation and maintenance of the Oswego River Hydro Project at the Fulton, Minetto and Varick Developments (FERC No. 2474) in accordance with the applicable provisions of the Oswego River offer of Settlement submitted to to the Federal Energy Regulatory Commission on February 19, 2004 and the attached conditions.

Permit Authorizations

Water Quality Certification - Under Section 401 - Clean Water Act

Permit ID 7-3599-00021/00001

New Permit

Effective Date: 10/4/2004

Expiration Date: No Exp. Date

NYSDEC Approval

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator: WILLIAM R ADRIANCE, Chief Permit Administrator

Address: NYSDEC HEADQUARTERS
625 BROADWAY
ALBANY, NY 12233

Authorized Signature: _____

William R. Adriance

Date 10/04/04

Permit Components

NATURAL RESOURCE PERMIT CONDITIONS



GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

**NATURAL RESOURCE PERMIT CONDITIONS - Apply to the Following
Permits: WATER QUALITY CERTIFICATION**

- 1. Conformance With Plans** All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or his agent as part of the permit application. Such approved plans were prepared by (See Natural Resource Permit Condition 11).
- 2. State May Order Removal or Alteration of Work** If future operations by the State of New York require an alteration in the position of the structure or work herein authorized, or if, in the opinion of the Department of Environmental Conservation it shall cause unreasonable obstruction to the free navigation of said waters or flood flows or endanger the health, safety or welfare of the people of the State, or cause loss or destruction of the natural resources of the State, the owner may be ordered by the Department to remove or alter the structural work, obstructions, or hazards caused thereby without expense to the State, and if, upon the expiration or revocation of this permit, the structure, fill, excavation, or other modification of the watercourse hereby authorized shall not be completed, the owners, shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore to its former condition the navigable and flood capacity of the watercourse. No claim shall be made against the State of New York on account of any such removal or alteration.
- 3. State Not Liable for Damage** The State of New York shall in no case be liable for any damage or injury to the structure or work herein authorized which may be caused by or result from future operations undertaken by the State for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.
- 4. Permittee Responsible For Other Approvals** Granting of this permit does not relieve the applicant of the responsibility of obtaining any other permission, consent or approval from the U.S. Army Corps of Engineers, U.S. Coast Guard, New York State Office of General Services or local government which may be required.
- 5. Precautions Against Contamination of Waters** All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the project.
- 6. No Interference With Navigation** There shall be no unreasonable interference with navigation by the work herein authorized.
- 7. State May Require Site Restoration** If upon the expiration or revocation of this permit, the project hereby authorized has not been completed, the applicant shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore the site to its former condition. No claim shall be made against the State of New York on account of any such removal or alteration.
- 8. Water Quality Certification** The NYS Department of Environmental Conservation hereby certifies that the subject project will not contravene effluent limitations or other limitations or standards under



Sections 301, 302, 303, 306 and 307 of the Clean Water Act of 1977 (PL 95-217) provided that all of the conditions listed herein are met.

9. Notification Requirements for Emergencies The following procedures shall apply to all activities conducted at the project in response to an emergency:

Prior to commencement of emergency activities, Permittee must notify NYS DEC and receive approval in advance of the work commencing. If circumstances require that emergency activities be taken immediately such that prior notice to the NYSDEC is not possible, then the NYSDEC must be notified by the Certificate Holder within 24 hours of commencement of the emergency activities. In either case, notification must be by certified mail or other written form of communication, including fax and electronic mail. This notification must be followed within 24 hours 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 contacts listed in Special Condition 10.

10. Department contacts Except as otherwise specified, all contacts with the Department concerning this certificate shall be addressed to the following:

NYSDEC - Region 7 Headquarters
Regional Permit Administrator
Division of Environmental Permits
615 Erie Boulevard
West Syracuse, NY 13204-2400

11. Offer of Settlement This certificate includes and incorporates the Oswego River "Offer of Settlement" (Settlement) dated November 2003 and submitted to the Federal Energy Regulatory Commission on February 19, 2004.

OPERATIONS

12. Base Flows The certificate holder shall maintain instream flows in accordance with the settlement, in particular, Section 3.2.

13. Impoundment Fluctuations The reservoirs at the Fulton, Minetto and Varick Developments as well as the reservoir at Oswego Falls (Project reservoirs) shall be operated in accordance with the Settlement, in particular, Section 3.1.2. Alternative impoundment operating plans must be reviewed and approved by NYSDEC prior to being implemented. Emergencies shall be dealt with in accordance with special condition 9 of this certificate.

14. Bypass Flows The certificate holder shall maintain bypass flows in accordance with the Settlement, in particular, Section 3.3.

15. Flow Monitoring The certificate holder shall develop a stream flow and water level monitoring plan consistent with the Settlement, in particular, Section 3.6.



16. Fish Protection/Passage Fish protection passage and movement provisions shall be provided in accordance with the Settlement, in particular, Section 3.5.

17. Public Access Public access and recreational opportunities shall be provided in conformance with the Settlement, in particular, Section 3.7.

CONSTRUCTION REQUIREMENTS

18. Maintenance Dredging The certificate holder shall curtail generation and install stoplogs or otherwise shut off flow through the turbines prior to commencing any maintenance dredging activities in the intake/forebay area.

19. Sediment Analysis and Disposal The certificate holder must sample any sediments to be disturbed or removed from the project waters and test them for contaminants. Sampling and testing shall be accomplished according to a protocol submitted to and approved by the Department beforehand. Approval from the Department shall include all disposal locations for any sediments to be removed from the project waters.

20. Erosion & Sediment Control Prior to commencing activities which could adversely affect water quality, the certificate holder must receive Department approval of an Erosion and Sediment Control Plan. This plan must be submitted at least 90 days before the intended date for commencing work. All work shall conform to the goals below.

At minimum, the certificate holder must accomplish the following objectives:

- a. isolate in-stream work from the flow of water and prevent discolored (turbid) discharges and sediments from entering the waters of the river due to excavation, dewatering and construction activities;
- b. Exclude the use of heavy construction equipment below the mean high water line until the work area is protected by an approved structure and dewatered, except where an emergency response requires immediate action;
- c. Stabilize any disturbed banks by grading to an appropriate slope, followed by armoring or vegetating as appropriate, to prevent erosion and sedimentation into the waterbody;
- d. Minimize soil disturbance, provide appropriate grading and temporary and permanent re-vegetation of stockpiles and other disturbed areas to minimize erosion/ sedimentation potential;
- e. Protect all waters from contamination by deleterious materials such as wet concrete, gasoline, solvents, epoxy resins or other materials used in the construction, maintenance and operation of the project;
- f. Install effective erosion control measures on the downslope of all disturbed areas and maintain them in a fully functional condition. These erosion control measures are to be installed before commencing any other activities involving soil disturbance;
- g. Ensure complete removal of all dredged and excavated material, debris or excess materials from construction, from the bed and banks of all water areas to an approved upland disposal site;
- h. 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.

21. Placement of cofferdams, construction of temporary access roads or ramps, or other temporary structures which encroach upon the bed or banks of the river The design and



installation of cofferdams, temporary access roads or ramps, or other temporary structures which encroach upon the bed or banks of the river must be approved by the Department prior to installation.

22. Construction Drawdowns Whenever construction and/or maintenance activities require that the water level of project reservoirs be lowered, it shall not be drawn down more than 1 foot per hour. During refill, the water level of the impoundment shall not be allowed to rise more than 1 foot per hour.

23. Maintenance of River Flow During all periods of construction, flows immediately downstream of work sites shall be maintained in accordance with condition 12 of this permit.

24. Turbidity Monitoring During Construction During construction related activities, the certificate holder will monitor the waters of the river at a point immediately upstream of project activities and at a second point no more than 100 feet downstream from any discharge point or other potential source of turbidity. The certificate holder specifically agrees that if, at any time, turbidity measurements from the downstream locations exceed the measurements from the locations upstream of the work areas, all related construction on the project will cease until the source of the turbidity is discovered and the situation is corrected.

25. Notification of DEC of construction activities The NYS DEC contact referenced in Special Condition 10 must be notified in writing at least two weeks prior to commencing any work performed under the authority of this certificate.

GENERAL CONDITIONS - Apply to ALL Authorized Permits:

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 be 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.

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.

3. Applications For Permit Renewals, Modifications or Transfers The permittee must submit a separate written application to the Department for permit 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. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Regional Permit Administrator



NYSDEC REGION 7 HEADQUARTERS
615 ERIE BOULEVARD WEST
SYRACUSE, NY13204 -2400

4. Submission of Renewal Application The permittee must submit a renewal application at least 30 days before permit expiration for the following permit authorizations: Water Quality Certification.

5. Permit Modifications, Suspensions and Revocations by the Department The Department reserves the right to modify, suspend or revoke this permit. 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.

6. Permit Transfer Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

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 permittees 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.

UNITED STATES OF AMERICA 109 FERC ¶ 62, 141
FEDERAL ENERGY REGULATORY COMMISSION

Erie Boulevard Hydropower, L.P.

Project No. 2474-004
New York

ORDER ON OFFER OF SETTLEMENT AND ISSUING NEW LICENSE

(November 30, 2004)

INTRODUCTION

1. On December 9, 1991, Niagara Mohawk Power Corporation (Niagara) filed an application for a new major license pursuant to sections 4(e) and 15 of the Federal Power Act (FPA)¹ to continue operation and maintenance of the 18.05-megawatt (MW) Oswego River Project No. 2474. The project is located on the Oswego River, a navigable waterway of the United States, in Oswego County, New York. The project does not occupy any federal lands. As discussed below, I am issuing a new license for the project.

2. This order also approves an Offer of Settlement filed by the licensee on behalf of itself and a number of signatories with respect to the relicensing of the Oswego River Project. As licensed, the Oswego River Project would continue to be a dependable source of electric energy, help conserve nonrenewable energy resources, reduce atmospheric pollution, and protect and enhance environmental, recreational and cultural resources at the project.

BACKGROUND

3. The original license for the project was issued on May 27, 1968.² The license expired on December 31, 1993, and since then, the project has operated under an annual license pending the disposition of the application for new license.³ In 1999, the Commission approved the transfer of the license from Niagara to Erie Boulevard Hydropower, L.P. (Erie).⁴

¹ 16 U.S.C §§ 797(e) and 808, respectively.

² 39 FPC 872 (1968), as amended, 50 FPC 1027 (1973).

³ See FPA section 15(a)(1), 16 U.S.C. § 808(a)(1).

⁴ 88 FERC ¶ 62,082 (1999).

4. Public notice of the license application was issued on February 9, 1993, setting April 12, 1993, as the deadline for filing motions to intervene. Timely motions to intervene were filed by John Leto Associates, U.S. Department of the Interior (Interior), New York State Department of Environmental Conservation (NYDEC), Adirondack Mountain Club, Trout Unlimited, City of Oswego, New York, and collectively, American Whitewater Affiliation, American Rivers, New York Rivers United, Natural Heritage Institute, Trout Unlimited, National Audubon Society, and Onondaga Audubon Society. Late motions to intervene were filed by the Town of Minetto, New York, and the City of Fulton, New York.⁵

5. The timely motions to intervene were automatically granted under 18 C.F.R. § 385.214(c)(1)(2004). The late motions to intervene for the Town of Minetto, New York, and the City of Fulton, New York were granted by notices issued December 2, 1993, and March 5, 1996, respectively.

6. The Commission issued a public notice on January 30, 1996, indicating the project was ready for environmental analysis and soliciting comments, recommendations, terms and conditions, and prescriptions. In response, comments were filed by Interior, New York Rivers United, Adirondack Mountain Club, and NYDEC.

7. On November 24, 1999, Commission staff made available for public comment a draft environmental assessment (DEA) that analyzed the impacts of relicensing the project. In letters filed January 10, January 21, January 31, and February 22, 2000, respectively, NYDEC, U.S. Fish and Wildlife Service (FWS), Erie and Adirondack Mountain Club, and the City of Oswego, New York commented on the DEA. NYDEC filed additional comments on January 31, 2000.

8. On December 6, 2001, Commission staff issued a final environmental assessment (FEA). All motions to intervene and comments have been fully considered in determining whether, and under what conditions, to issue this license.

PROJECT DESCRIPTION

9. The project consists of three developments extending from the Fulton development at river mile (RM) 11.6 to the Varick development at RM 1.4.

⁵ Trout Unlimited, the New York Council of Trout Unlimited, and Interior also filed motions in opposition to the project. Subsequently, they became signatories to the Settlement.

10. The Fulton development consists of a 509-foot-long, 15-foot-high concrete dam, a 33-acre reservoir, a 1,850-foot-long bypassed reach, and a powerhouse containing two generating units with a combined installed capacity of 1.25 MW.
11. The Minetto development consists of a 500-foot-long, 22.5-foot-high concrete dam, a 350-acre reservoir, and a powerhouse containing five generating units with a combined installed capacity of 8.0 MW.
12. The Varick development consists of a 730-foot-long, 13-foot-high masonry gravity dam, a 32-acre reservoir, a 1,940-foot-long bypassed reach, and a powerhouse containing four generating units with a combined installed capacity of 8.8 MW.
13. Erie operates the Oswego River Project's developments as store-and-release facilities. The developments use locks and dams owned by the New York State Canal Corporation (Canal Corporation) a subsidiary of the New York State Thruway Authority (NYSTA). NYSTA regulates the river to control flooding and to provide adequate water levels during the navigation season (generally May 1 to December 1) to operate the lock and dam system. The project is described in greater detail in ordering paragraph (B)(2).
14. Erie proposes to change project operations to a modified run-of-river (ROR) mode which would include limiting reservoir fluctuations and releasing minimum downstream flows according to the Settlement as discussed below. Erie does not propose any new construction or additional capacity at the project.

OFFER OF SETTLEMENT

15. On February 19, 2004, Erie filed an Offer of Settlement (Settlement) and an explanatory statement that includes provisions to protect and enhance fish and wildlife, and recreation resources.⁶
16. This section discusses the provisions of the Settlement Offer, including the environmental effects of the Settlement Offer's conditions (contained in section 3 of the Offer of Settlement). With the exception of the low-level flow diversion structures along a portion of the western side of the bypassed reach of the Varick powerhouse, the provisions of the Settlement were assessed in staff's 2001 FEA.

⁶ In addition to Erie, the Settlement was signed by the following parties: Adirondack Mountain Club, Izaak Walton League, New York Rivers United, NYDEC, New York State Conservation Council, Trout Unlimited, Interior, FWS, and the National Park Service.

A. Section 1.0 Introduction

17. Section 1 sets forth the purpose and effect of the Settlement.

B. Section 2.0 General Agreement of the Parties

18. Section 2 describes the general agreement of the parties, including a 40-year license term and the withdrawal of measures proposed in the license application.

19. Section 2.2 of the Settlement states that the parties' intent is that the provisions of section 3 of the Settlement be included as numbered license articles. Because the water quality certificate (WQC) for this project incorporates the settlement by reference, this order does not include numbered articles for every Settlement provision. These articles do not purport to, and indeed cannot, alter or override the WQC, but rather are meant to be complementary.⁷

C. Section 3.0 Measures Which the Licensee Will Undertake With Respect to License Conditions and Other Non-License Provisions of the Settlement

20. Section 3 includes the measures which Erie intends to undertake with respect to operating and maintaining the Oswego River Project once a new license is issued. Specifically, section 3 includes the following provisions:

Mode of Operation

21. Section 3.1 states that Erie will operate the Oswego River Project in a modified ROR mode within 18 months of license issuance and acceptance. Section 3.1.2 limits year-round impoundment fluctuations at the Fulton and Minetto developments to 0.5-feet and to 1.0-feet at the Varick development. In the FEA, staff recommended that Erie operate the project in a strict ROR mode, primarily citing the benefits to littoral zone aquatic habitat in the reservoir compared to the previous license which allowed peaking operation. However, the minor impoundment fluctuations allowed by the modified ROR mode will provide nearly the same level of protection to littoral zone habitat as strict ROR while allowing Erie some operational flexibility to buffer some of the effects of upstream projects. Allowing the Varick impoundment to fluctuate up to 1.0 foot, will also provide greater safety for anglers fishing below the development by not exposing them to the rapid fluctuations which can occur in project inflows. The impoundment fluctuation limits will benefit the aquatic community while allowing Erie the economic benefits of

⁷ See Avista Corporation. 93 FERC ¶ 61,116 at p. 61,327 (2000).

some minor peaking capacity. These economic benefits should help recoup the cost of other environmental measures included in the settlement. Articles 403 and 404 require this operating mode.

Base- Flow Releases

22. Section 3.2 states that Erie will release base flows during the walleye spawning season and during the remainder of the year below the powerhouse when generating or over the spillway during non-generation periods at the Fulton development. The base flows, required by Article 404, are similar to the flows recommended in the FEA, and will protect aquatic habitat in the tailrace below the Fulton powerhouse, in the Fulton bypassed reach, and the portion of the Oswego River downstream of the Fulton development.

Bypassed Reach Flows

23. Section 3.3 states that Erie will seasonally release a range of bypassed reach flows at the Fulton and Varick developments. These flows are similar to the flows recommended in the FEA. These bypassed reach flows, required in Article 405, will increase the amount of aquatic habitat in the Fulton and Varick bypassed reaches.

Low-level Flow Diversion Structure at Varick Development

24. Section 3.4 provides for Erie to install low-level flow diversion structures along a portion of the western side of the bypassed reach near the tailrace of the Varick powerhouse. The diversion structures are designed to allow Erie to divert approximately 70 percent of the upper bypassed reach flow to the lower bypassed reach during certain periods. The structures, required by Article 406, will enhance fish and wildlife habitat and improve aesthetics in the bypassed reach. To minimize the effects of installing the structures, Article 401 requires Erie to file an Erosion and Sediment Control Plan at least 90 days prior to commencing activities which would adversely affect water quality, *i.e.*, installing diversion structures or constructing recreation facilities.

Fish Protection, Passage, and Movement

25. Section 3.5 states that Erie will release year-round “fish friendly” flows⁸ through an existing sluice gate adjacent to the Fulton powerhouse, through an existing unused bay within the Minetto powerhouse, and through a location adjacent to the newly installed

⁸ “Fish friendly” is a flow that is released in a manner that is not expected to injure fish through contact with hard or rough surfaces.

trashrack overlays at the Varick development. An upstream eel conveyance system is to be installed seasonally from June 15 through September 15, and 1.0-inch, clear-spaced trashrack overlays or 1.5-inch diameter perforated plates are to be placed seasonally from May 1 through November 30 at the Fulton, Minetto, and Varick developments for fish protection. The fish protection measures and fish friendly flow releases (Article 407) will provide riverine and migratory species with routes to freely move downstream and provide seasonal protection from turbine entrainment without the expense of constructing new downstream passage facilities which the FEA found unnecessary.

Flow and Water Level Monitoring

26. Section 3.6 provides for Erie to develop a stream flow and water-level monitoring plan, including gages and equipment to document compliance with project impoundment level fluctuations and minimum flow release requirements. This plan will allow documentation of compliance with the required mode of project operation, and is required by Article 401 and the WQC.

Public Access

27. Section 3.7 provides for Erie to continue allowing public access to all lands within the project boundary including the impoundments, bypassed reaches, and adjacent lands associated with each development. A recreation plan for the project, required by Article 409, is discussed separately below.

28. As noted, the signatories to the Settlement request that the Commission incorporate the provisions in section 3.0 of the Settlement, without material modifications, as license conditions in a new license for the project. I conclude that with minor modifications pursuant to this order, the Settlement Offer is fair and reasonable and is in the public interest. As so modified, I accept the Settlement Offer, as incorporated in Articles 403 through 409. I explain the exceptions to the Settlement next.

Exceptions to the Offer of Settlement

Oswego Falls Project

29. Section 3.0 of the Settlement also includes provisions for operating and maintaining the upstream Oswego Falls Project.⁹ This requirement is beyond the scope of this license and must be properly considered in the context of the Project 5984 license.¹⁰

⁹ The Oswego Falls Project No. 5984, located upstream of the Oswego River Project, was relicensed to Niagara in March 1996, see 74 FERC ¶ 62,138 (1996).

Canoe Portage Facility at Minetto Development

30. Section 3.7.1 describes a canoe portage facility around Minetto dam. Erie would construct the facility and appropriate portage trail signage on the west side of the Oswego River downstream of the Minetto development on land owned by the NYSTA. The signatories to the Settlement request that this item not be included as a condition of the license. At the Varick and Fulton developments, adequate passage for canoeists is available through the existing locks.

31. The issue of providing a canoe portage facility at the Minetto development was assessed in the FEA which concluded that there is a need for canoe portage. The lock is located in the center of the river and can be difficult to enter for canoeists because of strong currents on both sides of the upstream entrance to the lock. However, upon further review, we conclude that the conditions affecting canoe passage at the Minetto development are a result of the lock's location which is not a situation created by the Oswego Project. Therefore, as requested by the parties, this license does not include the canoe portage put-in facility at the Minetto development.

WATER QUALITY CERTIFICATION

32. Under Section 401(a)(1) of the Clean Water Act (CWA),¹¹ the Commission may not issue a license for a hydroelectric project unless the state water quality certifying agency either has issued a water quality certification (WQC) for the project or has waived certification by failing to act on a request for certification within a reasonable period of time, not to exceed one year. Section 401(d) of the CWA provides that the state certification shall become a condition of any federal license or permit that is issued.¹² Only a reviewing court can revise or delete these conditions.¹³

33. On December 4, 1991, Niagara submitted a request for WQC to NYDEC. On November 19, 1992, NYDEC denied without prejudice Niagara's request for WQC. On

¹⁰ Erie filed, on February 18, 2004, an application to amend the Oswego Falls Project license which was approved by the Commission on June 9, 2004, see 107 FERC ¶ 62,221 (2004).

¹¹ 33 U.S.C. § 1341(a)(1).

¹² 33 U.S.C. § 1341(d).

¹³ See American Rivers v. FERC, 129 F.3d 99 (D.C. Cir. 1997).

January 3, 1994, NYDEC issued a draft WQC, and on May 6, 1994, Niagara appealed the draft WQC. A subsequent legal proceeding led to settlement talks culminating in the filed Settlement. On October 4, 2004, NYDEC issued a WQC for the Oswego River Project. The conditions of the WQC are set forth in Appendix A of this order, and are incorporated in the license by ordering paragraph D. Condition 11 of the WQC states that the certificate includes and incorporates the Settlement. The WQC includes requirements for minimum flows, limiting impoundment fluctuations, fish passage facilities, flow and water level monitoring, and recreation. For the WQC conditions, Article 401 requires the licensee to file plans for Commission approval.

SECTION 18 FISHWAY PRESCRIPTIONS

34. Section 18 of the FPA¹⁴ provides that the Commission shall require the construction, maintenance, and operation by a licensee of such fishways as the Secretaries of the U.S. Departments of Commerce or of the Interior may prescribe.

35. In a letter dated March 26, 1996, Interior prescribed downstream fish passage at the three project developments. This prescription was later revised in a February 27, 2001, Interior filing. Subsequent to the Settlement, in a letter filed March 4, 2004, Interior states that the fish passage, protective measures, and the implementation schedule identified in section 3.5 of the Settlement, supercede the measures incorporated in their February 27, 2001, modified prescriptions.

36. Section 2.9 of the Settlement notes that the license for the Oswego River Project should include the standard article reserving Interior's authority to prescribe fish passage facilities at the project. Consistent with the Commission's policy, Article 402 of this license reserves the Commission's authority to require fishways that may be prescribed by Interior for the Oswego River Project.

THREATENED AND ENDANGERED SPECIES

37. Section 7(a) of the Endangered Species Act of 1973 (ESA)¹⁵ 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.

¹⁴ 16 U.S.C. § 811.

¹⁵ 16 U.S.C. § 1536(a).

38. In the FEA (Section V.C.4), staff noted the FWS finding that no federally listed or proposed threatened and endangered species are known to occur in the project area. By letter filed June 14, 1999, the FWS stated that no further consultation pursuant to section 7 of the ESA was necessary for this project.¹⁶

RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES

39. Section 10(j) of the FPA¹⁷ requires the Commission, when issuing a license, to include conditions based on recommendations of federal and state fish and wildlife agencies submitted pursuant to the Fish and Wildlife Coordination Act,¹⁸ to "adequately and equitably protect, mitigate damages to, and enhance, fish and wildlife (including related spawning grounds and habitat)" affected by the project. If the Commission believes that any such recommendations may be inconsistent with the purpose and requirements of Part I of the FPA, or other applicable law, section 10(j)(2) of the FPA requires the Commission and the agencies to attempt to resolve such inconsistencies, giving due weight to the recommendations, expertise, and statutory responsibilities of such agencies. If the Commission still does not adopt a recommendation, it must explain how the recommendation is inconsistent with Part I of the FPA or other applicable law and how the conditions imposed by the Commission adequately and equitably protect, mitigate damages to, and enhance fish and wildlife resources.

40. In letters filed March 29, 1996, and April 2, 1996, Interior and NYDEC, respectively, submitted recommendations pursuant to section 10(j) of the FPA. Since NYDEC is also a signatory to the Settlement, we consider its earlier section 10(j) recommendations superseded by the provisions of the Settlement.¹⁹ By letter filed March 8, 2004, Interior states that its previously filed 10(j) recommendations are superseded by the Settlement provisions. The recommendations of the fish and wildlife agencies for the Oswego River Project, as now reflected in the Settlement Offer, are included in the license.

¹⁶ Letter from David A. Stilwell, Acting Field Supervisor, FWS, Cortland, New York.

¹⁷ 16 U.S.C. § 803(j)(1).

¹⁸ 16 U.S.C. § 661 *et. seq.*

¹⁹ Letter form David A. Stillwell, Field Supervisor, FWS, Cortland, NY.

OTHER ISSUES

Administrative Conditions

41. The Commission collects annual charges from licensees for administration of the FPA. Article 201 provides for the collection of such funds.
42. The Commission requires licensees to file sets of approved project drawings on microfilm and in electronic file format. Article 202 requires the filing of these drawings.
43. The Commission requires that for new major licenses, licensees must set up and maintain an amortization reserve account upon license issuance. Article 203 requires the establishment of the account.
44. Some projects directly benefit from headwater improvements that were constructed by other licenses, the United States, or permittees. Article 204 requires the licensee to reimburse such entities for these benefits if they were not previously assessed and reimbursed.

Commission Approval of Construction Plans

45. Erie proposes to construct and maintain low-level flow diversion structures along a portion of the western side of the bypassed reach near the tailrace of the Varick powerhouse. Articles 301 through 304 require the licensee to submit plans of the construction activities for Commission approval prior to the start of construction. Article 305 requires the licensee to file revised Exhibit F and G drawings showing the project as built.

Recreation Plan

46. In the FEA, staff recommended that Erie update their recreation plan filed with the Commission on December 14, 1993. The plan includes a description of the existing recreation facilities and use at the project. In addition, the existing plan includes Erie's proposal for constructing recreation facilities that have since been withdrawn according to section 2.14.1 of the Settlement.²⁰ The comprehensive recreation plan should be updated to be consistent with the Settlement and describe existing recreation facilities and management practices. Article 409 requires the revised plan. However, I note that the

²⁰ Section 2.14.1 of the Settlement are license application proposals that have been withdrawn and superseded by the Settlement including project operation, minimum flow releases, fish passage facilities, and recreation facilities.

Commission has reserved authority to require Erie or any successor to provide additional recreation facilities and access to project lands and waters for recreational purposes, should circumstances warrant.²¹

Historic Properties

47. On July 19, 1996, the New York State Historic Preservation Officer, the Advisory Council on Historic Preservation, and the Commission executed a Programmatic Agreement (PA) for managing historic properties that may be affected by the relicensing of the Oswego River Project.²² Article 410 requires Erie to implement the PA, including the Cultural Resources Management Plan (CRMP) for the project. The PA satisfies the Commission's responsibilities under Section 106 of the National Historic Preservation Act.²³

Use and Occupancy of Project Lands and Waters

48. Requiring a licensee to obtain prior Commission approval for every use or occupancy of the project land would be unduly burdensome. Therefore, Article 411 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.

COMPREHENSIVE PLANS

49. Section 10(a)(2)(A) of the FPA²⁴ requires the Commission to consider the extent to which a project is consistent with federal and state comprehensive plans for improving,

²¹ Standard Article 17 of Form L-3 is the reservation of authority for recreational facilities. 54 FPC at p. 1822. The standard form articles are incorporated into the license in ordering paragraph (E).

²² Programmatic Agreement Among the New York State Preservation Officer, the Advisory Council on Historic Preservation, and the Federal Energy Regulatory Commission For Managing Historic Properties That May Be Affected By A License Issuing To Niagara Mohawk Power Company For The Operation Of The Oswego River Project In Oswego County, New York (FERC No. 2474).

²³ 16 U.S.C. § 470s.

²⁴ 16 U.S.C. § 803(a)(2)(A).

developing, or conserving waterways affected by the project.²⁵ Under Section 10(a)(2)(A), federal and state agencies filed 43 plans that address various resources in New York. Of these, the Commission staff identified and reviewed seven plans relevant to this project.²⁶ No conflicts were found.

APPLICANT'S PLANS AND CAPABILITIES

50. In accordance with Sections 10(a)(2)(C) and 15(a) of the FPA,²⁷ staff has evaluated Erie's record as a licensee with respect to the following: (A) conservation efforts; (B) compliance history and ability to comply with the license; (C) safe management, operation, and maintenance of the project; (D) ability to provide efficient and reliable electric service; (E) need for power; (F) transmission services; (G) cost effectiveness of plans; and (H) actions affecting the public. I accept the staff's findings in each of the following areas.

A. Conservation Efforts

51. Erie has developed an extensive Demand Side Management Program (DSMP). Erie's goal with respect to DSMP is to encourage efficient use of energy resources. The energy-efficiency programs are basically conservation programs and include measures ranging from water heater wraps to high efficiency lighting and equipment. Erie also has innovative rate options which include time-of-use rates, real-time pricing, and voluntary interruptible and curtailable rate programs.

²⁵ Comprehensive plans for this purpose are defined at 18 CFR §2.19 (2004).

²⁶ (1) National Park Service, National Rivers Inventory, 1982; (2) Fish and Wildlife Service, Canada Wildlife Service, North American Waterfowl Management Plan: A Strategy for Cooperation, 1986; (3) Fish and Wildlife Service, Fisheries USA: The Recreational Fisheries Policy of the U.S. Fish and Wildlife Service, undated; (4) C. Lowie, E. Kozuchowski, and E.A. Poole, Fisheries Enhancement Plan for the Oswego River, A Tributary to Lake Ontario, Administrative Report No. 94-03, 1994; (5) New York State Department of Environmental Conservation, New York State Wild, Scenic, and Recreational River System Act, 1985; (6) New York State Department of Environmental Conservation, Regulation for Administration and Management of the Wild, Scenic, and Recreational River System in New York Excepting the Adirondack Park, 1986; and (7) New York State Parks, Recreation, and Historic Preservation, State Comprehensive Outdoor Recreation Plan, 1983.

²⁷ 16 U.S.C. §§ 803(a)(2)(C) and 808(a).

52. Erie's conservation and load management programs show that it has made an effort to conserve electricity and reduce peak hour demands. The staff concludes that Erie has made a satisfactory effort to comply with section 10(a)(2)(C) of the FPA.

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

53. Staff has reviewed Erie's compliance with the terms and conditions of the existing license. Staff finds that Erie's overall record of making timely filings and compliance with its license is satisfactory. The staff concludes that Erie 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.

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

54. The staff reviewed Erie's management, operation, and maintenance of the project, including all applicable safety requirements such as warning signs and boat barriers. The project lock and dams are currently owned and operated by the Canal Corporation. Erie has filed Emergency Action Plans for the Oswego River Project designed to provide early warning to persons located upstream and downstream who may be affected by a project emergency. Staff concludes that the project works are safe and that Erie's plans to manage, operate, and maintain the project safely are adequate for future operations and would pose no threat to public safety if operated according to the regulations governing hydroelectric licenses.

D. Ability to Provide Efficient and Reliable Electric Service

55. The staff reviewed Erie's plans and its ability to operate and maintain the project in a manner most likely to provide efficient and reliable electric service. Erie has been operating the project in an efficient manner within the constraints of the existing license, and staff concludes that it would continue to provide efficient and reliable electric service in the future.

E. Need for Power

56. The Oswego River Project has historically generated 74,200 MWh of electricity annually. This electricity from a non-polluting renewable source currently helps meet a growing demand. Without the Oswego River Project, Erie would have to either: (1) purchase power; (2) install additional fossil-fuel generators; or (3) purchase other hydroelectric facilities. Staff concludes that there is a need for power generated by the project.

F. Transmission Services

57. Erie proposes no new transmission facilities at the project, and the project as proposed to be licensed would not affect the existing regional transmission grid.

G. Cost-Effectiveness of Plans

58. Erie is not proposing, nor does this order approve, any new generating capacity at the Oswego River Project. Erie is proposing a number of measures for the enhancement of natural resources and recreational opportunities. Staff concludes that Erie's plans for implementing these measures, as well as its continued operation of the project, will likely be achieved in a cost-effective manner.

H. Actions Affecting the Public

59. The Oswego River Project generates electricity that is used to serve the needs of the public. Erie 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 implementing the various environmental and recreational enhancement measures approved in the license will benefit the public.

PROJECT ECONOMICS

60. In determining whether a proposed project will be best adapted to a comprehensive plan for developing a waterway for beneficial public purposes, the Commission considers a number of public interest factors, including the economic benefit of the project power.

61. Under the Commission's approach to evaluating the economics of hydropower projects, as articulated in *Mead Corp.*,²⁸ 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.

62. If licensed in accordance with the Settlement as proposed by Erie, the WQC conditions, and other requirements adopted herein, the project would produce an average of about 72,500 MWh of energy annually at an annual cost of about \$839,040 or 11.57

²⁸ 72 FERC ¶ 61,027 (1995).

mills/kWh. The annual value of the project's power would be about \$2,956,790 or 40.78 mills/kWh.²⁹ Thus, the project's power would cost about \$2,117,750 or 29.21 mills/kWh less than currently available alternative power.

63. In analyzing public interest factors, the Commission takes into account that hydroelectric projects offer unique operational benefits to the electric utility system (ancillary benefits). These benefits include their value as 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.

64. Ancillary services are now mostly priced at rates that recover only the cost of providing the electric service at issue, which do not resemble the prices that would occur in competitive markets. As competitive markets for ancillary services develop, the ability of hydro projects to provide ancillary services to the system will increase the benefits of the project.

COMPREHENSIVE DEVELOPMENT

65. Sections 4(e) and 10(a)(1) of the FPA,³⁰ respectively, require the Commission to give equal consideration to the power development purposes and to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of fish and wildlife, the protection of recreational opportunities, and the preservation of other aspects of environmental quality. Any license issued shall be such as in the Commission's 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.

66. Based on my independent review and evaluation of the Oswego River Project, recommendations from staff, the resource agencies, and other stakeholders, and the no-action alternative, as documented in the FEA, I have selected the Oswego River Project, with the WQC conditions and the Settlement provisions, as the preferred alternative.

²⁹ The value of power was estimated from the New York Independent System Operator web site at <http://nyiso.com>.

³⁰ 16 U.S.C. §§ 797(e) and 803(a)(1).

67. I selected this alternative because: (1) issuance of a new license would serve to maintain a beneficial, dependable, and inexpensive source of electric energy; (2) the required environmental measures would protect and enhance fish and wildlife resources, water quality, recreational resources, and historic properties; and (3) the 18.05 MW of electric energy generated from renewable resource would 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,³¹ 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 a moderate amount of such activities; and 50-year terms for projects with extensive measures.

69. The Settlement (section 2.1) contains a provision that the term of the new license should be 40 years from the effective date of the license. This license authorizes a moderate amount of new environmental mitigation measures relative to the size of the project. Therefore, I will specify a 40-year term from the effective date of the license for the Oswego River Project.

SUMMARY OF FINDINGS

70. The FEA for the Oswego River 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 would be safe if operated and maintained in accordance with the requirements of this license.

71. Based on the review and evaluation of the project, as proposed by the applicant including the Settlement provisions and the WQC conditions, I conclude that the continued operation and maintenance of the project in the manner required by the license would protect and enhance fish and wildlife resources, water quality, recreation, aesthetic, and historic resources. The electricity generated from this renewable water power resource would be beneficial because it would continue to offset the use of fossil-fueled generating stations, thereby conserving non-renewable resources and reducing atmospheric pollution. I conclude that the Oswego River Project, with the conditions set

³¹ 16 U.S.C. § 808(e).

forth below, will be best adapted to the comprehensive development of the Oswego River for beneficial public uses.

The Director orders:

(A) This license is issued to Erie Boulevard Hydropower, L.P. (licensee) for a period of 40 years, effective the first day of the month in which this order is issued, to operate and maintain the Oswego River 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.

(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 on December 6, 1991:

<u>Exhibit G Drawings</u>	<u>FERC No. 2474-</u>	<u>Showing</u>
Sheet No. 1	1001	Varick Development Project Boundary and Location Area
Sheet No. 2	1002	Minetto Development Project Boundary and Location Area
Sheet No. 3	1003	Minetto Development Project Boundary and Location Area
Sheet No. 4	1004	Minetto Development Project Boundary and Location Area
Sheet No. 5	1005	Minetto Development Project Boundary and Location Area
Sheet No. 6	1006	Fulton Development Project Boundary and Location Area

(2) Project works consisting of the following three developments:

The Fulton Development consisting of: (1) a 509-foot-long, 15-foot-high concrete buttress dam topped with 6-inch-high flashboards, and consisting of (a) a 35-foot-high, 41-foot-long, 14-foot-wide concrete intake structure with three steel gates; (b) a 10-foot-long, 40-foot-wide, 11-foot-deep forebay; and (c) trashracks with 3/8-inch steel bars with 2.5-inch openings; (2) a 33-acre reservoir with a normal pool elevation of 334.5 feet msl;

(3) a powerhouse containing two generating units with a combined installed capacity of 1.25MW; and (4) appurtenant facilities.

The Minetto Development consisting of: (1) a 500-foot-long, 22.5-foot-high concrete gravity dam topped with 10-inch-high flashboards, and consisting of (a) a 40-foot-high, 190-foot-long, 40-foot-wide concrete intake structure with nine steel gates; (b) a 100-foot-long, 200-foot-wide, 25-foot-deep forebay; and (c) trashracks with 0.5-inch steel bars with 2.5-inch openings; (2) a 350-acre reservoir with a normal pool elevation of 307.8 feet msl; (3) a powerhouse containing five generating units with a combined installed capacity of 8.0 MW; and (4) appurtenant facilities.

The Varick Development consisting of: (1) a 730-foot-long, 13-foot-high masonry gravity dam topped with a series of stepped flashboards ranging from 10-inches-high to 36-inches-high, and consisting of (a) a 189-foot-high, 26-foot-long, 28-foot-wide intake structure with 24 steel gates and an unused minimum flow gate; (b) a 950-foot-long, 150-foot-wide, 18-foot-deep forebay; and (c) trashracks with 3/8-inch steel bars with 4.0-inch openings; (2) a 32-acre reservoir with a normal pool elevation of 270.0 feet msl; (3) a powerhouse containing four generating units with a combined installed capacity of 8.8 MW; and (4) appurtenant facilities.

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

Exhibit A: Pages A-1 through A-14 filed on December 6, 1991.

Exhibit F: The following sections of Exhibit F filed on December 6, 1991:

<u>Exhibit F Drawings</u>	<u>FERC No. 2474-</u>	<u>Showing</u>
Sheet No. 1	1007	Fulton Location Plan
Sheet No. 2	1008	Fulton Intake and Powerhouse Plan and Section
Sheet No. 3	1009	Minetto Plans and Sections
Sheet No. 4	1010	Varick Plan and Sections
Sheet No. 5	1011	Varick West Side Linear Park Extension Site Plan
Sheet No. 6	1012	Varick West Side Linear Park Extension 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, F, and G described above are approved and made part of this license.

(D) This license is subject to the conditions submitted by the NYDEC pursuant to section 401 of the CWA, as those conditions are set forth in Appendix A to this order.

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

Article 201. Administrative Annual Charges. The licensee shall pay the United States the following annual charges, effective the first day of the month in which this license is issued for the purposes of reimbursing the United States for the Commission's administrative costs, pursuant to Part I of the Federal Power Act, a reasonable amount as determined in accordance with provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 18,050 kilowatts.

Article 202. Exhibit Drawings. Within 45 days of the date of issuance of the 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-2474-1001 through P-2474-1012) 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 (e.g., F-1, G-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. The 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 [e.g., P-2474-1001, 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

Each Exhibit G drawing that includes the project boundary must contain a minimum of three known reference points, arranged in a triangular format. The latitude and longitude coordinates, or state plane coordinates, of each reference point must be shown and identified on the drawing. Each Exhibit G drawing must be stamped by a Registered Land Surveyor.

c) The licensee shall file three separate sets of the project boundary vector data in a geo-referenced electronic file format (such as ArcView shape files, GeoMedia files, MapInfo files, or any similar format) with the Secretary of the Commission, ATTN: OEP/DHAC. The file name shall include: FERC Project Number, data description, date of this license, and file extension [e.g., P-2474, boundary vector data, MM-DD-YYYY.SHP]. The geo-referenced electronic boundary data file must be positionally accurate to ± 40 feet in order to comply with National Map Accuracy Standards for maps at a 1:24,000 scale. A single electronic boundary data file is preferred and must contain all reference points shown on the individual project boundary drawings. The latitude and longitude coordinates, or state plane coordinates, of each reference point must be shown. The data must be accompanied by a separate text file describing the map projection used (i.e., UTM, State Plane, Decimal Degrees, etc), the map datum (i.e., North American 27, North American 83, etc.), and the units of measurement (i.e., feet, meters, miles, etc.). The text file name shall include: FERC Project Number, data description, date of this license, and file extension [e.g., P-2474, project boundary metadata, MM-DD-YYYY.TXT].

Article 203. 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 204. 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, the licensee shall reimburse the owner of the headwater improvement for those benefits, at such time as they are assessed, in the same manner as for benefits received during the term of this new license.

Article 301. Contract Plans and Specifications. At least 60 days before starting construction, the licensee shall submit one copy to the Commission's D2SI-NYRO Regional Engineer and two copies to the Commission (one of these shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), of the final contract plans and specifications. The plans and specifications should include a blasting plan, if applicable. The Commission may require changes to the plans and specifications to assure construction is performed in a safe and environmentally sound manner. Construction may not commence until authorized by the D2SI-NYRO Regional Engineer.

Article 302. Quality Control and Inspection Program. At least 60 days before starting construction, the licensee shall submit one copy to the Commission's D2SI-NYRO Regional Engineer and two copies to the Commission (one of these shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), of the Quality Control and Inspection Program (QCIP) for the Commission's review and approval. The QCIP shall include a sediment and erosion control plan.

Article 303. *Cofferdam and Deep excavation Plan.* Before starting construction, the licensee shall review and approve the design of contractor-designed cofferdams and deep excavations. At least 30 days before starting construction of the cofferdams, the Licensee shall submit one copy to the Commission's D2SI-NYRO 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 304. *Temporary Emergency Action Plan.* At least 60 days before starting construction, the licensee shall submit one copy to the Commission's D2SI-NYRO Regional Engineer and two copies to the Commission (one of these shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), of the Temporary Emergency Action Plan (TEAP) for the Commission's review and approval. The TEAP shall describe emergency procedures in case failure of a cofferdam, any large sediment control structure, or any other water retaining structure that could endanger construction workers or the public. The TEAP shall include a notification list of emergency response agencies, a plan drawing of the proposed cofferdam arrangement, the location of safety devices and escape routes, and a brief description of testing procedures.

Article 305. *As-Built Drawings.* Within 3 months of completing the construction of the low-level flow diversion structures along a portion of the western side of the bypassed reach near the tailrace of the Varick powerhouse, the licensee shall file, for Commission approval, revised Exhibit F and G drawings, as applicable, showing the project as built. The licensee shall submit six copies to the Commission, one copy to the New York Regional Engineer, and one copy to the Director, Office of Energy Projects.

Article 401. *Commission Approval and Reporting.*

(a) Requirement to File Plans for Commission Approval

The New York State Department of Environmental Conservation (NYDEC) Water Quality Certificate (WQC) conditions (Appendix A) and the Settlement provisions require the licensee to operate the project with specific requirements, develop plans, and implement programs and report the results of monitoring studies without prior Commission approval. The plans listed below do not include prior Commission approval, but now shall also be submitted to the Commission for approval.

WQC Condition No. (Appendix A)	Settlement Section No.	Plan Name	Due Date
	3.6	Stream flow and Water Level Monitoring Plan	Within 15 months of license issuance
19 and 20		Sediment Analysis and Disposal, and Erosion and Sediment Control Plan	90 days prior to commencing work
21		Cofferdam Plan	90 days prior to commencing work

For each plan, the licensee shall submit to the Commission documentation of its consultation with the NYDEC and the U.S. Fish and Wildlife Service, copies of comments and recommendations made in connection with the plan or report, and a description of how the plan or report accommodates the comments or recommendations. 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 make changes to any plan or report. Upon Commission approval, the plan becomes a requirement of the license, and the licensee shall implement the plans or changes in project operations or facilities, including any changes required by the Commission.

Article 402. Reservation of Authority-Fishways. Authority is reserved by the Commission to require the licensee to construct, operate, and maintain, or to provide for construction, operation, and maintenance of, such fish passage facilities as may be prescribed by the Secretary of the Interior under section 18 of the FPA.

Article 403. Mode of Operation. Within eighteen months of license issuance, the licensee shall operate the Oswego River Project in Modified Run-of-River (MROR) mode as described in Section 3.1.2 of the Settlement with the following impoundment fluctuation limits in the Fulton, Minetto, and Varick developments as shown below and specified in Table 3-1 of the Settlement.

Normal impoundment fluctuations shall be defined as the maximum drawdown limit associated with the operating range necessary to achieve normal operation. The normal impoundment fluctuation limits shall be measured in the downward direction from the permanent crest of each dam or from the top of the flashboards (when in place). 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 same are not considered as a utilization of the normal impoundment

fluctuation.

Oswego River Hydroelectric Projects Normal Impoundment Fluctuations

Development	Permanent Crest of Dam (feet, USGS)	Flashboards	Normal Impoundment Fluctuations
Fulton	334.0	6"	0.5 foot (year-round) measured in a downward direction from the permanent crest of the dam or the top of the flashboards when in place.
Minetto	307.0	10"	
Varick	267.5	30"*	1.0-foot (year-round) measured in a downward direction from the permanent crest of the dam or the top of flashboards when in place.
		32"*	
		34"*	
		36"*	
	268.5	10"*	

*The Varick dam is currently fitted with a system of stepped flashboards with a maximum height of 36 inches from permanent crest elevation of the dam and may be adjusted as needed by the licensee. The current system is designed to fail at approximately 15 inches of overtopping. Under normal operating conditions, the water level is maintained at 30 inches above crest (Elev. 270.0).

These 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 mutual agreement between the licensee and the New York State Department of Environmental Conservation. If the limitations are so modified, the licensee shall notify the Commission as soon as possible, but no later than ten (10) business days after each such incident.

Article 404. Base-flows. Within eighteen months of license issuance, the licensee shall release the base-flows shown below and specified in Table 3-2 of the Settlement. The base-flow(s) as described in Table 3-2 shall be maintained in the river immediately downstream of the development's powerhouses. No base-flow is provided at the Minetto Development due to the back watering effect created by the dam at Lock # 6. The base flow at the Varick Development is provided for via the bypass flow as described in Table 3-3 of the Settlement.

These base-flow requirements may be curtailed or suspended if required by operating emergencies beyond the control of the licensee, including security, and for limited periods upon mutual agreement between the licensee and the New York State Department of Environmental Conservation. If the flows are so modified, the licensee shall notify the Commission as soon as possible, but no later than ten (10) business days

after each such incident.

Oswego River Base-Flow Schedule

Site	Flow Magnitude	Location	Season		Implementation Schedule
			From	To	
Fulton	800-cfs or inflow‡ (whichever is less) for walleye spawning	Below powerhouse when generating or over the spillway during non-generation periods.	The beginning of Walleye spawning season which begins when water temperature $\geq 4^{\circ}\text{C}$ for 4 consecutive days after March 15 th of each year.	The end of Walleye spawning season which ends 30 days after the water temperature $\geq 10^{\circ}\text{C}$ for 4 consecutive days.	Within 18 months of license issuance and acceptance.
	300-cfs or inflow‡ (whichever is less)		At the end of the Walleye spawning season.	To cease at the beginning of Walleye spawning season.	

‡Inflow is approximately equal to the gross river inflow less the flow volume used for canal lockage operations.

Article 405. Bypass Flows. Within eighteen months of license issuance, the licensee shall release the bypass flows as shown below and specified in Table 3-3 of the Settlement.

Oswego River Bypass flow Schedule

Site	Flow Magnitude	Location	Season	Timing of Implementation
Fulton	75-cfs (65-86) fish friendly flow	Release from the sluice gate adjacent to the Fulton powerhouse	Year-round	Within 18 months of license issuance and acceptance
Varick	800-cfs (782-818) or inflow [‡] , whichever is less*	Existing sluice gate(s) adjacent to the State head gate	All of Walleye spawning season (see Article 404 for Conventions & Definitions Section).	
	400-cfs (389-410) or inflow [‡] , whichever is less*		End of Walleye spawning season through May 31	
	200-cfs (192-207) or inflow [‡] , whichever is less*		June 1 through September 15	
	400-cfs (389-410) or inflow [‡] , whichever is less* [†]		September 16 through the beginning of Walleye spawning season	

* Note: Throughout the entire year the first 200 cfs released at the Varick development will be made fish friendly as described in Section 3.5, see footnote 8.

[†] The Parties agree that the licensee and the resource agencies will reevaluate this seasonal flow as requested by the licensee at a minimum of 5 years after license issuance with the intention of determining if implementing decreased bypass flows will meet agency management objectives.

[‡] Inflow is approximately equal to the gross river inflow less the flow volume used for canal lockage operations.

Article 406. Low-level Flow Diversion Structures. Within eighteen months of license issuance, the licensee shall install low-level flow diversion structures along a portion of the western side of the bypassed reach near the tailrace of the Varick powerhouse. The licensee shall consult with the New York State Department of Environmental Conservation and the U.S. Fish and Wildlife Service prior to the design and installation of these low-level flow diversion structures.

These structures shall be field located just upstream of the existing tailrace training wall. The licensee shall construct these low level flow diversion structures with minimal height and length to avoid any unnecessary impact to the river or fish. These modifications will attempt to divert approximately 70 percent of the upper bypassed reach flow, during the 200 cfs bypass flow release period from June 1 through September 16, to the lower bypassed reach.

Article 407. Fish Protection, Passage, and Movement. The licensee shall implement the fish-protection, passage, and movement measures as shown below and specified in Table 3-4 and 3-5 of the Settlement. The licensee shall provide the following measures and structures to facilitate fish movement.

Oswego River Hydroelectric Projects Fish Movement

Development	Downstream Movement Routes		Upstream Eel Conveyance System	
	Location	Implementation Schedule	Upstream Eel Conveyance System	Implementation Schedule
Fulton	75-cfs fish friendly release through the existing sluice gate adjacent to the Fulton powerhouse	Within 18 months of license issuance and acceptance	An upstream eel conveyance system will be field located in consultation with the USFWS, the NTSDEC and the Canal Corp. Each conveyance system will be installed seasonally from June 15 through September 15.	Within six (6) years of license issuance and acceptance
Minetto	25-cfs fish passage release through an existing unused bay within the Minetto powerhouse			Within four (4) years of license issuance and acceptance.
Varick	200-cfs fish friendly release through a location adjacent to the newly installed trashrack overlays			Within two (2) years of license issuance and acceptance.

Oswego River Hydroelectric Projects Fish Protection Measures

Development	Protection Measures	Implementation Schedule	Location	Seasonality
Fulton	Seasonal overlays in the form of 1" clear-spaced trashracks or 1.5" diameter perforated plates	Within 2 years of license issuance and acceptance for the Oswego River Project.	At the same location as the existing trashracks	To be placed seasonally from May 1 or when flows permit safe installation through November 30 or when the water temperature reaches 7 degrees C or less (whichever is sooner)
Minetto		Within 4 years of license issuance and acceptance for the Oswego River Project.		
Varick		Within 6 years of license issuance and acceptance for the Oswego River Project.	To be located at the "State Head Gates" adjacent to the dam.	

At the Fulton Development, the licensee shall install protective measures within two (2) years of license issuance that include 1.0-inch clear-spaced trashrack overlays or 1.5-inch diameter perforated plates to be placed seasonally from May 1 or when flows permit safe installation (whichever is later) through November 30 or when the temperature of the river decreases to 7°C or less (whichever is sooner) as shown in the above table and described in Table 3-5 of the Settlement. The licensee shall provide a year-round 75-cfs minimum "fish friendly" flow release located at a sluice gate adjacent to the powerhouse, and shall install an upstream eel conveyance system at the Fulton Development to be placed seasonally from June 15 through September 15 within six years of license issuance as described in Table 3-4 of the Settlement.

At the Minetto Development, the licensee shall install protective measures within four years of license issuance that include 1.0-inch clear-spaced trashrack overlays or 1.5-inch diameter perforated plates to be placed seasonally from May 1 or when flows permit safe installation (whichever is later) through November 30 or when the temperature of the river decreases to 7°C or less (whichever is sooner) as shown in the above table and described in Table 3-5 of the Settlement. The licensee shall provide a year-round 25-cfs minimum "fish friendly" flow release located within one of the existing unused bays at the Minetto powerhouse, and install an upstream eel conveyance system at the Minetto development to be placed seasonally from June 15 through September 15 within four

years of license issuance as shown in the above table and described in Table 3-4 of the Settlement.

At the Varick Development, the licensee shall install protective measures within six years of license issuance that include 1.0-inch clear-spaced trashrack overlays or 1.5-inch diameter perforated plates to be placed seasonally from May 1 or when flows permit safe installation (whichever is later) through November 30 or when the temperature of the river decreases to 7° C or less (whichever is sooner) as shown in the table above and described in Table 3-5 of the Settlement. This measure will be located at the “State Head Gate” structure adjacent to the dam. The licensee shall provide a year-round 200-cfs minimum “fish friendly” flow release located at the Varick dam. The licensee shall also install an upstream eel conveyance system at the Varick development to be placed seasonally from June 15 through September 15 within two years of license issuance as shown in the above table and described in Table 3-4 of the Settlement.

The licensee may curtail or suspend the requirements of this commitment if required by operating emergencies beyond the control of the licensee, including security, and for limited periods upon mutual agreement between the Licensee, the U.S. Fish and Wildlife Service, and the New York State Department of Environmental Conservation. If the requirements of this commitment are so modified, the licensee shall notify the Commission as soon as possible, but no later than ten (10) business days after each such incident.

Article 408. Design Drawings. No less than 90 days prior to the installation, construction, or modification of any structures required by Articles 407 and 408, the licensee shall submit, for Commission approval, design drawings for the proposed activity.

The design drawings shall be prepared in consultation with the New York State Department of Environmental Conservation and the U.S. Fish and Wildlife Service. The licensee shall include with the drawings documentation of agency consultation, copies of comments and recommendations on the completed drawings after they have been prepared and provided to the agencies, and specific descriptions of how the agencies’ comments are accommodated by the drawings. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the drawings with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee’s reasons, based on site-specific information.

The Commission reserves the right to require changes to the drawings. The activity shall not be implemented until the licensee is notified by the Commission that the drawings are approved. Upon Commission approval, the licensee shall implement the requirements of Articles 406 and 407, including any changes required by the

Commission.

Article 409. Revised Recreation Management Plan. Within one year of license issuance, the licensee shall file, for Commission approval, a revision of the recreation plan that was filed with the Commission on December 14, 1993, which has been prepared in consultation with the New York State Canal Corporation (NYSCC), the New York State Department of Environmental Conservation (NYDEC), and the U.S. Department of the Interior, National Park Service (NPS). The plan shall include, at a minimum: (a) a description, including site plans, of the licensee's recreation facilities located at the Oswego River Project; (b) a schedule of the days and times the recreational facilities will be open and available for public use; and (c) a description of the licensee's plans to allow public access to all lands within the Commission project boundary associated with each development covered by this license, with the exception of those lands and facilities specifically related to hydroelectric generation where public safety or site security would be a concern. Lands and facilities where public access will be precluded may include, but are not necessarily limited to, dams, dikes, gates, intake structures, water conveyance structures, powerhouses, substations, transmission lines, and certain access roads leading to such facilities.

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

The Commission reserves the right to require changes to the plan. No ground-disturbing or land-clearing activities for expanding and improving recreation facilities shall begin until the licensee is notified by the Commission that the plan is approved. Upon approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 410. Historic Properties. Within one year of license issuance, the licensee shall implement the "Programmatic Agreement Among the Federal Energy Regulatory Commission and the New York State Historic Preservation Officer For Managing Historic Properties That May Be Affected By A License Issuing To Erie Boulevard Hydropower, L.P For The Operation Of The Oswego River Project In Owego County, New York (FERC No. 2472) executed on July 19, 1996, including but not limited to the Cultural Resources Management Plan (CRMP) for the project. In the event that the Programmatic Agreement is terminated, the licensee shall implement the provisions of its

approved CRMP. The Commission reserves the authority to require changes to the CRMP at any time during the term of the license. If the Programmatic Agreement is terminated prior to Commission approval of the CRMP, the licensee shall obtain approval before engaging in any ground-disturbing or land-clearing 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 are 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 watercraft at a time and where said facility is intended to serve single-family type dwellings; (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline; and (4) food plots and other wildlife enhancements.

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 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.

(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 approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary 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 and state approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 watercraft at a time and are located at least one-half mile (measured over project waters) from any other private or public marina; (6) recreational development consistent with an approved Exhibit R or approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is 5 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 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 paragraphs (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 shall occur in a manner that shall 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 drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article shall 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 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 this order to be consulted on matters related to the filing. Proof of service on these entities must accompany the filing with the Commission.

(G) This order is issued under authority delegated to the Director and 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 of this order shall constitute acceptance of this license.

J. Mark Robinson
Director
Office of Energy Projects

APPENDIX A

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CERTIFICATION UNDER SECTION 401 OF THE
FEDERAL CLEAN WATER ACT

On October 4, 2004, the New York State Department of Environmental Conservation granted water quality certification under section 401 of the Clean Water Act to Erie Boulevard Hydropower, L.P. for the Oswego River Project with the following conditions:

1. **Conformance With Plans.** All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or his agency as part of the permit application. Such approved plans were prepared by (See Natural Resources Permit Condition 11).
2. **State May Order Removal or Alteration of Work.** If future operations by the State of New York require an alteration in the position of the structure or work herein authorized, or if, in the opinion of the Department of Environmental Conservation it shall cause unreasonable obstruction to the free navigation of said waters or flood flows or endanger the health, safety or welfare of the people of the State, or cause loss or destruction of the natural resources of the State, the owner may be ordered by the Department to remove or alter the structural work, obstructions, or hazards caused thereby without expense to the State, and if, upon the expiration or revocation of this permit, the structure, fill, excavation, or other modification of the watercourse hereby authorized shall not be completed, the owners, shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore to its former condition the navigable and flood capacity of the watercourse. No claim shall be made against the State of New York on account of any such removal or alteration.
3. **State Not Liable for Damage.** The State of New York shall in no case be liable for any damage or injury to the structure or work herein authorized which may be caused by or result from future operations undertaken by the State for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.
4. **Permittee Responsible For Other Approvals.** Granting of this permit does not relieve the applicant of the responsibility of obtaining any other permission, consent or approval from the U.S. Army Corps of Engineers, U.S. Coast Guard, New York State Office of General Services or local government which may be required.

5. **Precautions Against Contamination of Waters.** All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the project.

6. **No Interference With Navigation.** There shall be no unreasonable interference with navigation by the work herein authorized.

7. **State May Require Site Restoration.** If upon the expiration of revocation of this permit, the project hereby authorized has not been completed, the applicant shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore the site to its former condition. No claim shall be made against the State of New York on account of any such removal or alteration.

8. **Water Quality Certification.** The NYS Department of Environmental Conservation hereby certifies that the subject project will not contravene effluent limitations or other limitations or standards under Sections 301, 302, 303, 306, and 307 of the Clean Water Act of 1977 (PL 95-217) provided that all of the conditions listed herein are met.

9. **Notification Requirements for Emergencies.** The following procedures conducted at the project in response to an emergency:

Prior to commencement of emergency activities, Permittee must notify NYDEC and receive approval in advance of the work commencing. If circumstances require that emergency activities be taken immediately such that prior notice to the NYDEC is not possible, then the NYDEC must be notified by the Certificate Holder within 24 hours of commencement of the emergency of the emergency activities. In either case, notification must be by certified mail or other written form of communication, including fax and electronic mail. This notification must be followed within 24 hours 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 contacts listed in Special Condition 10.

10. **Department Contacts.** Except as otherwise specified, all contacts with the Department concerning this certificate shall be addressed to the following:

NYDEC - Region 7 Headquarters
Regional Permit Administrator
Division of Environmental Permits
615 Erie Boulevard
West Syracuse, NY 13204-2400

11. Offer of Settlement. This certificate includes and incorporates the Oswego River "Offer of Settlement" (Settlement) dated November 2003 and submitted to the Federal Energy Regulatory on February 19, 2004.

OPERATIONS

12. Base Flows. The certificate holder shall maintain instream flow in accordance with the settlement, in particular, Section 3.2.

13. Impoundment Fluctuations. The reservoirs at the Fulton, Minetto and Varick Developments as well as the reservoir at Oswego Falls (Project reservoirs) shall be operated in accordance with the Settlement, in Particular, Section 3.1.2. Alternative impoundment operating plans must be reviewed and approved by NYDEC prior to being implemented. Emergencies shall be dealt with in accordance with special condition 9 of this certificate.

14. Bypass Flows. The certificate holder shall maintain bypass flows in accordance with the Settlement, in particular, Section 3.3.

15. Flow Monitoring. The certificate holder shall develop a stream flow and water level monitoring plan consistent with the Settlement, in particular, Section 3.6.

16. Fish Protection/Passage. Fish protection passage and movement provisions shall be provided in accordance with the Settlement, in particular, Section 3.5.

17. Public Access. Public access and recreational opportunities shall be provided in conformance with the Settlement, in particular, Section 3.7.

CONSTRUCTION REQUIREMENTS

18. Maintenance Dredging. The certificate holder shall curtail generation and install stoplogs or otherwise shut off flow through the turbines prior to commencing any maintenance dredging activities in the intake/forebay area.

19. Sediment Analysis and Disposal. The certificate holder must sample any sediments to be disturbed or removed from the project waters and test them for contaminants.

Sampling and testing shall be accomplished according to a protocol submitted to and approved the Department beforehand. Approval from the Department shall include all disposal locations for any sediments to be removed from the project waters.

20. Erosion & Sediment Control. Prior to commencing activities which could adversely affect water quality, the certificate holder must receive Department approval of an Erosion and Sediment Control Plan. This plan must be submitted at least 90 days before the intended date for commencing work. All work shall conform to the goals below.

At minimum, the certificate holder must accomplish the following objectives:

- a. isolate in-stream work from the flow of water and prevent discolored (turbid) discharges and sediments from entering the waters of the river due to excavation, dewatering and construction activities;
- b. Exclude the use of heavy construction equipment below the mean high water line until the work area is protected by an approved structure and dewatered, except where an emergency response requires immediate action;
- c. Stabilize any disturbed banks by grading to an appropriate slope, followed by armoring or vegetating as appropriate, to prevent erosion and sedimentation into the waterbody;
- d. Minimize soil disturbance, provide appropriate grading and temporary and permanent re-vegetation of stockpiles and other disturbed areas to minimize erosion sedimentation potential;
- e. Protect all waters from contamination by deleterious materials such as wet concrete, gasoline, solvents, epoxy resins or other materials used in the construction, maintenance and operation of the project;
- f. Install effective erosion control measures on the downslope of all disturbed areas and maintain them in a fully functional condition. These erosion control measures are to be installed before commencing any other activities involving soil disturbance;
- g. Ensure complete removal of all dredged and excavated material, debris or excess materials from construction, from the bed and banks of all water areas to an approved upland disposal site;
- h. 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.

21. Placement of cofferdams, construction of temporary access roads or ramps, or other temporary structures which encroach upon the bed or banks of the river. The design and installation of cofferdams, temporary access roads or ramps, or other temporary structures which encroach upon the bed or banks of the river must be approved by the Department prior to installation.

22. Construction Drawdowns. Whenever construction and/or maintenance activities require that the water level of project reservoirs be lowered, it shall not be drawn down more than 1 foot per hour. During refill, the water level of the impoundment shall not be allowed to rise more than 1 foot per hour.

23. Maintenance of River Flow. During all periods of construction, flows immediately downstream of work sites shall be maintain in accordance with condition 12 of this permit.

24. Turbidity Monitoring During Construction. During construction related activities, the certificate holder will monitor the waters of the river at a point immediately upstream of project activities and at a second point no more than 100 feet downstream from any discharge point or other potential source turbidity. The certificate holder specifically agrees that if, at any time, turbidity measurements from the downstream locations exceed the measurements from the locations upstream of the work areas, all related construction on the project will cease until the source of the turbidity is discovered and the situation is corrected.

25. Notification of DEC of construction activities. The NYS DEC contact referenced in Special Condition 10 must be notified in writing at least two weeks prior to commencing any work performed under the authority of this certificate.

GENERAL CONDITIONS - Apply to ALL Authorized Permits:

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 be 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.

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.

3. Applications For Permit Renewals, Modifications or Transfers. The permittee must submit a separate written application to the Department for permit 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. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Regional Permit Administrator
NYDEC REGION 7 HEADQUARTERS
615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204-2400

4. Submission of Renewal Application. The permittee must submit a renewal application at least 30 days before permit expiration for the following permit authorizations: Water Quality Certification.

5. Permit Modifications, Suspensions and Revocations by the Department. The Department reserves the right to modify, suspend or revoke this permit. 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.

6. Permit Transfer. Permits are transferable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer ownership.

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, and damages, to the extent attributable to the permittee's acts or omissions in connection with, or operation and maintenance of, the facilities authorized by the permit whether in compliance or not in conditions 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 permittees agent with respect 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 right-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.

FERC 102 to Current Volume, Erie Boulevard Hydropower, L.P., Project Nos. 5984-055 and 2474-024, 116 FERC ¶62,191, Federal Energy Regulatory Commission, (Sep. 7, 2006)

[Click to open document in a browser](#)

[64,622]

Erie Boulevard Hydropower, L.P.,

Project Nos. 5984-055 and 2474-024

Order Amending License and Accelerating Eel Passage Schedule

September 7, 2006

Mohamad Fayyad, Engineering Team Lead, Division of Hydropower Administration and Compliance.

On March 15, 2006, Erie Boulevard Hydropower, L.P. (Erie) (Licensee) filed a license amendment application to increase the authorized generating capacity at its Oswego Falls Project, FERC No. 5984, and to accelerate the installation of upstream eel ladder facilities at its Oswego Falls Project and its Oswego River Project, FERC No. 2474. The projects are located on the Oswego River, Oswego County, New York.

Background

The license, ¹ as amended by an order issued May 21, 1999, ² authorizes the Oswego Falls project with two developments: (1) the East development with three turbine-generator units, each rated at 1,500 kW, for a total installed capacity of 4,500 kW and a total hydraulic capacity of 4,230 cfs; and (2) the West development with five quadruplex-type turbine-generator units: Units 1 and 2, inoperable; Unit 3, modified to contain only two of the original four runners, limiting output to 400 kW, with a hydraulic capacity of 250 cfs; and Units 4 and 5, with nameplate ratings indicating a maximum capacity of 930 kW each, at 17.0 ft. of head, each with a hydraulic capacity of 560 cfs, for a total installed capacity of 2,260 kW and a total hydraulic capacity of 1,370 cfs. The project's authorized combined total installed capacity is 6,760 kW and its hydraulic capacity is 5,600 cfs. ³

The Amendments

1. Proposed Turbine and Generation Changes

Erie proposes to replace Unit 3 at the West development of the Oswego Falls Project by: (1) replacing the existing horizontal quadruplex-type Francis turbine unit with two new, vertical propeller units, each rated 600 kW at 16.7 feet (ft) net head and with a hydraulic capacity of 416 cfs; (2) replacing the existing horizontally-oriented Unit 3 generator with two, new vertically-oriented generators, each rated 550 kW; (3) modifying the existing intake flume floor and roof to accommodate the installation of the new units; (4) building a 24 ft wide by 38 ft long weather-proof enclosure over the new generators on the flume roof; (5) sealing the existing shaft penetration from the turbine flume to the generator room; and (5) providing miscellaneous electrical, control and protection equipment for the new units.

In its license amendment application, Erie included revised Exhibit A and two revised Exhibit F-1 and F-2 drawings for the West development, which reflect general design of Unit 3 replacement.

2. Proposed Mitigation and Enhancement Measures

To mitigate for any incremental increase in fish entrainment that could result from the increase in

[64,623]

hydraulic capacity at the project, the licensee proposes to accelerate the installation of upstream eel ladder facilities at its Oswego Falls Project and its Oswego River Project. The Oswego River Project, FERC No. 2474, is located downstream of the Oswego Falls Project and consists of the Varick, Minetto, and Fulton developments.

On February 19, 2004, the licensee filed an Offer of Settlement with the Commission regarding the licensing of the Oswego River Project and amendment of the Oswego Falls Project. The settlement included a schedule for implementation (2006-2012) and seasonal installation (June 15 through September 15) of upstream eel passage facilities at the two projects. The eel passage requirements were included in Article 407 of the license for the Oswego River Project, issued on November 30, 2004,⁴ but were never included as a requirement in the Oswego Falls Project license.⁵ Nevertheless, the licensee, after consultation with the U.S. Fish and Wildlife Service (FWS), the New York State Department of Environmental Conservation (NYDEC), and New York Rivers United, has agreed to the following accelerated schedule for eel passage at the projects.

Table 1

Project No.	Development	Original Schedule	Accelerated Schedule
2474	Varick	30-Dec-2006	30-Dec-2006
2474	Minetto	30-Dec-2008	30-Dec-2008
2474	Fulton	30-Dec-2010	30-Dec-2008
5984	Oswego Falls	30-Dec-2012	30-Dec-2008

Agency Consultation

1. Water Quality Certification

On May 17, 2006, the licensee filed an application with the NYDEC for a Water Quality Certificate for the proposed turbine upgrades, pursuant to Section 401 of the Clean Water Act.⁶ The NYDEC issued its Section 401 certification on August 25, 2006 (Attachment A). Section 401(d) of the Clean Water Act provides that the state certification shall become a condition of the project license.

2. Threatened and Endangered Species

Section 7(a)(2) of the Endangered Species Act (ESA) of 1973⁷ requires federal agencies to ensure their actions are not likely to jeopardize the continued existence of federally listed threatened or endangered species, or result in the destruction or adverse modification of their designated critical habitat.

Our review indicates that, except for occasional transient individuals, there are no known federally listed or proposed threatened or endangered species within the project area. Section 7 consultation under the ESA is, therefore, not required.⁸

Public Notice

On April 17, 2006, the Commission issued a public notice of the application for the amendment and soliciting comments and motions to intervene. By letter dated April 27, 2006, the U.S. Department of the Interior (Interior) provided comments and recommended mitigative measures. On May 1, 2006, the NYDEC filed its petition for intervention. No comments or motion to intervene were filed in opposition to this amendment application.

Interior stated that it participated in consultation through the FWS and that it has no objections to the licensee's proposal. Interior further stated that the accelerated implementation of eel ladders at the Oswego River and Oswego Falls Projects as recommended by the FWS is adequate mitigation for the impacts to fish and wildlife resources that may accrue from the proposed increased hydraulic capacity at the Oswego Falls Project.

Discussion and Conclusions

1. Design Changes

Erie proposed rehabilitation of Unit 3 would change the West development's authorized installed capacities, as shown in the following Table 2.

[64,624]

Table 2

Unit No.	Existing Capacity		Proposed Capacity, (kW)			Limiting Capacity
	(kW)					
	Turbine	Generator	Turbine	Generator	(kW)	
—	—	—	Unit No.	(T)	(G)	
3	405	400	3.1	600	550	550 (G)
4	937.5	930	3.2	600	550	550 (G)
5	937.5	930	4	937.5	930	930 (G)
	937.5	930	5	937.5	930	930 (G)
Total	2,280	2,260	Total	3,075	2,960	2,960

The replacement of Unit 3 at the West development with the two units would increase the authorized installed capacity by 700 kW (2@550 kW # 400 kW) and the hydraulic capacity by 582 cfs (2@416 cfs # 250 cfs). This would result in an increase of the project's total authorized generating capacity from 6,760 kW (4,500 kW at the East development + 2,260 kW at the West development) to 7,460 kW, and its hydraulic capacity from 5,600 cfs to 6,182 cfs, or 10.39%. The replacement will not affect project operations or normal maximum reservoir surface elevation and there will be no ground disturbing activity at the site.

2. Environmental Analysis

Replacement of Unit 3 with the two units in the West development will be completed in the dry. All required minimum and fish passage flows will be complied with during the construction period. As such, with the exception of minor short term increases in traffic from transporting of the new equipment and workers involved in the construction project, we do not envision any major effects on area fish, wildlife, recreational or historical and cultural resources during the construction period.

During operation of the new turbine/generator units, spillage at the dam will be reduced an estimated 9 days on average; however all required flows will continue to be passed and there will be no changes to the existing run-of-river operation or water level fluctuations. Adverse impacts to wildlife, recreational or historical and cultural resources during project operation are not expected.

Because of the increase in hydraulic capacity of the project, there is the potential for an incremental increase in fish entrainment. To mitigate this potential impact, the licensee will install eel passage facilities at this project and the downstream Oswego River Project on an accelerated schedule, as we are requiring in Ordering Paragraph (A) of this order. This mitigation has been deemed adequate by the resource agencies.

For the reasons stated above, we conclude that issuance of this order would not constitute a major federal action significantly affecting the quality of the human environment.

3. Summary

Our environmental analysis of the license amendment application did not identify any significant impacts that would result from the Commission's approval of the application to increase the authorized installed capacity.

This order approves the amendment to increase the Oswego Falls Project's installed generating capacity from 6,760 kW to 7,460 kW. This order also approves the revised schedule for eel passage installation at the Oswego River and Oswego Falls Projects. This order requires the licensee to notify the Commission, within 30 days from the start of construction, of the date of such commencement of construction. The date will be used to amend license Article 201 concerning the assessment of annual charges.⁹ Furthermore, this order requires the licensee to submit revised as-built Exhibits A and F, as needed, to reflect the capacity changes approved in this order, 90 days after the replacement of Unit 3 have been completed.

The Director orders:

(A) The application to amend the license to increase the project's installed capacity, as filed March 15, 2006, and the proposed accelerated schedule for eel passage installation at the Oswego River (P-2474) and Oswego Falls Project (P-5984), as shown in Table 1 in this order, are approved as provided in this order.

(B) Ordering Paragraph (B)(2) of the license is revised, in part, to read as follows:

Oswego West Development

... (e) four quadruplex-type turbine-generator units: Units 1 and 2, inoperable; Units 4 and 5, with nameplate ratings indicating a maximum capacity of 930 kW each, at 17.0 ft. of head, each with a hydraulic capacity of 560 cfs; and two new vertical propeller turbine units, Units 3.1 and 3.2, (replacing Unit 3), each rated 600 kW at 16.7 ft head with a hydraulic capacity of 416 cfs, connected to two vertically-oriented generators each rated 550 kVa with 1.0 power factor; ... (See Table 2).

[64,625]

(C) The Exhibit A and the following revised Exhibit F drawings for the Oswego Falls West development, filed on March 15, 2006, showing general design of Unit 3 replacement, which supercede old exhibits, are approved and made part of the license:

Table 3

FERC Exhibit	FERC No.	Showing	Superseding
F-1	5984-13	Oswego Falls East Development; Location Plan, Plan and Sections	5984-10
F-2	5984-14	Oswego Falls West Development; Plan and Sections	5984-11

(D) Within 45 days of the date of issuance of this order, 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 ¼# x 7 3/8 #) aperture cards. Prior to microfilming, the FERC Drawing Number (*i.e.*, P-5984-13 and P-5984-14) 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, F-2), Drawing Title, and date of this order shall be typed on the upper left corner of each aperture card. See Fig. 1.

[Figure 1. Sample Aperture Card Format](#)

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. The drawings must be identified as **(CELL) material under 18 C.F.R. §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 order, and file extension in the following format [P-5984-13, F-1, Oswego Falls East Development; Location Plan, Plan and Sections, MM-DD-2006.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.)

[64,626]

DRAWING SIZE FORMAT—24# x 36# (min), 28# x 40# (max)

FILE SIZE—less than 1 MB desired

(E) This order is subject to the conditions of the Water Quality Certificate that was issued on August 25, 2006, by the New York State Department of Environmental Conservation for the proposed turbine upgrades (Attachment A).

(F) The licensee shall commence construction of replacement of Unit 3 with two new units within two years from the issuance date of this order and shall complete construction within four years from the issuance date of this order.

(G) Within 30 days after the start of construction, the licensee shall notify the Commission of the date of such commencement of construction. The filing should include written documentation and photographs of all work performed since the start of construction. The date of commencement of construction will be used to amend license Article 201 for the assessment of annual charges.

(H) At least 60 days prior to the start of construction of replacement of Unit 3 with two new units, the licensee shall submit one copy of its plans and specifications 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). The licensee may not begin construction until the D2SI-New York Regional Engineer has reviewed and commented on the plans and specifications, determined that all preconstruction requirements have been satisfied, and authorized start of construction.

(I) Within 90 days of the completion of construction of replacement of Unit 3 with two new units, the licensee shall file with the Commission and the Division of dam Safety and Inspections- New York regional Office, photographs of the nameplates of the turbine and generator of the new units.

(J) Within 90 days from completion of replacement of Unit 3, the licensee must submit revised as-built Exhibits A and F, as needed, to reflect the capacity changes approved in this order.

(K) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to [18 C.F.R. §385.713](#).

[64,627]

Attachment A

[NY State Permit, p. 1](#)

[64,628]

[NY State Permit, p. 2](#)

[64,629]

[NY State Permit, p. 3](#)

[64,630]

[NY State Permit, p. 4](#)

[64,631]

[NY State Permit, p. 5](#)

[64,632]

[NY State Permit, p. 6](#)

[64,633]

[NY State Permit, p. 7](#)

Footnotes

1 [74 FERC ¶62,138](#) (March 15, 1996).

2 [87 FERC ¶62,205](#) (May 21, 1999).

3 In its current amendment application, under Exhibit B, the licensee describes the existing hydraulic capacities as 400 cfs for Unit 3 and 930 cfs for each of Units 4 and 5. We believe this is an error because these numbers are rather the installed capacities of the subject units. However, if the

licensee's intent is to change the hydraulic capacities currently authorized for those units, then it must file a separate amendment application.

4 [109 FERC ¶62,141](#) (2004).

5 [74 FERC ¶62,138](#) (1996).

6 33 U.S.C. §1341.

7 16 U.S.C. §1536(a).

8 See letters from the U.S. Department of the Interior dated February 15, 1990, and June 14, 1999, to L. Cashell and T. DeWitt, Federal Energy Regulatory Commission, respectively.

9 See [66 FERC ¶61,086](#), issued January 18, 1994. The order states that, "With respect to substantial changes in installed capacity that receive prior approval, the effective date for revised annual charges will be the date of the commencement of construction of the revised capacity."

ATTACHMENT C

QUESTION 10:

MAP SHOWING 200 FT ZONE AROUND RESERVOIR

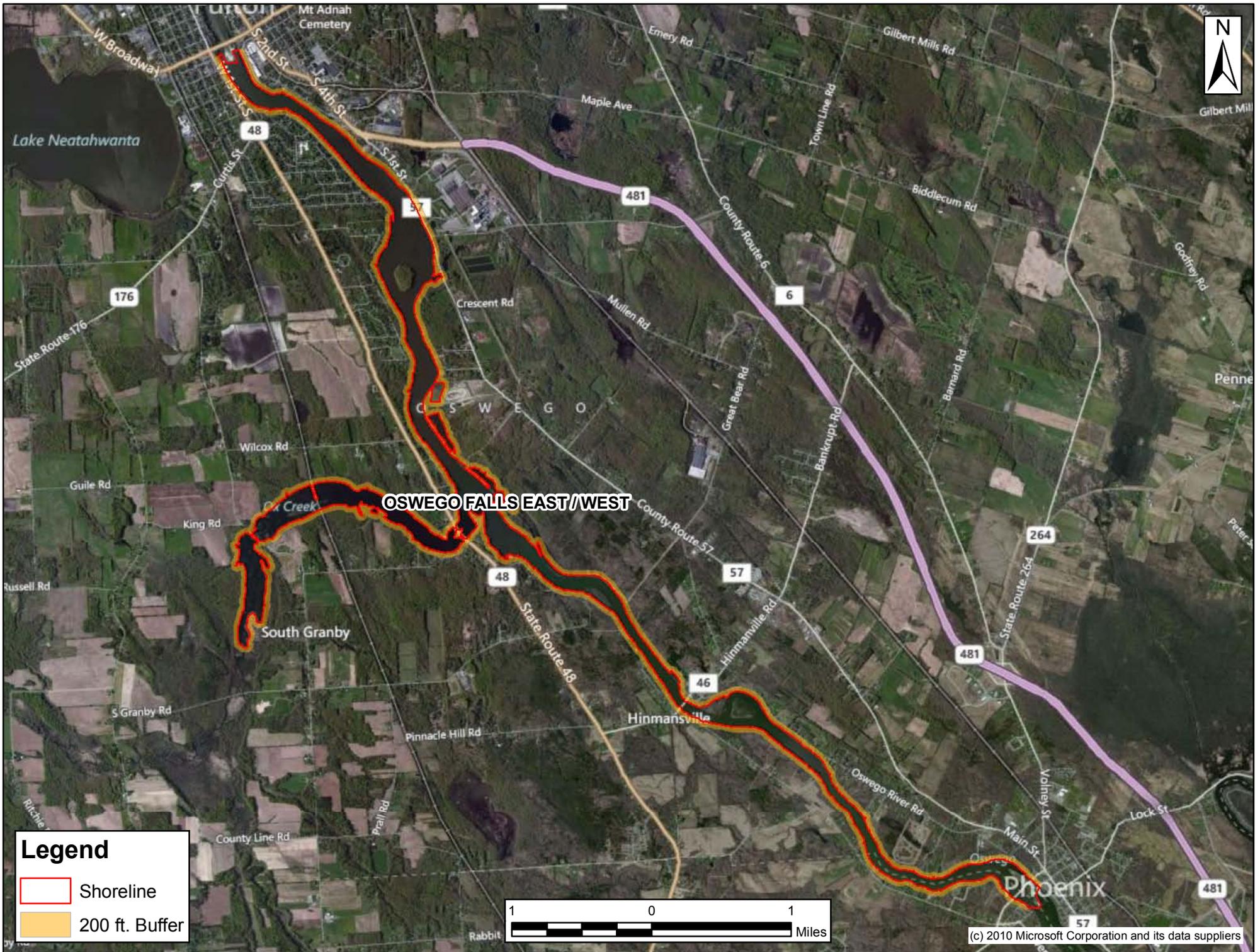




Legend

- Shoreline
- 200 ft. Buffer

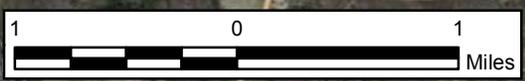




OSWEGO FALLS EAST/WEST

Legend

- Shoreline
- 200 ft. Buffer



ATTACHMENT D

QUESTION 11:

LIST OF KEY AGENCY/STAKEHOLDER CONTACTS

Izaak Walton League
New York Chapter
2582 Pompey Hollow Road
Cazenovia, NY 13035

National Park Service
15 State Street
Boston, MA 02109

New York Council, Trout Unlimited
7 Helen Street
Plattsburg, NY 12901

New York State Conservation Council
8 East Main Street
Ilion, NY 13357

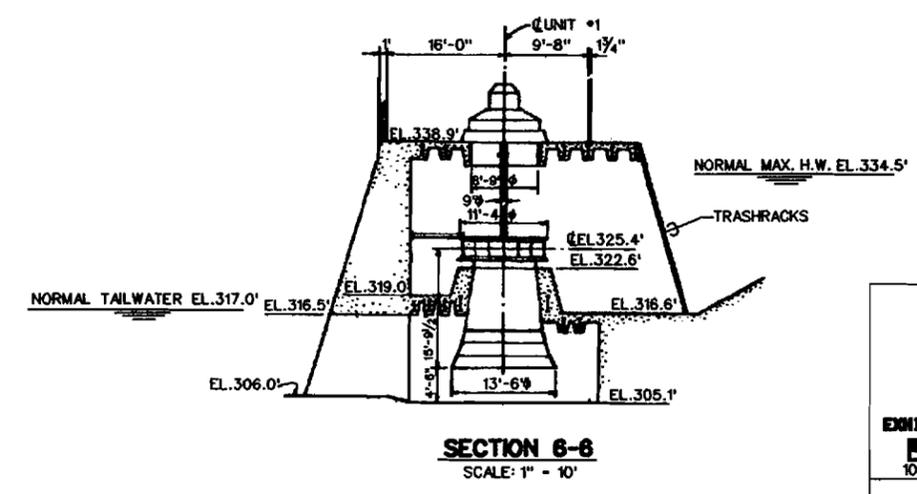
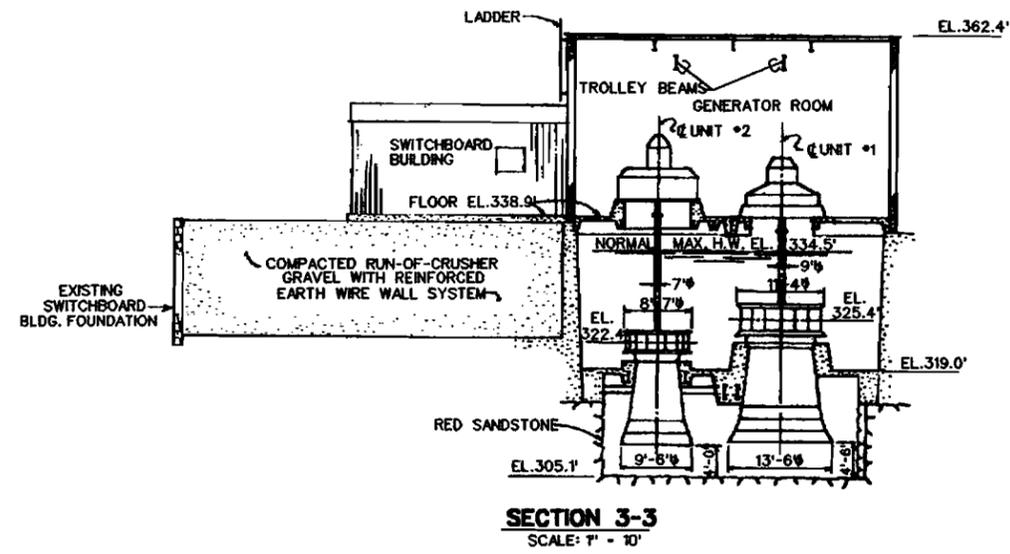
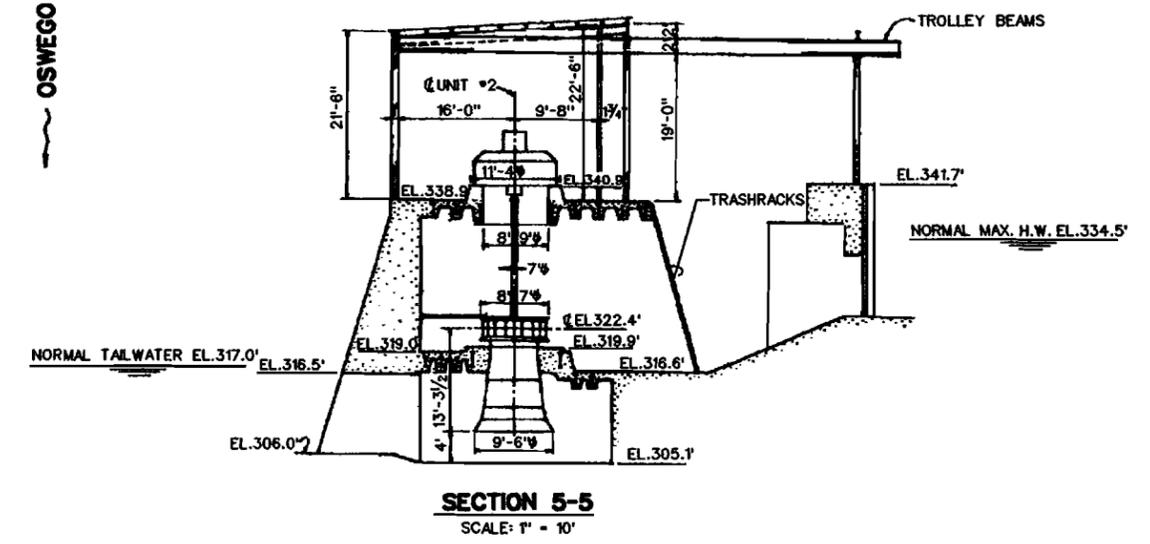
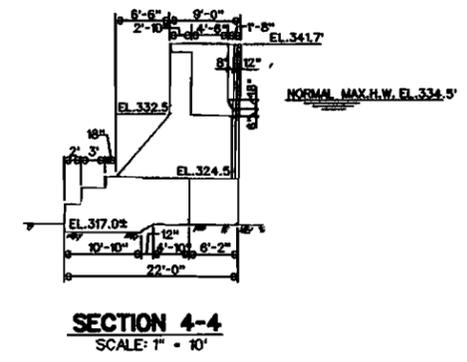
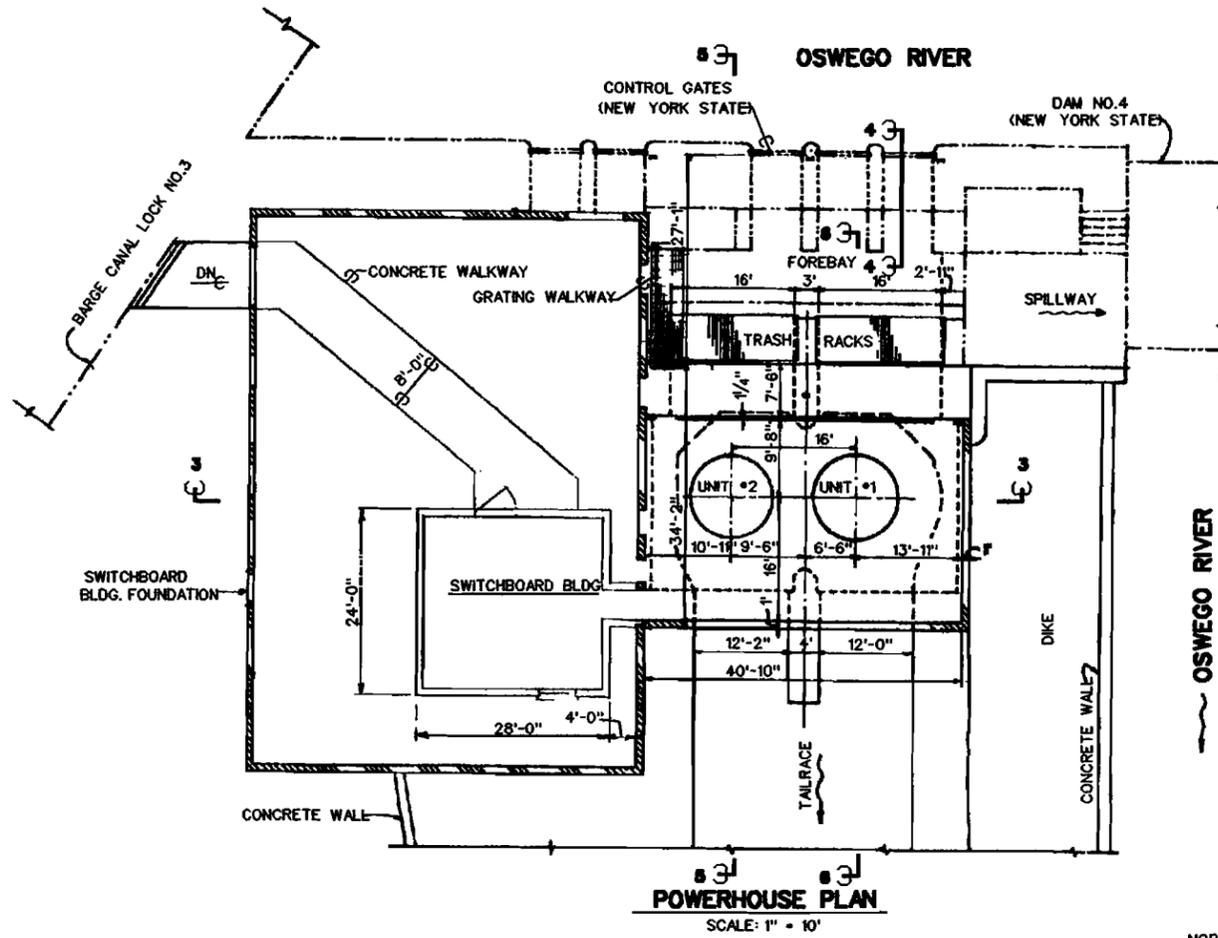
New York State Department of Environmental Conservation
Alice Richardson
Dulles State Office Building
317 Washington Street
Watertown, NY 13601

U.S. Fish & Wildlife Service
Steven Patch
3817 Luker Road
Cortland, NY 13045

ATTACHMENT E

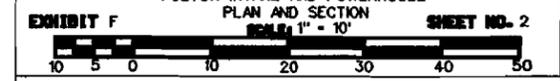
QUESTION 12:

EXHIBIT F & G DRAWINGS



**THIS IS A CADD DRAWING.
DO NOT MAKE MANUAL CHANGES**

ERIE BOULEVARD HYDROPOWER, LP
LIVERPOOL, N.Y.
OSWEGO RIVER PROJECT
FULTON DEVELOPMENT
FULTON INTAKE AND POWERHOUSE
PLAN AND SECTION
SCALE: 1" = 10' **SHEET NO. 2**

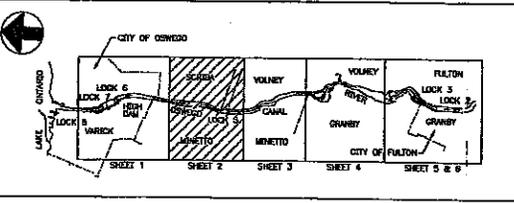
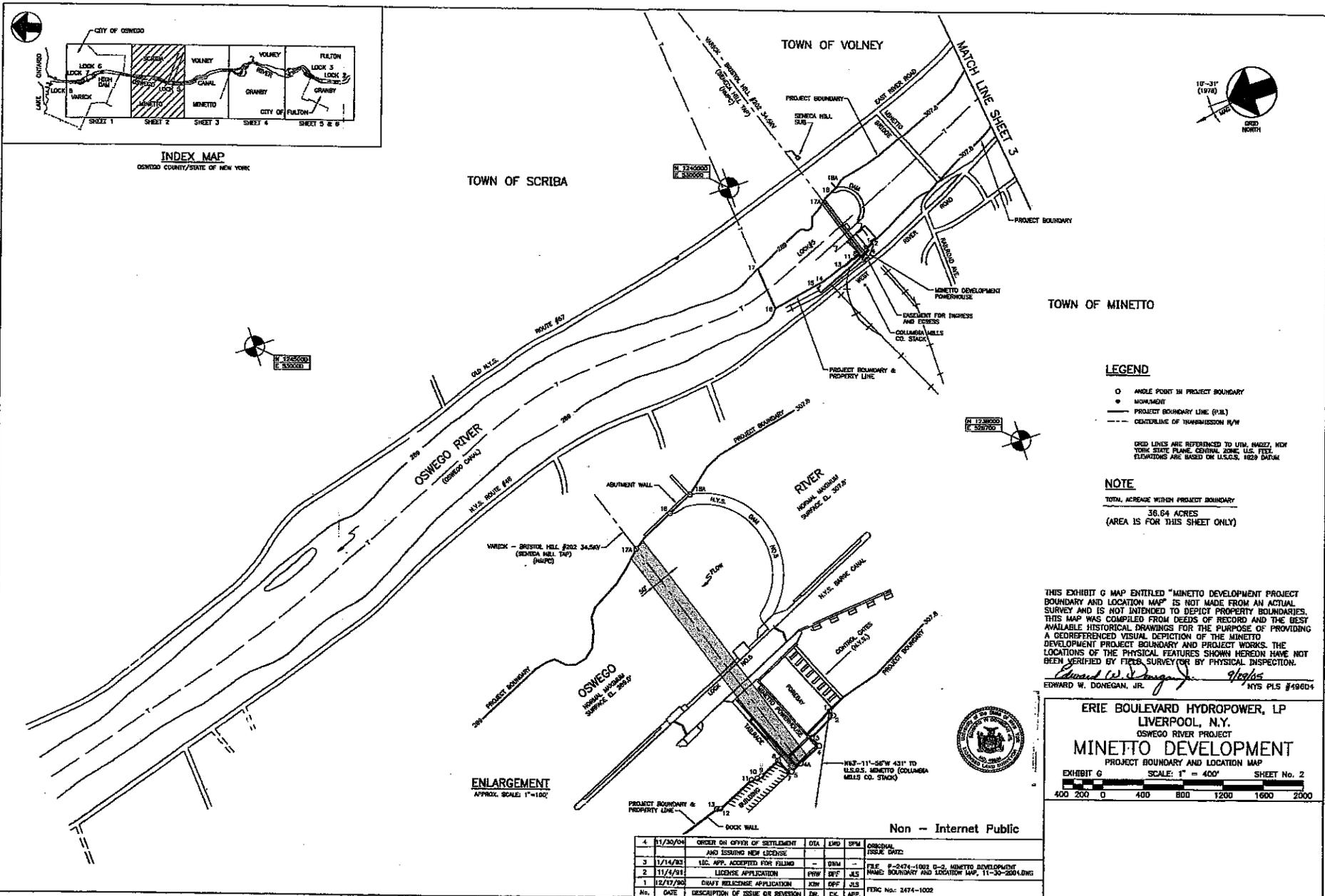


NO.	DATE	DESCRIPTION OF ISSUE OR REVISION	DR.	CK.	APP.	NO.	DATE	DESCRIPTION OF ISSUE OR REVISION	DR.	CK.	APP.	NO.	DATE	DESCRIPTION OF ISSUE OR REVISION	DR.	CK.	APP.
4	11/30/04	ORDER ON OFFER OF SETTLEMENT AND ISSUING OF NEW LICENSE															
3	1/14/03	LC. APP. ACCEPTED FOR FILING															
2	11/4/01	LICENSE APPLICATION															
1	12/17/90	DRAFT LICENSE APPLICATION															

ORIGINAL
ISSUE DATE
FILE
NAME F22474.dgn
F22474.ctb
FERC NO. 2474-1008

CEII

CAD FILENAME: P-2474-1002, G-2, MINETTO DEVELOPMENT BOUNDARY AND LOCATION MAP, 11-30-2004



INDEX MAP
OSWEGO COUNTY/STATE OF NEW YORK

LEGEND

- ANGLE POINT IN PROJECT BOUNDARY
- MONUMENT
- PROJECT BOUNDARY LINE (P.B.)
- - - CENTERLINE OF TRANSMISSION L/V

DEED LINES ARE REFERENCED TO UTM, NAD83, NEW YORK STATE PLANS, ZONE 18E, FEET. ELEVATIONS ARE BASED ON U.S.C.S., 1029 DATUM

NOTE

TOTAL ACRES WITHIN PROJECT BOUNDARY
36.64 ACRES
(AREA IS FOR THIS SHEET ONLY)

THIS EXHIBIT G MAP ENTITLED "MINETTO DEVELOPMENT PROJECT BOUNDARY AND LOCATION MAP" IS NOT MADE FROM AN ACTUAL SURVEY AND IS NOT INTENDED TO DEPICT PROPERTY BOUNDARIES. THIS MAP WAS COMPILED FROM DEEDS OF RECORD AND THE BEST AVAILABLE HISTORICAL DRAWINGS FOR THE PURPOSE OF PROVIDING A GEOGRAPHIC VISUAL DEPICTION OF THE MINETTO DEVELOPMENT PROJECT BOUNDARY AND PROJECT WORKS. THE LOCATIONS OF THE PHYSICAL FEATURES SHOWN HEREON HAVE NOT BEEN VERIFIED BY FIELD SURVEY OR BY PHYSICAL INSPECTION.

Edward W. Donegan, Jr. 9/26/04
EDWARD W. DONEGAN, JR. MYS PLS #19804

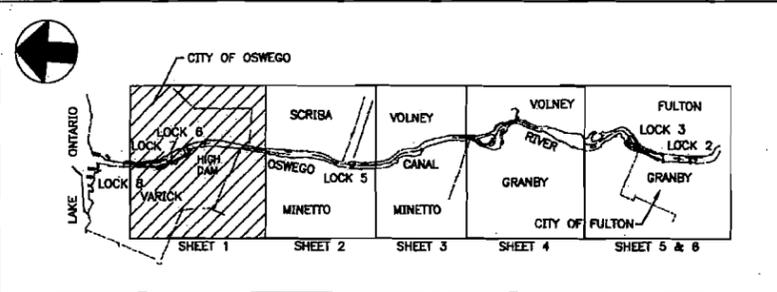


ERIE BOULEVARD HYDROPOWER, LP
LIVERPOOL, N.Y.
OSWEGO RIVER PROJECT
MINETTO DEVELOPMENT
PROJECT BOUNDARY AND LOCATION MAP
EXHIBIT G SCALE: 1" = 400' SHEET No. 2

ENLARGEMENT
APPROX. SCALE: 1"=100'

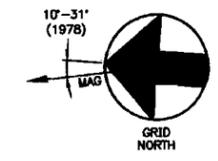
Non - Internet Public

No.	DATE	DESCRIPTION OF ISSUE OR REVISION	DR.	CHK.	APP.	PERC No.:
4	01/30/04	ORDER ON OFFER OF SETTLEMENT AND ISSUING NEW LICENSE	DTA	EMD	SPM	ORIGINAL ISSUE DATE:
3	1/14/02	SEC. APP. ACCEPTED FOR FILING	FWW	SPC	JES	FILE: P-2474-1002 G-2, MINETTO DEVELOPMENT BOUNDARY AND LOCATION MAP, 11-30-2004.DWG
2	11/4/01	LICENSE APPLICATION	FWW	SPC	JES	
1	02/17/00	DRAFT RELEASE APPLICATION	KCH	SPC	JES	



INDEX MAP
OSWEGO COUNTY/STATE OF NEW YORK

TOWN OF SCRIBA



CITY OF OSWEGO

TOWN OF MINETTO

LEGEND

- ANGLE POINT IN PROJECT BOUNDARY
- MONUMENT
- PROJECT BOUNDARY LINE (P.B.)
- - - CENTERLINE OF TRANSMISSION R/W

GRID LINES ARE REFERENCED TO UTM, NAD27, NEW YORK STATE PLANE, CENTRAL ZONE, U.S. FEET. ELEVATIONS ARE BASED ON U.S.G.S. 1929 DATUM

NOTE

TOTAL ACREAGE WITHIN PROJECT BOUNDARY
62.18 ACRES
(AREA IS FOR THIS SHEET ONLY)

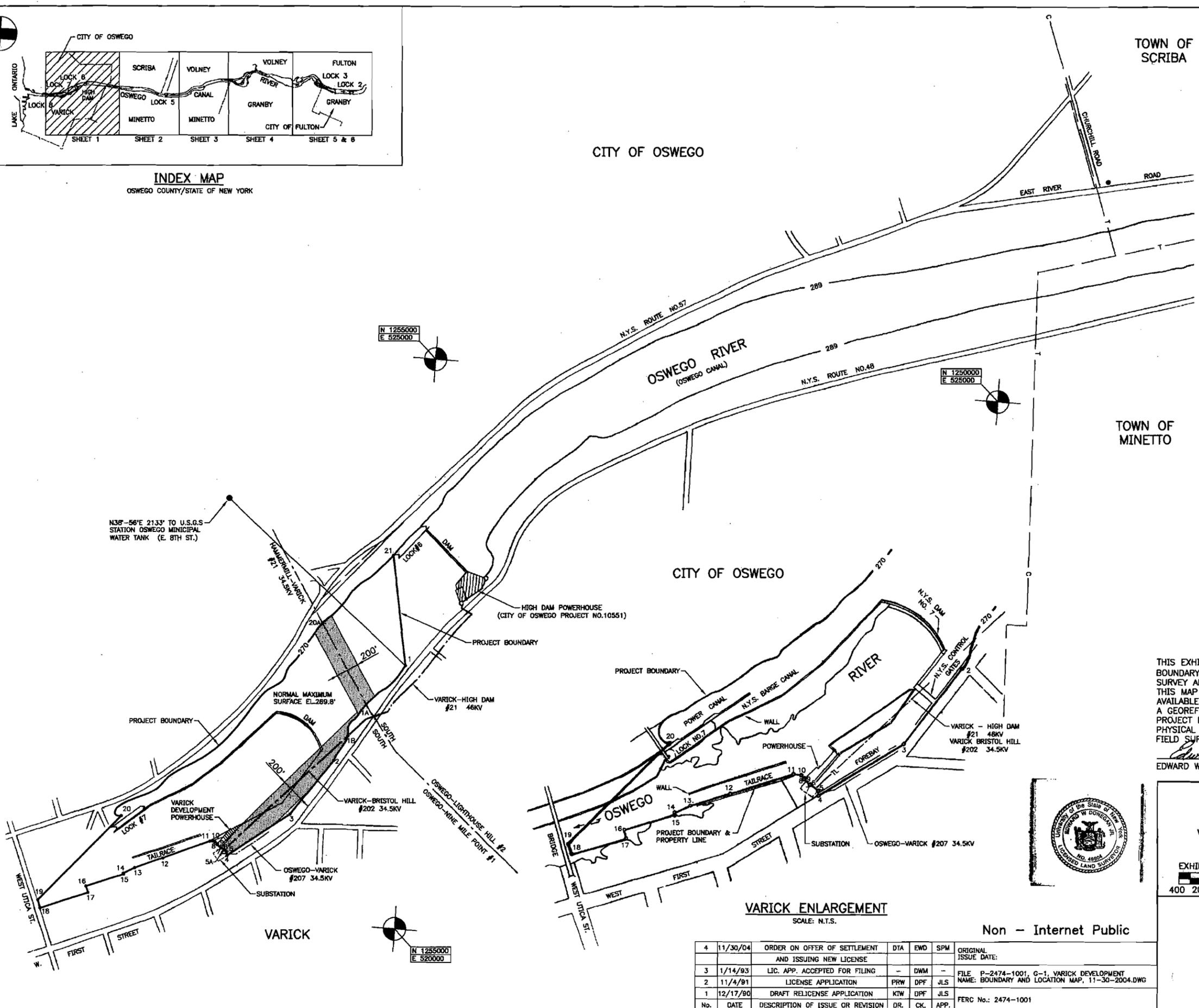
THIS EXHIBIT G MAP ENTITLED "VARICK DEVELOPMENT PROJECT BOUNDARY AND LOCATION MAP" IS NOT MADE FROM AN ACTUAL SURVEY AND IS NOT INTENDED TO DEPICT PROPERTY BOUNDARIES. THIS MAP WAS COMPILED FROM DEEDS OF RECORD AND THE BEST AVAILABLE HISTORICAL DRAWINGS FOR THE PURPOSE OF PROVIDING A GEOREFERENCED VISUAL DEPICTION OF THE VARICK DEVELOPMENT PROJECT BOUNDARY AND PROJECT WORKS. THE LOCATIONS OF THE PHYSICAL FEATURES SHOWN HEREON HAVE NOT BEEN VERIFIED BY FIELD SURVEY OR BY PHYSICAL INSPECTION.

Edward W. Donegan, Jr. 9/29/05
EDWARD W. DONEGAN, JR. NYS PLS #49604



ERIE BOULEVARD HYDROPOWER, LP
LIVERPOOL, N.Y.
OSWEGO RIVER PROJECT
VARICK DEVELOPMENT
PROJECT BOUNDARY AND LOCATION MAP
EXHIBIT G SCALE: 1" = 400' SHEET No. 1
400 200 0 400 800 1200 1600 2000

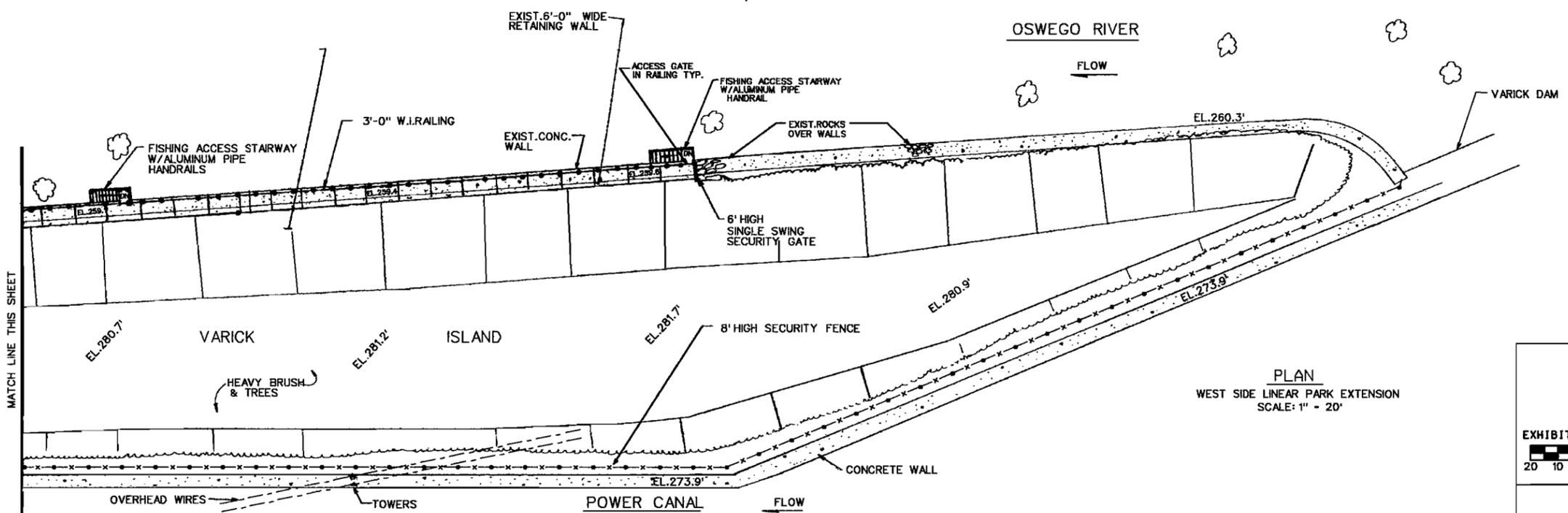
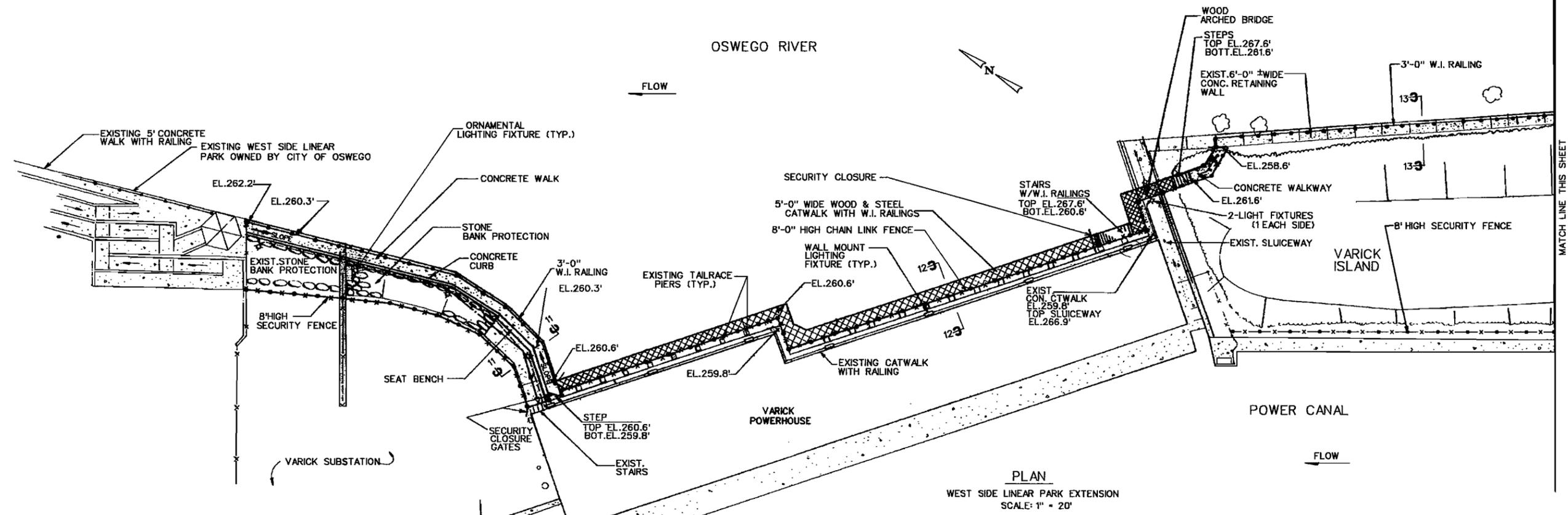
CAD FILENAME: P-2474-1001, G-1, VARICK DEVELOPMENT BOUNDARY AND LOCATION AREA, 11-30-2004



VARICK ENLARGEMENT
SCALE: N.T.S.

Non - Internet Public

No.	DATE	DESCRIPTION OF ISSUE OR REVISION	DR.	CK.	APP.	FERC No.: 2474-1001
4	11/30/04	ORDER ON OFFER OF SETTLEMENT AND ISSUING NEW LICENSE	DTA	EWD	SPM	ORIGINAL ISSUE DATE:
3	1/14/93	LIC. APP. ACCEPTED FOR FILING	-	DWM	-	FILE P-2474-1001, G-1, VARICK DEVELOPMENT
2	11/4/91	LICENSE APPLICATION	PRW	DPF	JLS	NAME: BOUNDARY AND LOCATION MAP, 11-30-2004.DWG
1	12/17/90	DRAFT RELICENSE APPLICATION	KTW	DPF	JLS	



THIS IS A CADD DRAWING.
DO NOT MAKE MANUAL CHANGES.

ERIE BOULEVARD HYDROPOWER, LP
LIVERPOOL, N.Y.

OSWEGO RIVER PROJECT
VARICK DEVELOPMENT
WEST SIDE LINEAR PARK EXTENSION
SITE PLAN

EXHIBIT F
SCALE: 1" = 20' SHEET NO. 5

CEII

NO.	DATE	DESCRIPTION OF ISSUE OR REVISION	DR.	CK.	APP.	NO.	DATE	DESCRIPTION OF ISSUE OR REVISION	DR.	CK.	APP.	NO.	DATE	DESCRIPTION OF ISSUE OR REVISION	DR.	CK.	APP.	NO.	DATE	DESCRIPTION OF ISSUE OR REVISION	DR.	CK.	APP.	
3	11/30/04	ORDER ON OFFER OF SETTLEMENT AND ISSUING NEW LICENSE																						
2	1/14/93	LIC. APP. ACCEPTED FOR FILING																						
1	11/4/91	LICENSE APPLICATION																						

ORIGINAL ISSUE DATE	
FILE NAME	f52474.dgn f52474.cit
PERC NO.	2474-1011

ATTACHMENT F

QUESTION A – FLOW:

2012 ANNUAL MINIMUM FLOW COMPLIANCE REPORT

HYDRO OPERATING PROCEDURE 202

NEW YORK WEST OPERATIONS

Transmittal Memo

DATE: April 4, 2012
FROM: STEVEN P. MURPHY
 (315) 413-2788 (office)
 (315) 461-8577 (fax)
 (315) 439-0096 (cell)

- TO:**
- ADAMS, M.
 - AUSER, J.
 - AUSTIN, P.
 - BATES, D.
 - BERNARD, J.
 - BURTICK, D.
 - BUSH, B.
 - CARVEL, R.
 - CLOOT, J.P.
 - COLE, C.
 - COLEMAN, CATHY
 - DAOUST, D.
 - DONOVAN, B.
 - ELMER, J.
 - GAMBLE, J.
 - HICKEY, D.
 - JOHNSON, M.
 - LONGO, R.
 - LEMIEUX, T.
 - JIGANTI, M.
 - SMITH, A.
 - SNYDER, A.
 - UNCHER, T.
 - ZECHER, M.
 - ZARRELLA, T.

DATE OF ATTACHMENT	April 4, 2012
TYPE OF ATTACHMENT	2011 Min Flow / Headpond Compliance Certification
FERC No	All NYW
PROJECT	All NYW
DEVELOPMENT	All NYW

NOTES

- SARAH KULPA (HDR)
- AMANDA MINER (HDR)
- JIM GIBSON (HDR)

ORIGINAL TO SCANNER

For Your Information Per Your Request Review & Comment

Follow-Up Action Req'd (see below) No Action Now, More to Follow

Follow-Up By Whom:
 Date:
 Action:

Brookfield

New York West Operations
Erie Boulevard Hydropower, LP
33 West 1st Street South
Fulton, NY 13069

Tel. (315) 593-3118
Fax (315) 598-4831
www.brookfieldpower.com

April 4, 2012

Mr. Gerald Cross, Regional Engineer
FEDERAL ENERGY REGULATORY COMMISSION
New York Regional Office
19 West 34th Street - Suite 400
New York, New York 10001

Subject: Minimum Flow and Pond Level Compliance for 2011

Project No. 2330 Lower Raquette River
Project No. 2474 Oswego River
Project No. 2498 Hewittville
Project No. 2499 Unionville
Project No. 2538 Beebee Island
Project No. 2569 Black River
Project No. 2645 Beaver River
Project No. 2713 Oswegatchie River
Project No. 2837 Granby
Project No. 4402 Talcville

Project No. 4472 Franklin Falls
Project No. 5984 Oswego Falls
Project No. 7000 Newton Falls
Project No. 7320 Chasm
Project No. 7321 Macomb
Project No. 7387 Piercefield
Project No. 7518 Hogansburg
Project No. 9222 Yaleville
Project No. 10461 W. Branch St. Regis River

Dear Mr. Cross:

Erie Boulevard Hydropower, L. P. (Erie) submits, for the above referenced projects, that it has complied with minimum flow releases, headpond levels, and special water releases and similar requirements in calendar years 2011, except as previously advised in letter reports filed with the Commission for the respective hydro developments.

Should you have any questions, please contact the undersigned at (315) 598-6130.

Very truly yours,



Steven P. Murphy
New York West Operations

xc: J. Elmer
D. Daoust

ATTACHMENT G

**QUESTION E – THREATENED & ENDANGERED
SPECIES PROTECTION:**

CONSULTATION RECORD

March 27, 2012

Ms. Jean Pietrusiak
New York State Department of Environmental Conservation
New York Natural Heritage Program
625 Broadway, 5th Floor
Albany, NY 12233-4757

**Subject: Oswego River Hydroelectric Projects (FERC Nos. 5984 and 2474)
Threatened and Endangered Species Consultation**

Dear Ms. Pietrusiak:

Erie Boulevard Hydropower, L.P. (Erie) is the owner, operator, and licensee of the Oswego Falls (FERC No. 5984) and Oswego River (FERC No. 2474) projects. These projects are comprised of five hydroelectric developments located at four dams along the Oswego River. From upstream to downstream, these developments are the Oswego Falls East and West, Fulton, Minetto, and Varick developments. The Oswego Falls East and West developments (River Mile [RM] 12.6 – Lock 2) and Fulton development (RM 11.6 – Lock 3) are located in the City of Fulton at the Upper Fulton dam and Lower Fulton dam, respectively. The Minetto Development is located in the Town of Minetto at the Minetto dam (RM 5.1 – Lock 5). The Varick Development (RM 1.4 – Lock 7) is located at the Varick dam in the City of Oswego.

As a matter of background, Federal Energy Regulatory Commission (FERC) licenses for the projects were issued according to the schedule below:

- Oswego Falls Project (Oswego Falls East and West developments) – March 15, 1996
- Oswego River Project (Fulton, Minetto, and Varick developments) – November 30, 2004

Project operations and environmental protection measures at these projects have been largely determined by a comprehensive Offer of Settlement that Erie developed in conjunction with the New York State Department of Environmental Conservation and other entities in 2004. The licensing processes for these projects included consultation with resource agencies regarding threatened and endangered species.

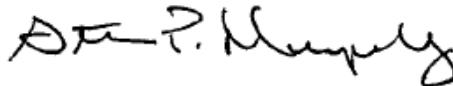
Erie is presently working with the Low Impact Hydropower Institute (LIHI) to recertify the Oswego River developments as low impact projects. In preparing the application for LIHI certification, Erie must update or confirm consultation with resource agencies with respect to the presence of threatened or endangered species within the vicinity of the projects.

Per the request from LIHI, Erie respectfully requests information on the presence of threatened or endangered species within the vicinity of the above-listed projects. The project location coordinates have been provided below, as well as on the enclosed aerial maps.

- Oswego Falls East..... Latitude: 43.3147; Longitude: -76.4158
- Oswego Falls West Latitude: 43.3147; Longitude: -76.4158
- Fulton Latitude: 43.3241; Longitude: -76.4198
- Minetto..... Latitude: 43.4; Longitude: -76.4725
- Varick..... Latitude: 43.45; Longitude: -76.5042

Erie would appreciate a response within 30 days of the date of this letter. Thank you in advance for your assistance, and if you have any questions, please do not hesitate to contact me at (315) 598-6130.

Sincerely,



Steven P. Murphy
New York West Operations

Enclosure

OSWEGO FALLS EAST & WEST DEVELOPMENTS



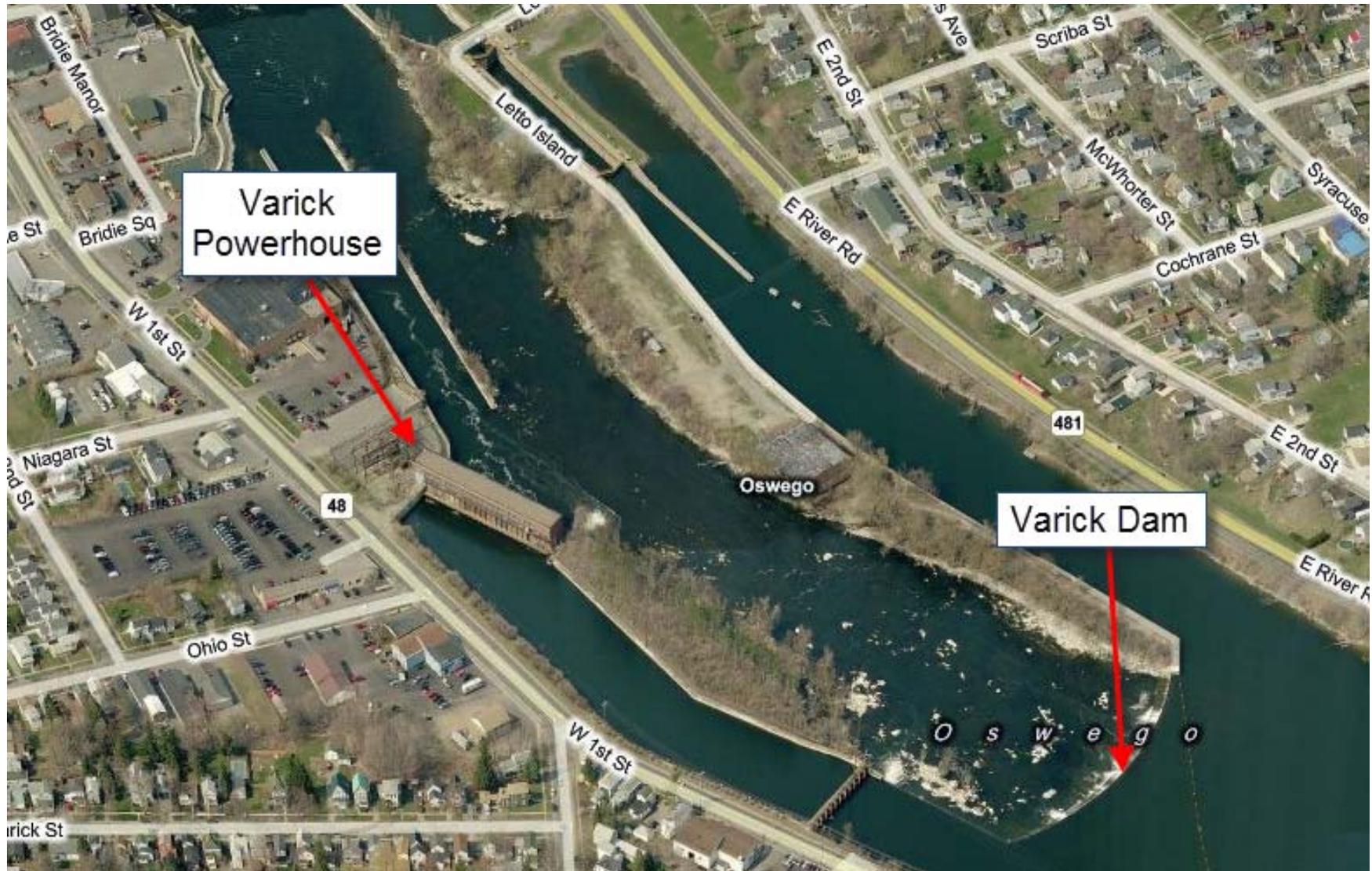
GRANBY PROJECT & FULTON DEVELOPMENT



MINETTO DEVELOPMENT



VARICK DEVELOPMENT



March 27, 2012

Ms. Jean Pietrusiak
New York State Department of Environmental Conservation
New York Natural Heritage Program
625 Broadway, 5th Floor
Albany, NY 12233-4757

**Subject: Oswego River Hydroelectric Projects (FERC Nos. 5984 and 2474)
Threatened and Endangered Species Consultation**

Dear Ms. Pietrusiak:

Erie Boulevard Hydropower, L.P. (Erie) is the owner, operator, and licensee of the Oswego Falls (FERC No. 5984) and Oswego River (FERC No. 2474) projects. These projects are comprised of five hydroelectric developments located at four dams along the Oswego River. From upstream to downstream, these developments are the Oswego Falls East and West, Fulton, Minetto, and Varick developments. The Oswego Falls East and West developments (River Mile [RM] 12.6 – Lock 2) and Fulton development (RM 11.6 – Lock 3) are located in the City of Fulton at the Upper Fulton dam and Lower Fulton dam, respectively. The Minetto Development is located in the Town of Minetto at the Minetto dam (RM 5.1 – Lock 5). The Varick Development (RM 1.4 – Lock 7) is located at the Varick dam in the City of Oswego.

As a matter of background, Federal Energy Regulatory Commission (FERC) licenses for the projects were issued according to the schedule below:

- Oswego Falls Project (Oswego Falls East and West developments) – March 15, 1996
- Oswego River Project (Fulton, Minetto, and Varick developments) – November 30, 2004

Project operations and environmental protection measures at these projects have been largely determined by a comprehensive Offer of Settlement that Erie developed in conjunction with the New York State Department of Environmental Conservation and other entities in 2004. The licensing processes for these projects included consultation with resource agencies regarding threatened and endangered species.

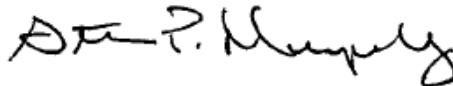
Erie is presently working with the Low Impact Hydropower Institute (LIHI) to recertify the Oswego River developments as low impact projects. In preparing the application for LIHI certification, Erie must update or confirm consultation with resource agencies with respect to the presence of threatened or endangered species within the vicinity of the projects.

Per the request from LIHI, Erie respectfully requests information on the presence of threatened or endangered species within the vicinity of the above-listed projects. The project location coordinates have been provided below, as well as on the enclosed aerial maps.

- Oswego Falls East..... Latitude: 43.3147; Longitude: -76.4158
- Oswego Falls West Latitude: 43.3147; Longitude: -76.4158
- Fulton Latitude: 43.3241; Longitude: -76.4198
- Minetto..... Latitude: 43.4; Longitude: -76.4725
- Varick..... Latitude: 43.45; Longitude: -76.5042

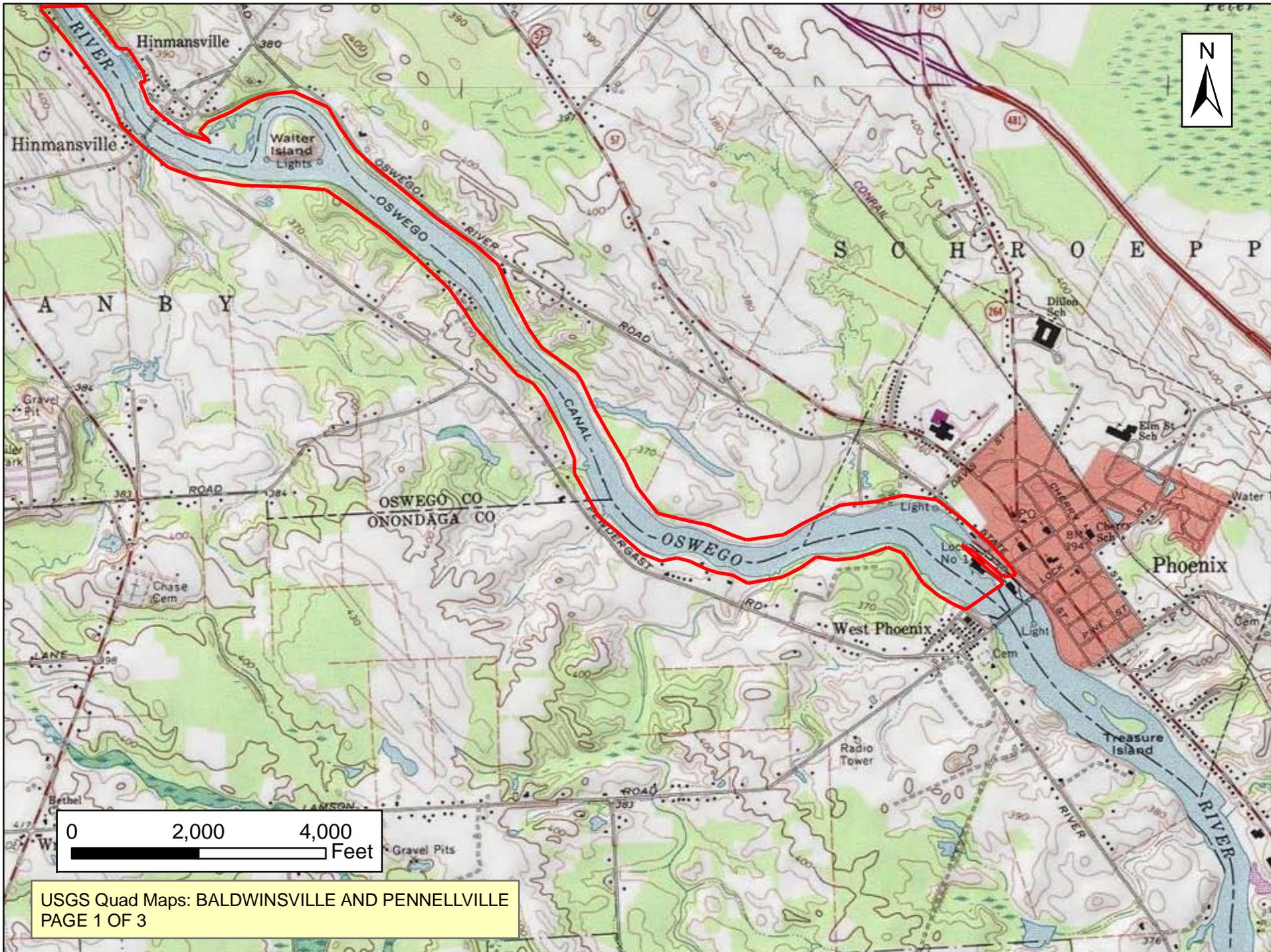
Erie would appreciate a response within 30 days of the date of this letter. Thank you in advance for your assistance, and if you have any questions, please do not hesitate to contact me at (315) 598-6130.

Sincerely,



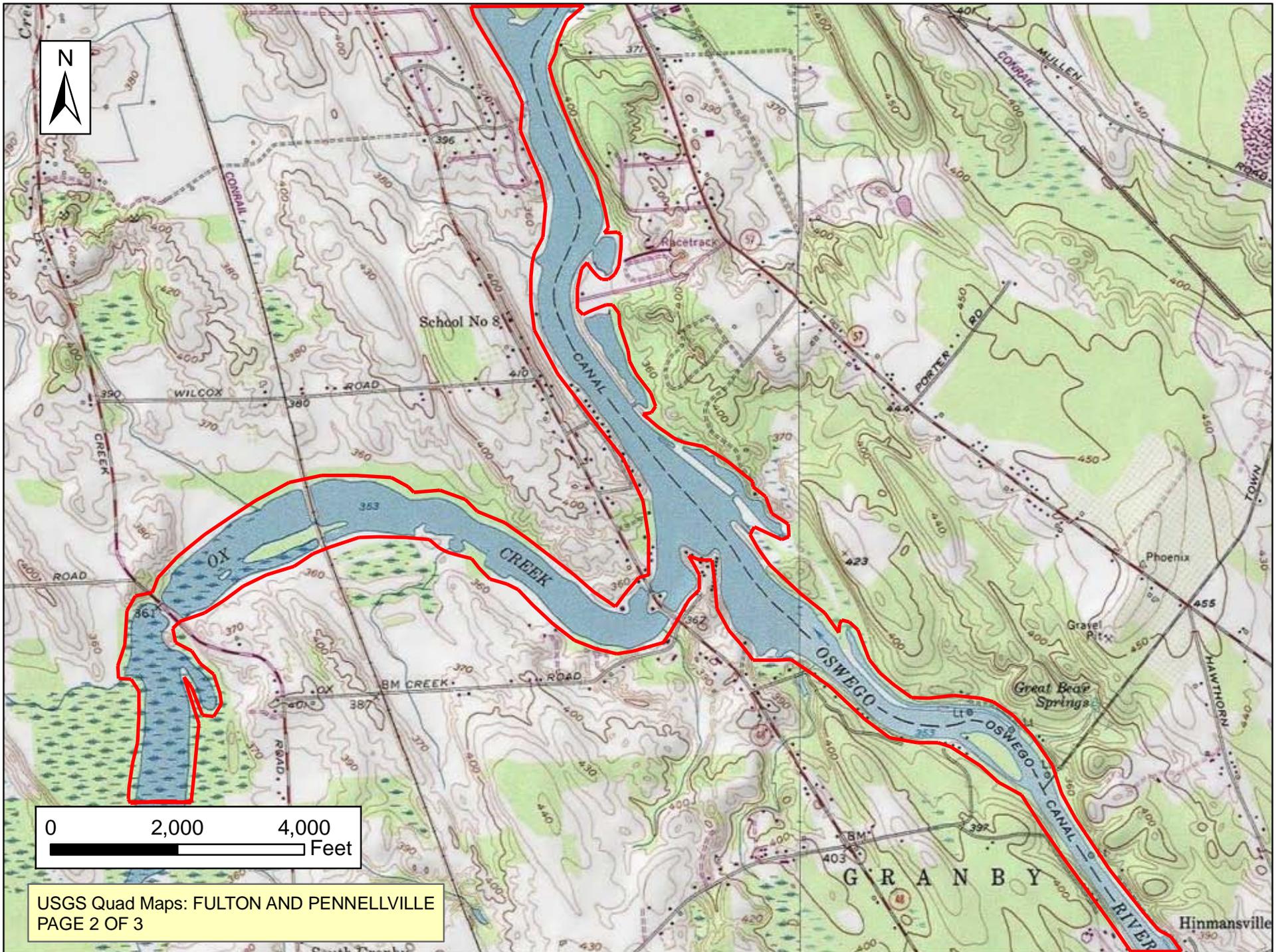
Steven P. Murphy
New York West Operations

Enclosure



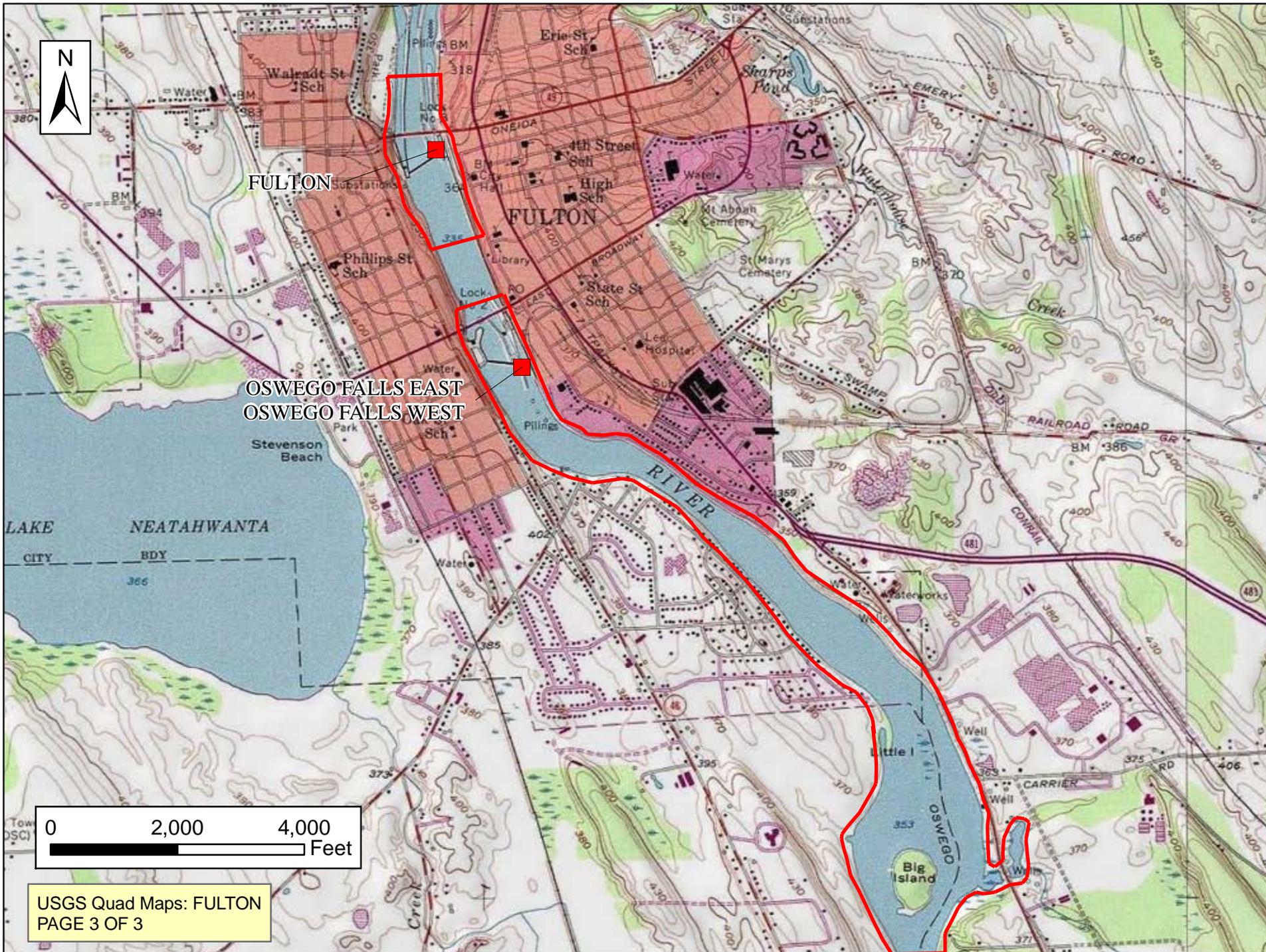
USGS Quad Maps: BALDWINVILLE AND PENNELLVILLE
PAGE 1 OF 3

OSWEGO FALLS EAST AND WEST PROJECT BOUNDARIES

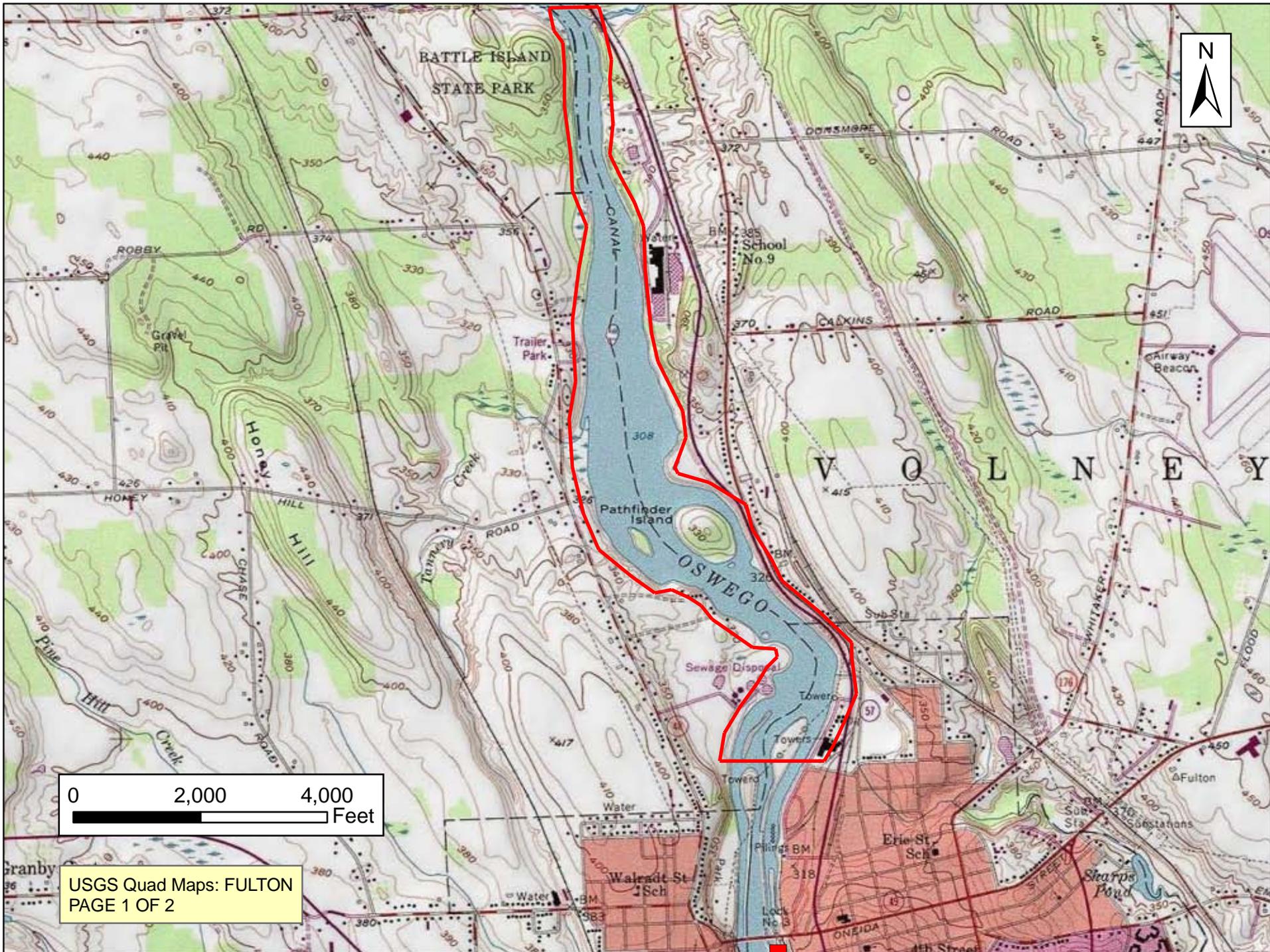


USGS Quad Maps: FULTON AND PENNELLVILLE
PAGE 2 OF 3

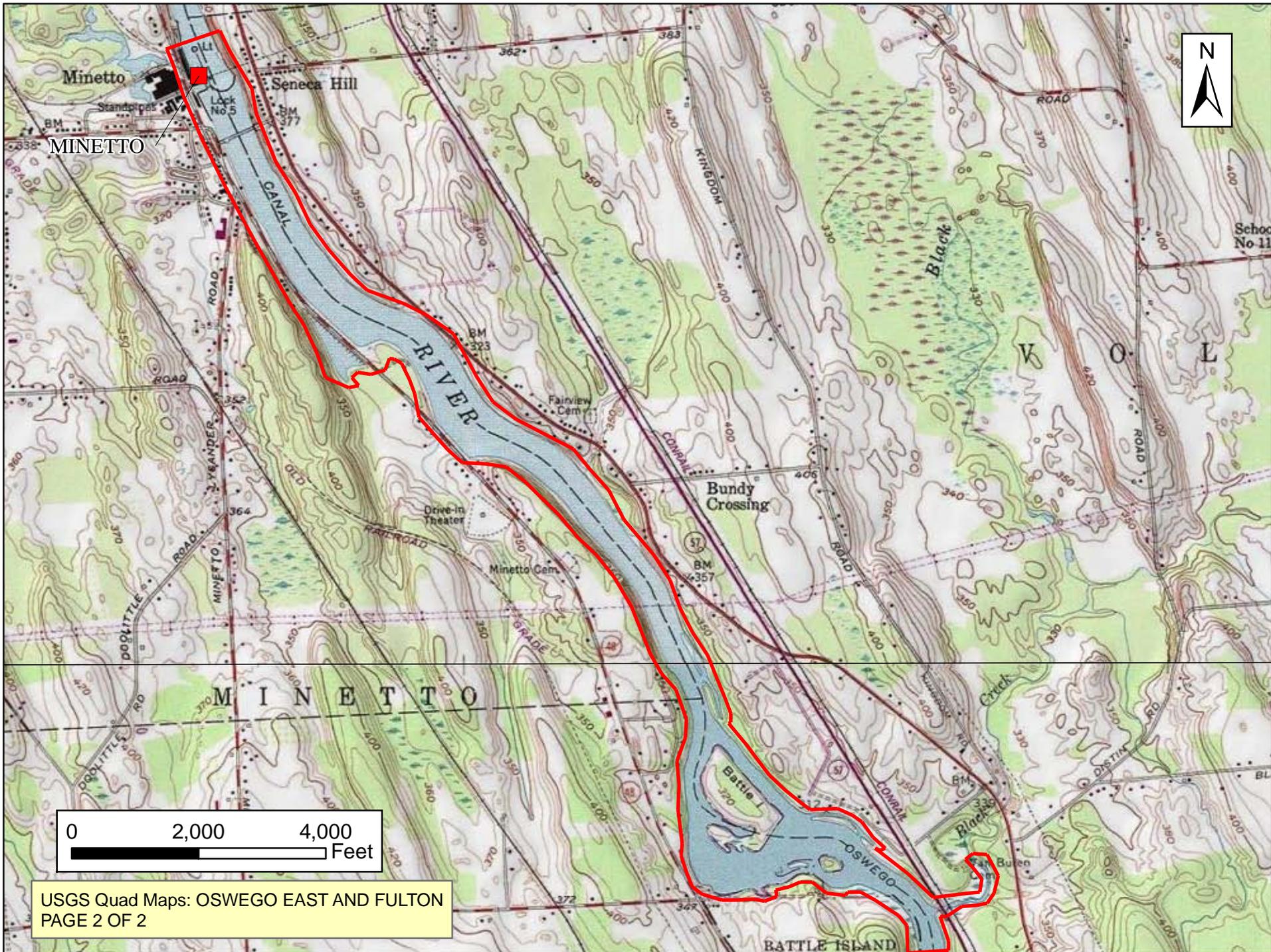
OSWEGO FALLS EAST AND WEST PROJECT BOUNDARIES



FULTON AND OSWEGO FALLS EAST AND WEST PROJECT BOUNDARIES

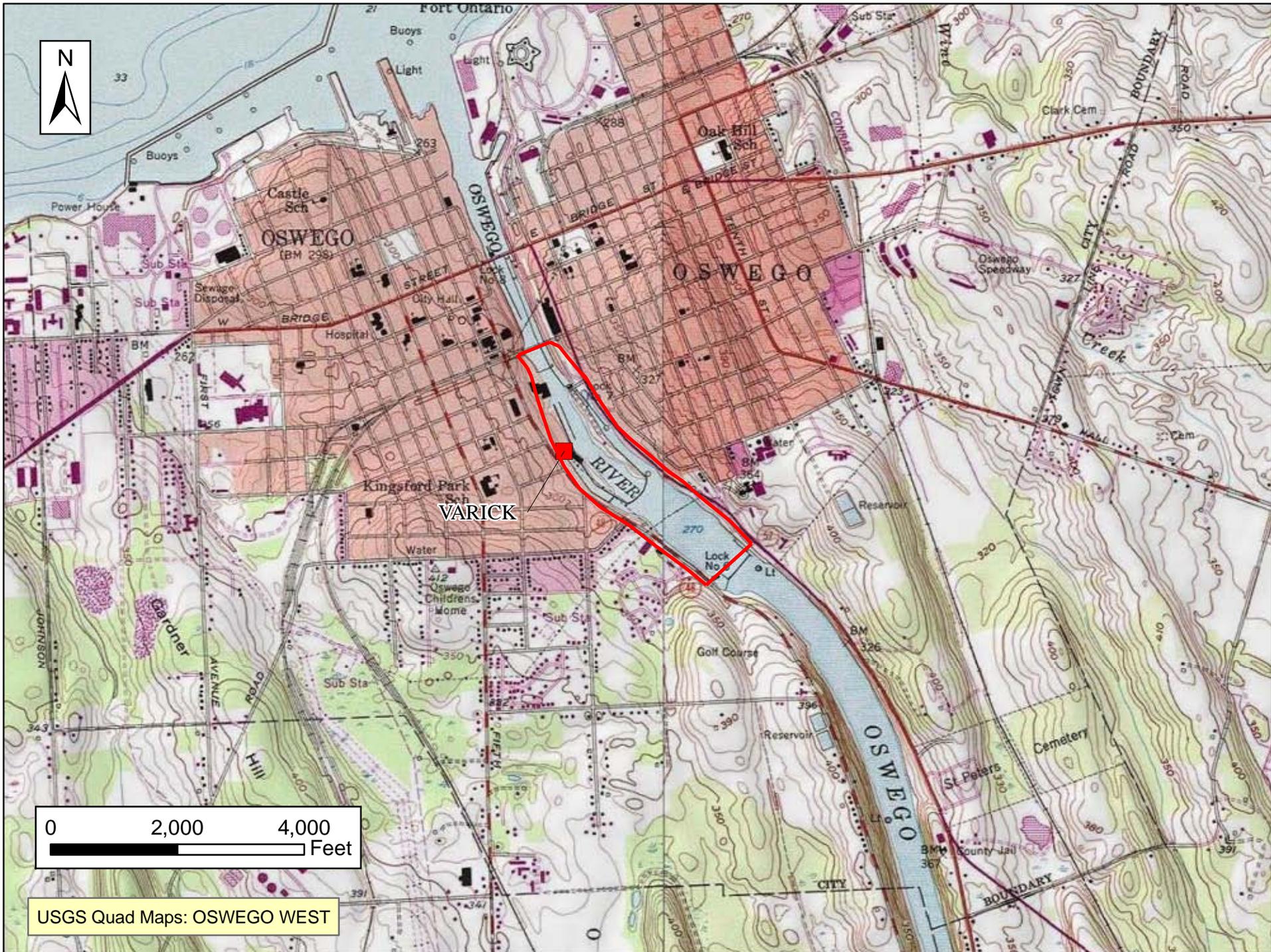


MINNETTO PROJECT BOUNDARY



USGS Quad Maps: OSWEGO EAST AND FULTON
PAGE 2 OF 2

MINNETTO PROJECT BOUNDARY



VARICK PROJECT BOUNDARY

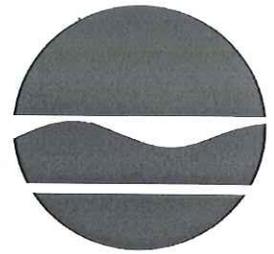
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish, Wildlife & Marine Resources

625 Broadway, 5th Floor, Albany, New York 12233-4757

Phone: (518) 402-8935 • Fax: (518) 402-8925

Website: www.dec.ny.gov



Joe Martens
Commissioner

April 30, 2012

Steven Murphy
Brookfield
Erie Blvd Hydropower
33 West First Street South
Fulton, NY 13069

Dear Mr. Murphy:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to an Environmental Assessment for the proposed OSWEGO RIVER Hydroelectric Projects - FERC 5984 and 2474 - located at FOUR dams along the Oswego River - this response applies to SITE 1 - OSWEGO FALLS EAST, area as indicated on the map you provided.

Enclosed is a report of rare or state-listed animals and plants, significant natural communities, and other significant habitats, which our databases indicate occur, or may occur, on your site or in the immediate vicinity of your site. For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our databases. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental impact assessment.

The enclosed report may be included in documents that will be available to the public. However, any enclosed maps displaying locations of rare species are considered sensitive information, and are intended only for the internal use of the recipient; they should not be included in any document that will be made available to the public, without permission from the New York Natural Heritage Program.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.ht ml.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

Sincerely,

Jean Pietrusiak, Information Services
NYS Department Environmental Conservation

Enc.
cc: Reg. 7

352

Natural Heritage Report on Rare Species

NY Natural Heritage Program, NYS DEC, 625 Broadway, 5th Floor,
Albany, NY 12233-4757
(518) 402-8935



~The information in this report includes only records entered into the NY Natural Heritage databases as of the date of the report. This report is not a definitive statement on the presence or absence of all rare species or significant natural communities at or in the vicinity of this site.
~Refer to the User's Guide for explanations of codes, ranks and fields.
~We do not provide maps for species most vulnerable to disturbance.

Natural Heritage Report on Rare Species and Ecological Communities



MAMMALS

<i>Myotis sodalis</i>			Office Use
Indiana Bat	NY Legal Status: Endangered	NYS Rank: S1 - Critically imperiled	12153
Maternity colony	Federal Listing: Endangered	Global Rank: G2 - Imperiled	ESU
	County: Onondaga, Oswego		USFWS
	Town: Granby, Lysander, Schroepfel, Volney		
	Location: Documented within 2 miles of project site. Animals can move 2 miles or more from documented locations. For information on the population at this location and management considerations, please contact the NYS DEC Regional Wildlife Manager for the Region where the project is located.		
<hr/>			
<i>Myotis sodalis</i>			Office Use
Indiana Bat	NY Legal Status: Endangered	NYS Rank: S1 - Critically imperiled	12153
Maternity colony	Federal Listing: Endangered	Global Rank: G2 - Imperiled	ESU
	County: Onondaga, Oswego		USFWS
	Town: Granby, Lysander, Schroepfel, Volney		
	Location: Documented within 2 miles of project site. Animals can move 2 miles or more from documented locations. For information on the population at this location and management considerations, please contact the NYS DEC Regional Wildlife Manager for the Region where the project is located.		
<hr/>			
<i>Myotis sodalis</i>			Office Use
Indiana Bat	NY Legal Status: Endangered	NYS Rank: S1 - Critically imperiled	12153
Maternity colony	Federal Listing: Endangered	Global Rank: G2 - Imperiled	ESU
	County: Onondaga, Oswego		USFWS
	Town: Granby, Lysander, Schroepfel, Volney		
	Location: Documented within 2 miles of project site. Animals can move 2 miles or more from documented locations. For information on the population at this location and management considerations, please contact the NYS DEC Regional Wildlife Manager for the Region where the project is located.		
<hr/>			
<i>Myotis sodalis</i>			Office Use
Indiana Bat	NY Legal Status: Endangered	NYS Rank: S1 - Critically imperiled	12153
Maternity colony	Federal Listing: Endangered	Global Rank: G2 - Imperiled	ESU
	County: Onondaga, Oswego		USFWS
	Town: Granby, Lysander, Schroepfel, Volney		
	Location: Documented within 2 miles of project site. Animals can move 2 miles or more from documented locations. For information on the population at this location and management considerations, please contact the NYS DEC Regional Wildlife Manager for the Region where the project is located.		
<hr/>			
<i>Myotis sodalis</i>			Office Use
Indiana Bat	NY Legal Status: Endangered	NYS Rank: S1 - Critically imperiled	12153
Maternity colony	Federal Listing: Endangered	Global Rank: G2 - Imperiled	ESU
	County: Onondaga, Oswego		USFWS
	Town: Granby, Lysander, Schroepfel, Volney		
	Location: Documented within 2 miles of project site. Animals can move 2 miles or more from documented locations. For information on the population at this location and management considerations, please contact the NYS DEC Regional Wildlife Manager for the Region where the project is located.		
<hr/>			

OFF

Natural Heritage Report on Rare Species and Ecological Communities



<i>Myotis sodalis</i>			Office Use
Indiana Bat	NY Legal Status: Endangered	NYS Rank: S1 - Critically imperiled	12153
Maternity colony	Federal Listing: Endangered	Global Rank: G2 - Imperiled	ESU
	County: Onondaga, Oswego		USFWS
	Town: Granby, Lysander, Schroepfel, Volney		
	Location: Documented within 2 miles of project site. Animals can move 2 miles or more from documented locations. For information on the population at this location and management considerations, please contact the NYS DEC Regional Wildlife Manager for the Region where the project is located.		

<i>Myotis sodalis</i>			Office Use
Indiana Bat	NY Legal Status: Endangered	NYS Rank: S1 - Critically imperiled	12153
Maternity colony	Federal Listing: Endangered	Global Rank: G2 - Imperiled	ESU
	County: Onondaga, Oswego		USFWS
	Town: Granby, Lysander, Schroepfel, Volney		
	Location: Documented within 2 miles of project site. Animals can move 2 miles or more from documented locations. For information on the population at this location and management considerations, please contact the NYS DEC Regional Wildlife Manager for the Region where the project is located.		

<i>Myotis sodalis</i>			Office Use
Indiana Bat	NY Legal Status: Endangered	NYS Rank: S1 - Critically imperiled	12153
Maternity colony	Federal Listing: Endangered	Global Rank: G2 - Imperiled	ESU
	County: Onondaga, Oswego		USFWS
	Town: Granby, Lysander, Schroepfel, Volney		
	Location: Documented within 2 miles of project site. Animals can move 2 miles or more from documented locations. For information on the population at this location and management considerations, please contact the NYS DEC Regional Wildlife Manager for the Region where the project is located.		

8 Records Processed

More detailed information about many of the rare and listed animals in New York, including biology, identification, habitat, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org, from NatureServe Explorer at <http://www.natureserve.org/explorer>, and from NYSDEC at <http://www.dec.ny.gov/animals/7494.html>.

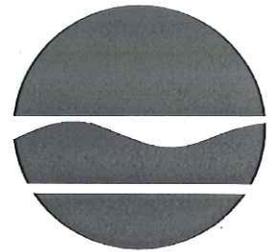
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish, Wildlife & Marine Resources

625 Broadway, 5th Floor, Albany, New York 12233-4757

Phone: (518) 402-8935 • Fax: (518) 402-8925

Website: www.dec.ny.gov



Joe Martens
Commissioner

April 30, 2012

Steven Murphy
Brookfield
Erie Blvd Hydropower
33 West First Street South
Fulton, NY 13069

Dear Mr. Murphy:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to an Environmental Assessment for the proposed OSWEGO RIVER Hydroelectric Projects - FERC 5984 and 2474 - located at FOUR dams along the Oswego River - this response applies to SITE 2 - OSWEGO FALLS WEST, area as indicated on the map you provided.

Enclosed is a report of rare or state-listed animals and plants, significant natural communities, and other significant habitats, which our databases indicate occur, or may occur, on your site or in the immediate vicinity of your site. For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our databases. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental impact assessment.

The enclosed report may be included in documents that will be available to the public. However, any enclosed maps displaying locations of rare species are considered sensitive information, and are intended only for the internal use of the recipient; they should not be included in any document that will be made available to the public, without permission from the New York Natural Heritage Program.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

Sincerely,

Jean Pietrusiak, Information Services
NYS Department Environmental Conservation

Enc.
cc: Reg. 7

353

Natural Heritage Report on Rare Species and Ecological Communities



NY Natural Heritage Program, NYS DEC, 625 Broadway, 5th Floor,
Albany, NY 12233-4757
(518) 402-8935

~The information in this report includes only records entered into the NY Natural Heritage databases as of the date of the report. This report is not a definitive statement on the presence or absence of all rare species or significant natural communities at or in the vicinity of this site.
~Refer to the User's Guide for explanations of codes, ranks and fields.
~Location maps for certain species and communities may not be provided 1) if the species is vulnerable to disturbance, 2) if the location and/or extent is not precisely known, 3) if the location and/or extent is too large to display, and/or 4) if the animal is listed as Endangered or Threatened by New York State.

Natural Heritage Report on Rare Species and Ecological Communities



MAMMALS

Myotis sodalis

Indiana Bat	NY Legal Status: Endangered	NYS Rank: S1 - Critically imperiled	Office Use 12153
Maternity colony	Federal Listing: Endangered	Global Rank: G2 - Imperiled	ESU
	Last Report: **	EO Rank: **	USFWS
	County: Onondaga, Oswego		
	Town: Granby, Lysander, Schroepfel, Volney		
	Location: At, or in the vicinity of, the project site.		
	General Quality and Habitat: **For information on the population at this location and management considerations, please contact the NYS DEC Regional Wildlife Manager for the Region where the project is located.		

Myotis sodalis

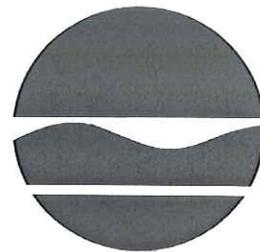
Indiana Bat	NY Legal Status: Endangered	NYS Rank: S1 - Critically imperiled	Office Use 12153
Maternity colony	Federal Listing: Endangered	Global Rank: G2 - Imperiled	ESU
	Last Report: **	EO Rank: **	USFWS
	County: Onondaga, Oswego		
	Town: Granby, Lysander, Schroepfel, Volney		
	Location: At, or in the vicinity of, the project site.		
	General Quality and Habitat: **For information on the population at this location and management considerations, please contact the NYS DEC Regional Wildlife Manager for the Region where the project is located.		

2 Records Processed

More detailed information about many of the rare and listed animals and plants in New York, including biology, identification, habitat, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org, from NatureServe Explorer at <http://www.natureserve.org/explorer>, from NYSDEC at <http://www.dec.ny.gov/animals/7494.html> (for animals), and from USDA's Plants Database at <http://plants.usda.gov/index.html> (for plants).

More detailed information about many of the natural community types in New York, including identification, dominant and characteristic vegetation, distribution, conservation, and management, is available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org. For descriptions of all community types, go to <http://www.dec.ny.gov/animals/29384.html> and click on Draft Ecological Communities of New York State.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Fish, Wildlife & Marine Resources
625 Broadway, 5th Floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • **Fax:** (518) 402-8925
Website: www.dec.ny.gov



Joe Martens
Commissioner

April 30, 2012

Steven Murphy
Brookfield
Erie Blvd Hydropower
33 West First Street South
Fulton, NY 13069

Dear Mr. Murphy:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to an Environmental Assessment for the proposed OSWEGO RIVER Hydroelectric Projects - FERC 5984 and 2474 - located at FOUR dams along the Oswego River - this response applies to SITE 3 - FULTON FALLS, area as indicated on the map you provided.

Enclosed is a report of rare or state-listed animals and plants, significant natural communities, and other significant habitats, which our databases indicate occur, or may occur, on your site or in the immediate vicinity of your site. For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our databases. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental impact assessment.

The enclosed report may be included in documents that will be available to the public. However, any enclosed maps displaying locations of rare species are considered sensitive information, and are intended only for the internal use of the recipient; they should not be included in any document that will be made available to the public, without permission from the New York Natural Heritage Program.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.ht ml.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

Sincerely,

Jean Pietrusiak, Information Services
NYS Department Environmental Conservation

Enc.
cc: Reg. 7

354

Natural Heritage Report on Rare Species

NY Natural Heritage Program, NYS DEC, 625 Broadway, 5th Floor,
Albany, NY 12233-4757
(518) 402-8935



- ~The information in this report includes only records entered into the NY Natural Heritage databases as of the date of the report. This report is not a definitive statement on the presence or absence of all rare species or significant natural communities at or in the vicinity of this site.
- ~Refer to the User's Guide for explanations of codes, ranks and fields.
- ~We do not provide maps for species most vulnerable to disturbance.

Natural Heritage Report on Rare Species and Ecological Communities



MAMMALS

<i>Myotis sodalis</i>				Office Use
Indiana Bat	NY Legal Status: Endangered	NYS Rank: S1 - Critically imperiled		12153
Maternity colony	Federal Listing: Endangered	Global Rank: G2 - Imperiled		ESU
	County: Onondaga, Oswego			USFWS
	Town: Granby, Lysander, Schroepfel, Volney			
	Location: Documented within 2 miles of project site. Animals can move 2 miles or more from documented locations. For information on the population at this location and management considerations, please contact the NYS DEC Regional Wildlife Manager for the Region where the project is located.			

1 Records Processed

More detailed information about many of the rare and listed animals in New York, including biology, identification, habitat, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org, from NatureServe Explorer at <http://www.natureserve.org/explorer>, and from NYSDEC at <http://www.dec.ny.gov/animals/7494.html>.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish, Wildlife & Marine Resources

625 Broadway, 5th Floor, Albany, New York 12233-4757

Phone: (518) 402-8935 • Fax: (518) 402-8925

Website: www.dec.ny.gov



Joe Martens
Commissioner

April 30, 2012

Steven Murphy
Brookfield
Erie Blvd Hydropower
33 West First Street South
Fulton, NY 13069

Dear Mr. Murphy:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to an Environmental Assessment for the proposed OSWEGO RIVER Hydroelectric Projects - FERC 5984 and 2474 - located at FOUR dams along the Oswego River - this response applies to SITE 4 A, area as indicated on the map you provided (page #1 of 2 maps), Towers Island to Battle Island State Park Area. Manetto Proj.

Enclosed is a report of rare or state-listed animals and plants, significant natural communities, and other significant habitats, which our databases indicate occur, or may occur, on your site or in the immediate vicinity of your site. For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our databases. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental impact assessment.

The enclosed report may be included in documents that will be available to the public. However, any enclosed maps displaying locations of rare species are considered sensitive information, and are intended only for the internal use of the recipient; they should not be included in any document that will be made available to the public, without permission from the New York Natural Heritage Program.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

Sincerely,

Jean Pietrusiak, Information Services
NYS Department Environmental Conservation

Enc.
cc: Reg. 7

355

Natural Heritage Report on Rare Species

NY Natural Heritage Program, NYS DEC, 625 Broadway, 5th Floor,
Albany, NY 12233-4757
(518) 402-8935



- ~The information in this report includes only records entered into the NY Natural Heritage databases as of the date of the report. This report is not a definitive statement on the presence or absence of all rare species or significant natural communities at or in the vicinity of this site.
- ~Refer to the User's Guide for explanations of codes, ranks and fields.
- ~We do not provide maps for species most vulnerable to disturbance.

Natural Heritage Report on Rare Species and Ecological Communities



MAMMALS

<i>Myotis sodalis</i>				Office Use
Indiana Bat	NY Legal Status: Endangered	NYS Rank: S1 - Critically imperiled		12153
Maternity colony	Federal Listing: Endangered	Global Rank: G2 - Imperiled		ESU
	County: Onondaga, Oswego			USFWS
	Town: Granby, Lysander, Schroepfel, Volney			
	Location: Documented within 2 miles of project site. Animals can move 2 miles or more from documented locations. For information on the population at this location and management considerations, please contact the NYS DEC Regional Wildlife Manager for the Region where the project is located.			

1 Records Processed

More detailed information about many of the rare and listed animals in New York, including biology, identification, habitat, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org, from NatureServe Explorer at <http://www.natureserve.org/explorer>, and from NYSDEC at <http://www.dec.ny.gov/animals/7494.html>.

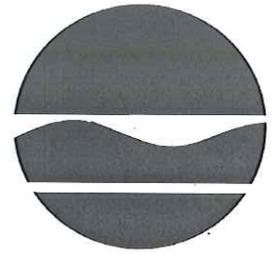
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish, Wildlife & Marine Resources

625 Broadway, 5th Floor, Albany, New York 12233-4757

Phone: (518) 402-8935 • Fax: (518) 402-8925

Website: www.dec.ny.gov



April 30, 2012

Joe Martens
Commissioner

Steven Murphy
Brookfield
Erie Blvd Hydropower
33 West First Street South
Fulton, NY 13069

Dear Mr. Murphy:

In response to your recent request, we have reviewed the New York Natural Heritage Program database, with respect to an Environmental Assessment for the proposed OSWEGO RIVER Hydroelectric Project - FERC 5984 AND 2474 - located at FOUR dams - this response applies to SITE 4 B MINETTO PROJECT area as indicated on the map you provided, ((Page 2 of 2 pages) BATTLE ISLAND , north to LOCK # 5.

We have no records of rare or state listed animals or plants, significant natural communities or other significant habitats, on or in the immediate vicinity of your site.

The absence of data does not necessarily mean that rare or state-listed species, natural communities or other significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain information which indicates their presence. For most sites, comprehensive field surveys have not been conducted. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities and other significant habitats maintained in the Natural Heritage Data bases. Your project may require additional review or permits; for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Sincerely,

Jean Pietrusiak, Information Services
NYS Department Environmental Conservation

Enc.
cc: Reg. 7

356

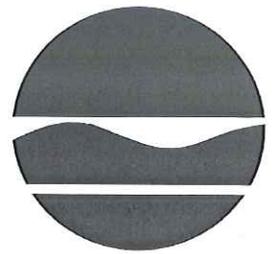
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish, Wildlife & Marine Resources

625 Broadway, 5th Floor, Albany, New York 12233-4757

Phone: (518) 402-8935 • Fax: (518) 402-8925

Website: www.dec.ny.gov



Joe Martens
Commissioner

April 30, 2012

Steven Murphy
Brookfield
Erie Blvd Hydropower
33 West First Street South
Fulton, NY 13069

Dear Mr. Murphy:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to an Environmental Assessment for the proposed OSWEGO RIVER Hydroelectric Projects - FERC 5984 and 2474 - located at FOUR dams along the Oswego River - this response applies to SITE 5, area as indicated on the map you provided - VARICK.

Enclosed is a report of rare or state-listed animals and plants, significant natural communities, and other significant habitats, which our databases indicate occur, or may occur, on your site or in the immediate vicinity of your site. For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our databases. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental impact assessment.

The enclosed report may be included in documents that will be available to the public. However, any enclosed maps displaying locations of rare species are considered sensitive information, and are intended only for the internal use of the recipient; they should not be included in any document that will be made available to the public, without permission from the New York Natural Heritage Program.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.ht ml.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

Sincerely,

Jean Pietrusiak, Information Services
NYS Department Environmental Conservation

Enc.
cc: Reg. 7

357

Natural Heritage Report on Rare Species and Ecological Communities



NY Natural Heritage Program, NYS DEC, 625 Broadway, 5th Floor,
Albany, NY 12233-4757
(518) 402-8935

~The information in this report includes only records entered into the NY Natural Heritage databases as of the date of the report. This report is not a definitive statement on the presence or absence of all rare species or significant natural communities at or in the vicinity of this site.
~Refer to the User's Guide for explanations of codes, ranks and fields.
~Location maps for certain species and communities may not be provided 1) if the species is vulnerable to disturbance, 2) if the location and/or extent is not precisely known, 3) if the location and/or extent is too large to display, and/or 4) if the animal is listed as Endangered or Threatened by New York State.

Natural Heritage Report on Rare Species and Ecological Communities



FISH

Acipenser fulvescens

Lake Sturgeon	NY Legal Status:Threatened	NYS Rank: S1S2 - Critically imperiled	Office Use 923
	Federal Listing:	Global Rank: G3G4 - Vulnerable	BOF
	Last Report: **	EO Rank: **	
	County: Oswego		S
	Town: Oswego - City		
	Location: At, or in the vicinity of, the project site.		
	General Quality and Habitat: **For information on the population at this location and management considerations, please contact the NYS DEC Regional Wildlife Manager for the Region where the project is located.		

OTHER

Waterfowl Winter Concentration Area

	NY Legal Status:Unlisted	NYS Rank: S3S4 - Vulnerable	Office Use 2608
	Federal Listing:	Global Rank: GNR - Not ranked	
	Last Report: 1992-01-08	EO Rank: Extant	
	County: Oswego		S
	Town: Oswego - City		
	Location: Oswego River and Harbor		
	General Quality and Habitat: The first 0.5 mi below the dam is shallow, with a rock and rubble bottom and small wooded islands. The next 1 mi to the mouth is wider, deeper and extensively bulkheaded. Breakwalls have been constructed at the mouth of the river, creating a major sheltered harbor. The harbor is heavily developed for industrial, commercial and recreational uses. Several oil-fired power plants in the vicinity discharge heated water just outside the western harbor breakwall.		

2 Records Processed

More detailed information about many of the rare and listed animals and plants in New York, including biology, identification, habitat, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org, from NatureServe Explorer at <http://www.natureserve.org/explorer>, from NYSDEC at <http://www.dec.ny.gov/animals/7494.html> (for animals), and from USDA's Plants Database at <http://plants.usda.gov/index.html> (for plants).

More detailed information about many of the natural community types in New York, including identification, dominant and characteristic vegetation, distribution, conservation, and management, is available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org. For descriptions of all community types, go to <http://www.dec.ny.gov/animals/29384.html> and click on Draft Ecological Communities of New York State.

March 27, 2012

Mr. David Stillwell
U.S. Fish and Wildlife Service
3817 Luker Road
Cortland, NY 13045

Subject: **Oswego River Hydroelectric Projects (FERC Nos. 5984 and 2474)
Threatened and Endangered Species Consultation**

Dear Mr. Stillwell:

Erie Boulevard Hydropower, L.P. (Erie) is the owner, operator, and licensee of the Oswego Falls (FERC No. 5984) and Oswego River (FERC No. 2474) projects. These projects are comprised of five hydroelectric developments located at four dams along the Oswego River. From upstream to downstream, these developments are the Oswego Falls East and West, Fulton, Minetto, and Varick developments. The Oswego Falls East and West developments (River Mile [RM] 12.6 – Lock 2) and Fulton development (RM 11.6 – Lock 3) are located in the City of Fulton at the Upper Fulton dam and Lower Fulton dam, respectively. The Minetto Development is located in the Town of Minetto at the Minetto dam (RM 5.1 – Lock 5). The Varick Development (RM 1.4 – Lock 7) is located at the Varick dam in the City of Oswego.

As a matter of background, Federal Energy Regulatory Commission (FERC) licenses for the projects were issued according to the schedule below:

- Oswego Falls Project (Oswego Falls East and West developments) – March 15, 1996
- Oswego River Project (Fulton, Minetto, and Varick developments) – November 30, 2004

Project operations and environmental protection measures at these projects have been largely determined by a comprehensive Offer of Settlement that Erie developed in conjunction with the U.S. Fish and Wildlife Service and other entities in 2004. The licensing processes for these projects included consultation with resource agencies regarding threatened and endangered species.

Erie is presently working with the Low Impact Hydropower Institute (LIHI) to recertify the Oswego River developments as low impact projects. In preparing the application for LIHI certification, Erie must update or confirm consultation with resource agencies with respect to the presence of threatened or endangered species within the vicinity of the projects.

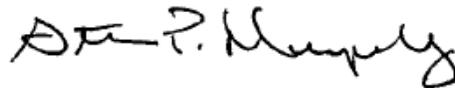
Mr. David Stillwell
March 27, 2012
Page 2 of 2

Per the request from LIHI, Erie respectfully requests information on the presence of threatened or endangered species within the vicinity of the above-listed projects. The project location coordinates have been provided below, as well as on the enclosed aerial maps.

- Oswego Falls East..... Latitude: 43.3147; Longitude: -76.4158
- Oswego Falls West Latitude: 43.3147; Longitude: -76.4158
- Fulton Latitude: 43.3241; Longitude: -76.4198
- Minetto..... Latitude: 43.4; Longitude: -76.4725
- Varick..... Latitude: 43.45; Longitude: -76.5042

Erie would appreciate a response within 30 days of the date of this letter. Thank you in advance for your assistance, and if you have any questions, please do not hesitate to contact me at (315) 598-6130.

Sincerely,



Steven P. Murphy
New York West Operations

Enclosure

OSWEGO FALLS EAST & WEST DEVELOPMENTS



GRANBY PROJECT & FULTON DEVELOPMENT



MINETTO DEVELOPMENT



VARICK DEVELOPMENT





United States Department of the Interior

FISH AND WILDLIFE SERVICE

New York Field Office

3817 Luker Road

Cortland, NY 13045

Phone: (607) 753-9334 Fax: (607) 753-9699

<http://www.fws.gov/northeast/nyfo>



Project Number: 120283

To: Staven Murphy

Date: Mar 30, 2012

Regarding: Oswego River Hydroelectric Projects (FERC Nos. 5984 and 2474)

Town/County: Cities of Fulton and Oswego and Town of Minetto / Oswego County

The U.S. Fish and Wildlife Service (Service) New York Field Office has received your request for information regarding occurrences of Federally-listed or proposed threatened and endangered species within the vicinity of the above-referenced project/property. In an effort to streamline project reviews, we have shifted our species list request responses to our website at <http://www.fws.gov/northeast/nyfo/es/section7.htm>. Please go to our website and print the appropriate portions of our county list of endangered, threatened, proposed, and candidate species, and the official list request response for your files. Step-by-step instructions are also found on our website.

As a reminder, Section 9 of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) prohibits unauthorized taking* of listed species and applies to Federal and non-Federal activities. Additionally, Section 7(a)(2) of the ESA requires Federal agencies, in consultation with the Service, to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. An assessment of the potential direct, indirect, and cumulative impacts is required for all Federal actions that may affect listed species. For projects not authorized, funded, or carried out by a Federal agency, consultation with the Service pursuant to Section 7(a)(2) of the ESA is not required. However, no person is authorized to "take" any listed species without appropriate authorizations from the Service. Therefore, we provide technical assistance to individuals and agencies to assist with project planning to avoid the potential for "take," or when appropriate, to provide assistance with their application for an incidental take permit pursuant to Section 10(a)(1)(B) of the ESA.

Project construction or implementation should not commence until all requirements of the ESA have been fulfilled. If you have any questions or require further assistance regarding threatened or endangered species, please contact the Endangered Species Program at (607) 753-9334. Please refer to the above project number in any future correspondence.

Endangered Species Biologist: Robyn A. Niver

*Under the Act and regulations, it is illegal for any person subject to the jurisdiction of the United States to take (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these), import or export, ship in interstate or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any endangered fish or wildlife species and more threatened fish and wildlife species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. "Harm" includes any act which actually kills or injures fish or wildlife, and case law has clarified that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.

ATTACHMENT H

QUESTION F – CULTURAL RESOURCES PROTECTION:

2006 CULTURAL RESOURCES MANAGEMENT PLAN

JANUARY 26, 2007 ORDER APPROVING CRMP

Brookfield Power

New York Operations
225 Greenfield Parkway, Suite 201
Liverpool, NY 13088

Tel (315) 413-2700
Fax (315) 461-8577
www.brookfieldpower.com

March 8, 2006

PUBLIC Information

FILED
OFFICE OF THE
SECRETARY
2006 MAR - 8 P 3: 02
REGULATORY COMMISSION

Hon. Magalie Roman Salas, Secretary
Federal Energy Regulatory Commission
Mail Code DLC, HL-11.1
888 First Street, NE
Washington, DC 20426

RE: **Oswego River Project (FERC No. 2474)**
Article 410 - Submittal of Cultural Resources Management Plan
NYSOPRHP #05PR5409

Dear Secretary Salas:

Pursuant to Article 410 of the Oswego River Project license, Erie Boulevard Hydropower, L.P. (Erie) was directed to prepare a Cultural Resource Management Plan in accordance with the *Programmatic Agreement Among the Federal Energy Regulatory Commission, the Advisory Council on Historic Preservation, and the New York State Historic Preservation Officer for Managing Historic Properties that May be Affected by a License Issuing to Niagara Mohawk Power Corporation, Beebee Island Corporation, or Moreau Manufacturing Company for the Continued Operation of 14 Hydroelectric Projects in Upstate New York* (executed on July 19, 1996).

Accordingly, enclosed please find enclosed an original and eight (8) copies of the **Confidential Cultural Resources Management Plan for the Oswego River Project, FERC No. 2474**. Due to the potentially sensitive nature of historic properties identified in the CRMP, this submittal has been labeled **NON-PUBLIC Information**.

By letter dated October 28, 2005, Erie submitted a draft CRMP to the State Historic Preservation Officer (SHPO) of the New York State Office of Parks, Recreation, and Historic Preservation. At the request of SHPO, the draft CRMP was resubmitted to include the Onondaga Nation on December 21, 2005. The SHPO had no comments to make, as noted in their letter dated February 17, 2006. By letter dated January 24, 2006 Mr. Joseph J. Heath responded on behalf of the Onondaga Nation with several comments,



March 8, 2006

Page 2 of 4

which have been incorporated into the Final CRMP where applicable. These comments, with Erie's responses, are presented below:

Section 4.3: Future Effects

Comment:

- "The Onondaga nation should be consulted, in addition to the SHPO, in the event of any additional ground-disturbing activity."

Erie's Response:

- Erie has incorporated text into Section 4.3 that specifies the conditions when Erie will consult with both the Onondaga Nation and the SHPO, namely, when ground-disturbing activities or other modifications are planned that may affect pre-historic or historic period archaeological sites. In cases where proposed actions may affect only above-ground historic period resources, Erie intends to consult only with the SHPO.

Comment:

- "Contact information for the Onondaga Nation should be Mr. Tony Gonyea, Onondaga Nation Historic Preservation Office, (315) 952-3109; and Mr. Joseph Heath, General Counsel, (315) 475-2559."

Erie's Response:

- This contact information has been noted, and will be used in future correspondence.

Comment:

- "What is meant by the term "areas of Native American concern"? Is this intended to limit or expand the definition of "historic property" in 36 CFR 800.16 (1)(1) and (2) (see Draft CRM Plan p. 2)?"

Erie's Response:

- It is clear that 36 CFR 800.16 (1)(1) and (2) includes "properties of traditional religious and cultural importance to an Indian tribe." Erie has therefore amended the plan to eliminate the phrase cited above.

Section 4.4: Routine Maintenance Activities

Comment:

- "The Onondaga Nation should be consulted, in addition to the SHPO, in the event of operation and maintenance activities not identified in the *Compendium of Compatible Operation and Maintenance Activities (Categorical Exclusions for Historic Hydroelectric Facilities)*."

March 8, 2006

Page 3 of 4

Erie's Response:

- Erie has removed the final sentence of the section in the interests of clarity. For actions that do not fall within the Compendium, the consulting parties are adequately identified in Section 4.3: Future Effects.

Section 5.3: Unidentified Historic Properties

Comment:

- "The Onondaga Nation should be consulted, in addition to the SHPO, in the event of the inadvertent discovery of a potential historic property."

Erie's Response:

- Erie has amended Section 5.3 of the CRMP to include consultation with the Onondaga Nation.

Comment:

- "We note that the term "stabilize the area" may cause situations where additional and unnecessary disturbance of historic properties may occur during stabilization, and encourage revision of this plan to indicate that only those activities absolutely necessary to prevent hazardous conditions should be undertaken prior to notification of SHPO and the Onondaga Nation."

Erie's Response:

- Erie has amended point number 1 under Section 5.3 to reflect this concern.

Section 5.4: Protection of Discovered Human Remains

Comment:

- "I have attached for your reference a copy of the Haudenosaunee Statement on Human Remains. The Onondaga Nation is one of the six members of the Haudenosaunee Confederacy, which was formed by the Peacemaker on the shore of Onondaga Lake many centuries ago. We request that the policy reflected in the attached statement be respected by Brascan Power."

Erie's Response:

- Erie has amended Section 5.4 to include reference to the Haudenosaunee Statement on Human Remains.

Comment:

- "We understand that the Advisory Committee on Historic Preservation is revising its 1988 "Policy Statement Regarding Treatment of Human Remains and Grave Goods," and anticipates releasing a revised policy in the Fall of 2006. We request that this portion of the Draft CRM Plan be revised to provide for compliance with the 1988 policy, as it may be revised from time to time."

March 8, 2006

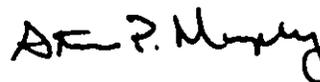
Page 4 of 4

Erie's Response:

- Erie has amended Section 5.4 to note that Erie will abide by Federal and New York State policy, currently defined by Native American Graves Protection and Repatriation Act and the Advisory Council's statement, while giving due respect under the Haudenosaunee Statement; should these change, Erie will continue to abide by Federal and New York State policy.

If have any questions pertaining to this submittal, please call the undersigned at (315) 413-2788.

Very truly yours,



Steven P. Murphy
Lake Ontario Production Center

Enclosure:

xc w/Encl: Ms. Bernadette Castro, NYSHPO
Mr. Joseph J. Heath, Onondaga Nation

FERC 102 to Current Volume, Erie Boulevard Hydropower, L.P., Project No. 2474-022, 118 FERC ¶62,069, Federal Energy Regulatory Commission, (Jan. 26, 2007)

[Click to open document in a browser](#)

[64,198]

Erie Boulevard Hydropower, L.P.,

Project No. 2474-022

Order Approving Cultural Resource Management Plan

January 26, 2007

John E. Estep, Chief, Land Resources Branch, Division of Hydropower Administration and Compliance.

On March 8, 2006, Erie Boulevard Hydropower, L.P. (licensee) filed a Cultural Resources Management Plan (CRMP) for the Oswego River Hydroelectric Project (Project) pursuant to Article 410 of the Order on Offer of Settlement and Issuing New License.¹ The Oswego Hydroelectric Project is located on the Oswego River in Oswego County, New York.

Background and Description

Article 410 requires the licensee to implement its Programmatic Agreement (PA) executed on July 19, 1996.

² The PA requires the licensee to file the CRMP for Commission approval within one year of the date of license issuance. The CRMP submitted by the licensee outlines the historic background of the project and describes the area of potential effect (APE). Several cultural resources were identified and listed according to its association with a project development.³ The types of historic resources found at the project were also described.

The licensee identifies several activities at the project that would not affect historic properties within the APE, including required construction of a low-level flow diversion structure and fish protection measures. The licensee also states that its modified run-of-river mode would help to limit erosion and therefore limit any impacts to potential archaeological sites. The CRMP also includes procedures for any inadvertent discoveries during ground disturbance, protection of discovered human remains, dispute resolution, amendments to the CRMP, and annual reporting.

Consultation

The licensee consulted with the SHPO and the Onondaga Nation. The SHPO submitted a letter on February 17, 2006 stating that it had no comments on the CRMP. The Onondaga Nation sub

[64,199]

mitted a letter on January 24, 2006 and its comments were incorporated in the CRMP or otherwise adequately addressed by the licensee. As required by the PA, the Commission sent a letter to the Council on October 10, 2006 requesting comments on the enclosed CRMP. No comments were received.

Discussion and Conclusion

Based on the contents of the plan, I find the CRMP consistent with the requirements of the PA, as well as Article 410 of the license. Therefore, upon issuance of this order, the licensee should implement the CRMP.

The licensee is reminded that the first report of all activities associated with the implemented CRMP should be filed with the SHPO and the Commission by February 1, 2008.⁴ The report should contain a detailed summary of any cultural resources work conducted during the preceding year; if no work was completed, the licensee should file a letter to that effect to satisfy the intent of this requirement.

The Director orders:

(A) The Cultural Resources Management Plan for the Oswego Hydroelectric Project, filed on March 8, 2006, is approved.

(B) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to [18 C.F. R. §385.713](#).

Footnotes

- 1 See [109 FERC ¶62,141](#) (2004).
- 2 The PA was executed among the Commission, the Advisory Council on Historic Preservation (Council), and the New York State Historic Preservation Officer (SHPO).
- 3 The Oswego Project consists of three developments: Fulton, Minetto, and Varick.
- 4 This is consistent with the PA's stipulation that the licensee is to implement the CRMP and file the first annual report after it has been in place for a year.

ATTACHMENT I

QUESTION G – RECREATION:

2006 FINAL RECREATION MANAGEMENT PLAN

AUGUST 8, 2006 ORDER APPROVING RECREATION MANAGEMENT PLAN



ORIGINAL

January 5, 2006

Honorable Magalie Roman Salas
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

FILED
OFFICE OF THE
SECRETARY
2006 JAN -6 A 11:44
FEDERAL ENERGY
REGULATORY COMMISSION

RE: **Oswego River Project (FERC No. 2474)**
Article 409 – Final Revised Recreation Plan

Dear Secretary Salas:

In accordance with the Order on Offer of Settlement and Issuing New License (Issued November 30, 2004) for the Oswego River Project, Erie Boulevard Hydropower, L.P. (Erie) is herein filing an original and eight copies of the Final Revised Recreation Plan (Plan) – Article 409. The Licensee submitted a draft Plan for consultation purposes with the New York State Department of Environmental Conservation (NYSDEC), the US Fish & Wildlife Service (USFWS) and the National Park Service on October 27, 2005 and New York State Canal Corporation (NYSCC) on November 7, 2005. Correspondence addressing Article 409 and Erie’s response to these comments are included within the Final Plan.

The Settlement Agreement (filed with the Commission on February 18, 2004) addresses two specific issues related to recreation (1) allowing public access to project lands with the exception of lands where public safety and site security would be a concern; and (2) providing an alternate canoe portage route around the Minetto Dam, an issue which was “not to be included in the license”. Although Article 409 does not relate specifically to the terms and conditions of the Settlement Agreement, Erie has attempted to incorporate these issues into the Revised Recreation Plan. This Plan represents a revised version of the Recreation Plan developed during the relicensing process and filed with the Commission on December 14, 1993. The Plan represents an inventory of formal recreational opportunities within the Oswego River Project Boundary, the plan does not include new construction plans and specifications normally associated with a standard recreation license article issued with a new FERC License.

If you have any question regarding this submittal, please contact the undersigned directly at (315) 413-2788. Thank you for your consideration in this matter.

Sincerely,

Steven P. Murphy
Lake Ontario Production Center

Attachment

- xc: D. Bishop (NYSDEC)
- S. Patch (USFWS)
- J. Zmarthie (NYSCC)
- K. Mendik (NPS)
- D. Murray (FERC-Wash.)

G:\Steno\HYDRO GENERATION\Debbie\2006\apml005a.doc

**ERIE BOULEVARD
HYDROPOWER, L.P.**
LIVERPOOL, NEW YORK

OSWEGO RIVER PROJECT
FERC NO. 2474

**ARTICLE 409
REVISED RECREATION PLAN**

JANUARY 2006

Prepared by:

Kleinschmidt
Energy & Water Resource Consultants

**ERIE BOULEVARD HYDROPOWER, L.P.
LIVERPOOL, NEW YORK**

**OSWEGO RIVER PROJECT
FERC NO. 2474**

**ARTICLE 409
REVISED RECREATION PLAN**

TABLE OF CONTENTS

1.0 INTRODUCTION 1-1
 1.1 Background 1-1

2.0 PROJECT FACILITIES 2-1
 2.1 Oswego River Hydroelectric Project and Region 2-1
 2.2 Varick Development 2-3
 2.3 Minetto Development 2-7
 2.4 Fulton Development 2-9

3.0 SCHEDULE OF AVAILABILITY OF RECREATION FACILITIES 3-1

4.0 AVAILABILITY OF FACILITIES FOR PUBLIC USE 4-1
 4.1 Varick Development 4-1
 4.2 Minetto Development 4-1
 4.3 Fulton Development 4-2

5.0 AGENCY CONSULTATION 5-1

LIST OF FIGURES

Figure 1: Oswego River Project Area 2-2
Figure 2: Varick Development Site Plan 2-4
Figure 3: Varick Development Site Plan 2-5
Figure 4: Minetto Development Site Plan 2-8
Figure 5: Fulton Development Site Plan 2-10
Figure 6: Fulton Development Site Plan 2-11

LIST OF APPENDICES

- Appendix A: Photos
- Appendix B: Agency Comment Letters

**ERIE BOULEVARD HYDROPOWER, L.P.
LIVERPOOL, NEW YORK**

**OSWEGO RIVER PROJECT
FERC NO. 2474**

**ARTICLE 409
REVISED RECREATION PLAN**

1.0 INTRODUCTION

1.1 Background

Niagara Mohawk Power Corporation, a predecessor to Erie Boulevard Hydropower, L.P. (EBH), the current owner, filed a relicense application for the Oswego River Project (FERC No. 2474-NY) on December 4, 1991.

The original Oswego River Project Recreation Plan was submitted to FERC on December 14, 1993 in response to a FERC Additional Information Request (AIR) dated August 7, 1992.

The Oswego River Project received a new operating license from the Federal Energy Regulatory Commission (FERC) on November 30, 2004.

Prior to issuance of the new license, the Oswego River Project underwent a comprehensive settlement negotiation process with agencies and interested stakeholders, which was completed in early 2004. The resulting Settlement Agreement (SA) from that process was filed with FERC on February 18, 2004.

Article 409 of the new license directs EBH to develop a revised recreation plan for the Oswego River Project. Article 409 reads as follows:

“Within one year of license issuance, the licensee shall file, for Commission approval, a revision of the recreation plan that was filed with the Commission on December 14, 1993, which has been prepared in consultation with the New York State Canal Corporation (NYSCC), the New York State Department of Environmental Conservation (NYDEC), and the U.S. Department of the Interior, National Park Service (NPS). The plan shall include, at a minimum:

- a. A description, including site plans, of the licensee's recreation facilities located at the Oswego River Project;*
- b. A schedule of the days and times the recreational facilities will be open and available for public use; and*
- c. A description of the licensee's plans to allow public access to all lands within the Commission project boundary associated with each development covered by this license, with the exception of those lands and facilities specifically related to hydroelectric generation where public safety or site security would be a concern.*

Lands and facilities where public access will be precluded may include, but are not limited to, dams, dikes, gates, intake structures, water conveyance structures, powerhouses, substations, transmission lines, and certain access roads leading to such facilities.

The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provide to the NYSCC, NYDEC, and NPS and specific descriptions of how the NYSCC, NYDEC, and NPS comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the NYSCC, NYDEC, and NPS to comment and to make recommendations prior to filing the Commission for approval. If the

licensee does not adopt a recommendation, the filing should include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No ground-disturbing or land-clearing activities for expanding and improving recreation facilities shall begin until the licensee is notified by the Commission that the plan is approved. Upon approval, the licensee shall implement the plan, including any changes required by the Commission."

This plan addresses the items described above.

2.0 PROJECT FACILITIES

2.1 Oswego River Hydroelectric Project and Region

The Oswego River Hydroelectric Project is located in Oswego County in north central New York, between the cities of Oswego and Fulton, along a stretch of the Oswego River extending approximately 12 miles upstream of its confluence with Lake Ontario (Figure 1 – Oswego River Project Area). The entire Oswego River flows northeast to Lake Ontario from the confluence of the Seneca and Oneida Rivers directly downstream of Oneida Lake for a total of approximately 25 miles.

The Oswego River Hydroelectric Project consists of three developments: the Fulton Development located approximately 12 miles upstream of the confluence of the Oswego River with Lake Ontario; the Minetto Development located approximately 5 miles upstream of the confluence; and the Varick Development located approximately 2 miles upstream of the confluence (Figure 1 – Oswego River Project Area). The Varick Development is the last dam in the river before flow enters the lake. The Varick, Minetto, and Fulton Developments were constructed in 1925, 1914, and 1925, respectively.

The Varick and Fulton Developments are located in the midst of the Cities of Oswego and Fulton, respectively. The Minetto Development is located in the hamlet of Minetto. The Oswego River corridor in this area is a mix of urban, suburban and rural environments.

In addition to being used for hydroelectric development, the Oswego River is part of the New York State Barge Canal System with 7 operating locks from Phoenix to Lake Ontario. As such, there is a navigational lock associated with each dam along the river (Figure 1 – Oswego River Project Area). The canal locks are operated by the New York State Canal Corporation (NYSCC). The NYSCC regulates the water in the river for the canal system. During the navigation season (typically May 1 through November 15), an average flow of 40 cfs is utilized for locking operations. EBH must maintain water levels at or above dam crest elevations during this time period. The remaining water is used for power generation by EBH.

2.2 Varick Development

During the 1980's, the City of Oswego constructed the West Side Linear Park along the Oswego River. The park is basically a wide concrete walkway along the river's western edge with a railing separating the walkway from the river (Figures 2 and 3 – Varick Development Site Plan). This park, extending from the Oswego harbor upstream to the Varick Development, is a major seasonal fishing attraction in the Northeast. Thousands of fishermen use the facility each year as seasonal fish runs are made upstream to the Varick Dam (Appendix A, Photo 1).

Figure 2: Varrick Development Site Plan

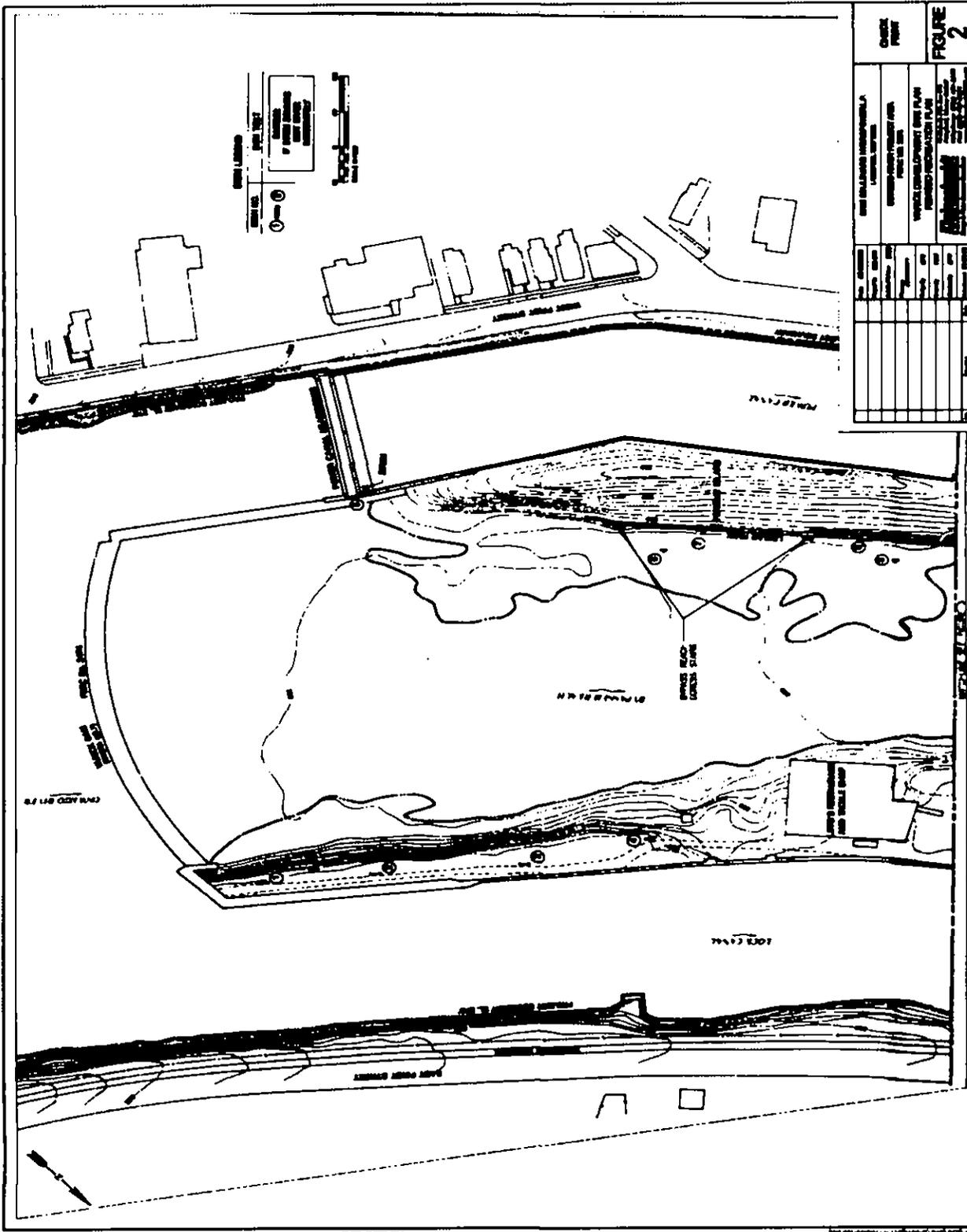
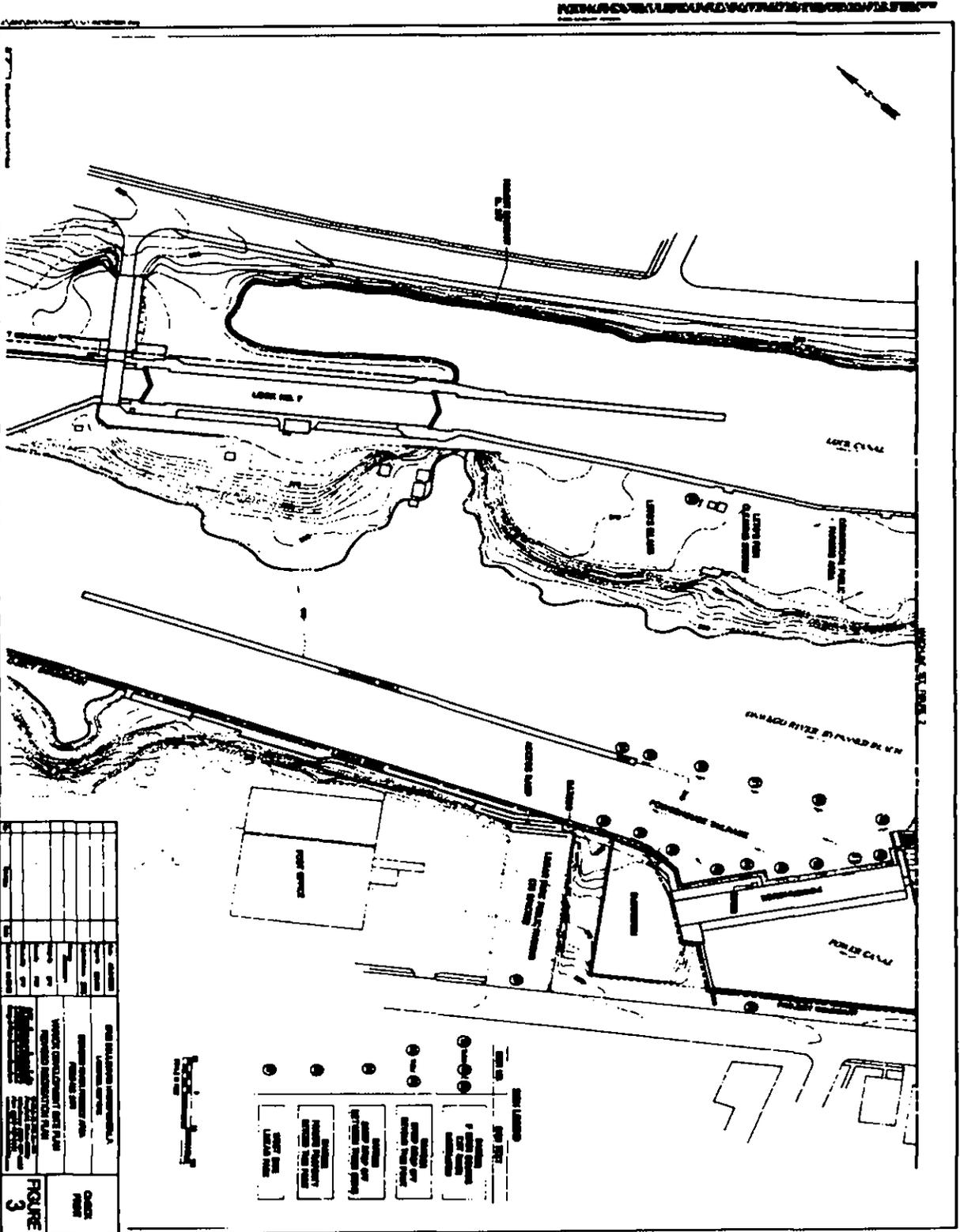


Figure 3: Vardik Development Site Plan



Dedicated October 3, 1991, the Linear Park Expansion project, in a joint venture with the City of Oswego, provided angler access to the forebay island (Varick Island). Niagara Mohawk contributed to the construction costs for an angler walkway over the tailrace (mounted on the powerhouse), a walkway onto Varick (Forebay) Island, and stairs into the bypassed reach (Figures 2 and 3 – Varick Development Site Plan and Appendix A, Photos 3, 4, and 5). Niagara Mohawk also provided an area for public parking and access to Linear Park (Appendix A, Photo 6).

Linear Park affords excellent opportunity to the handicapped angler. Parking is available, walkways are gently sloped concrete, and support-safety railings help both the visually and physically impaired. A rampway leads from the parking to the promenade (Figure 3 – Varick Development Site Plan and Appendix A, Photo 7).

Angler safety is a critical concern in the lower Oswego River below the Varick Dam. Anglers may have only 3 to 10 minutes to retreat if water levels rise in the bypassed reach. In addition, many of the non-resident fishermen are unfamiliar with the river and its conditions.

Consequently, EBH maintains a safety program involving a Fisherman Alarm System (FAS) and signs notifying fishermen of the most dangerous portions of the Varick Development bypassed reach and tailrace (Figures 2 and 3 – Varick Development Site Plan indicate the location of the signage). In addition, the City of Oswego's Fire and Police Departments provide rescue services. The most dangerous current, due to depth and velocity, is below the powerhouse. Therefore, that is the densest area for signage (Figure 3 – Varick Development Site Plan and Appendix A, Photo 8).

In 1988, to further enhance angler safety, Niagara Mohawk constructed a staggered height flashboard system to provide anglers downstream of the dam with a visual alert signal that spillage was increasing, and that evacuation was prudent. This system was supplemented in 1990-91 with the audio FAS which provides a tone and recorded evacuation message. The FAS is activated by sudden changes in the Varick wicket gate settings or sudden rises in the impoundment level, by remote initiation at

Hydro Control in Liverpool, NY, or manually by on-site EBH or fire department personnel. These enhancements are currently maintained by EBH.

The extension of the West Side Linear Park with stairs leading to the bypassed reach also has improved safety by providing additional egress for fishermen when the flow increases (Figure 2 – Varick Development Site Plan). Before the extension was in place, fishermen had to wade across the river and exit on the east side.

EBH will continue to operate and maintain the existing fisherman alarm system (FAS) and associated warning signage during the new license term. Lock 7 provides boating access around the Varick Development dam. The West Side Linear Park will continue to be operated and maintained by the City of Oswego.

2.3 Minetto Development

The recreational enhancements at Minetto are not a part of the new license for the Oswego River Project. These enhancements were developed as a result of the settlement agreement (SA) and are described in more detail in that document (see Section 3.7.1 of the SA).

Utilizing the existing Minetto Park boat launch facility as an upstream canoe take-out point on the west side of the river (Appendix A, Photo 9), EBH has located a canoe portage trail, including signage, along the river between the western river edge and the State Route 48 highway (Figure 4 – Minetto Development Site Plan and Appendix A, Photos 10, 11, and 12). Since EBH owns very little land at the Minetto Development, in accordance with the SA, it obtained an access easement from the adjacent property owner to allow for the portage trail to be identified (Figure 4 – Minetto Development Site Plan).

EBH will maintain the portage trail signage during the new license term. Lock 5 also provides boating access around the Minetto Development dam.

2.4 Fulton Development

At the Fulton Development, there is existing fishing access to the impoundment as well as the bypass reach area. Bypass reach fishing access is provided via a set of stairs that descend from the downstream end of the New York State Canal Corporation's Lock No. 3 to the small island that is located between the lock canal and the tailrace area of the Fulton powerhouse (Figures 5 and 6– Fulton Development Site Plan and Appendix A, Photo 13). An informal trail system exists on the island providing fishing access along both sides of the island (Appendix A, Photos 14 and 15). Impoundment fishing access is provided along the east side seawall that connects Lock 3 with the upstream Lock 2 of the Oswego Falls Project (FERC No. 5984 - NY) (Appendix A, Photos 16 and 17). The City of Fulton operates and maintains the Towpath Trail, which includes the canal side park and a small marina adjacent to the upstream end of the New York State Canal Corporation's Lock 3 (Appendix A, Photo 18).

Lock 3 provides boating access around the Fulton Development dam.

3.0 SCHEDULE OF AVAILABILITY OF RECREATION FACILITIES

The primary recreational activity along the Oswego River is fishing. Fishing activity is governed by New York State Law and may vary on the Oswego River in accordance with the current year *New York State Freshwater Fishing Regulations*. In addition, the New York State Canal Corporation operates the Oswego River lock system seven days a week generally during the hours of 7 a.m. to 10:00 p.m. during peak navigation season (late May to early October) and reduced hours during the remainder of the navigation season, early May through November, allowing for boating access along the river.

4.0 AVAILABILITY OF FACILITIES FOR PUBLIC USE

The recreational opportunities provided by the SA, supplement the existing recreational opportunities on the Oswego River which provide public access to, and use of, the impoundments, bypass reaches, and adjacent lands associated with the Fulton, Minetto, and Varick developments.

EBH allows free public access to all lands within the FERC project boundary associated with each development covered by the SA, with the exception of those lands and facilities specifically related to hydroelectric generation where public safety or site security would be a concern. Lands and facilities where public access will be precluded may include, but are not necessarily limited to, dams, dikes, gates, intake structures, water conveyance structures, powerhouses, substations, transmission lines, and certain access roads leading to the facilities.

4.1 Varick Development

Fishing is the primary recreational opportunity that is available at the Varick Development. The entire bypass reach between the Varick dam and powerhouse is open to the public for fishing in accordance with State law. Informal impoundment fishing access is also available along the impoundment shoreline. In addition, the City of Oswego's West Side Linear Park is also open to the public during daylight hours.

4.2 Minetto Development

Impoundment fishing is the primary recreational opportunity that is available at the Minetto Development. The Minetto Development does not have a bypass reach and access to the tailrace area is restricted due to the presence of old mill buildings owned by others. In addition to impoundment shoreline fishing access, impoundment boating access is also available from the Town of Minetto's boat launch facility along the western shore upstream of the dam. Fishing activity is provided in accordance with State law.

4.3 Fulton Development

Impoundment and bypass reach fishing access is the primary recreational opportunity available at the Fulton Development. Fishing activity is provided in accordance with State law.

5.0 AGENCY CONSULTATION

The Draft Revised Oswego River Project Recreation Plan was submitted to the NYSDEC, USFWS and NPS for review and comment on October 27, 2005. The Draft Revised Oswego River Project Recreation Plan was submitted to the NYSCC for review and comment on November 7, 2005.

The following comments were received:

USFWS Comment Letter dated November 1, 2005: Plan is satisfactory and no additional comments.

Licensee Response: None.

NYSDEC Verbal Comment (via 11/2/05 phone conversation between Dan Bishop and Steven Murphy): On page 3-1 of the Draft Plan the fishing hours referenced are related to the Varick Development between the dates of September 1 through March 31 only. The remainder of the year at the Varick Development and the other developments on the Oswego River, fishing is allowed all hours during the designated season.

Licensee Response : The Final Plan has been revised to more clearly indicate that fishing activity is governed by New York State Law and specifics related to the Oswego River are reference the *New York State Freshwater Fishing Regulations*.

NYSDEC Comment e-mail dated November 4, 2005 : Plan is suitable.

Licensee Response: None.

NPS – No Comments were received

NYSCC – No Comments were received

The comments received have been addressed in the Final Revised Recreation Plan. Appendix B contains copies of the agency comment letters.

APPENDIX A

PHOTOS



Photo 1: Varick - West Side Linear Park, Looking North (Downstream)



Photo 2: Varick - Leto's Island Commercial Parking



Photo 3: Varick - Angler Walkway Over Tailrace (On Powerhouse)



Photo 4: Varick - Walkway onto Varick (Forebay Island), Looking North (Downstream)



Photo 5: Varick - Stairs into Bypass Reach from Walkway on Varick Island



Photo 6: Varick - West Side Linear Park, Public Parking



Photo 7: Varick - Rampway Access for Disabled Persons Leading to West Side Linear Park



Photo 8: Varick - Safety Signage at Tailrace, Looking West to West Side Linear Park



Photo 9: Minetto - Town Park Boat & Launch, Looking South (Upstream)



Photo 10: Minetto - Canoe Portage Route Marker (Telephone Pole), Looking North (Downstream)

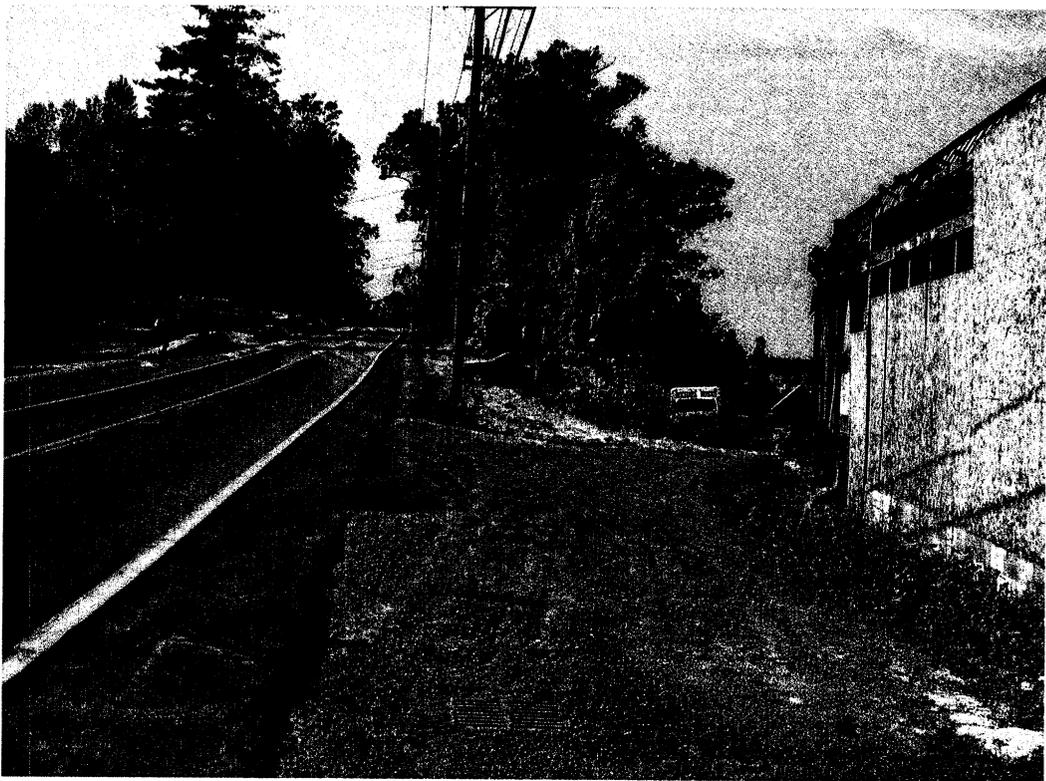


Photo 11: Minetto - Canoe Portage Trail Along Easement Route, Looking North (Downstream)



Photo 12: Minetto - Canoe Portage Trail Downstream Terminus, Looking West

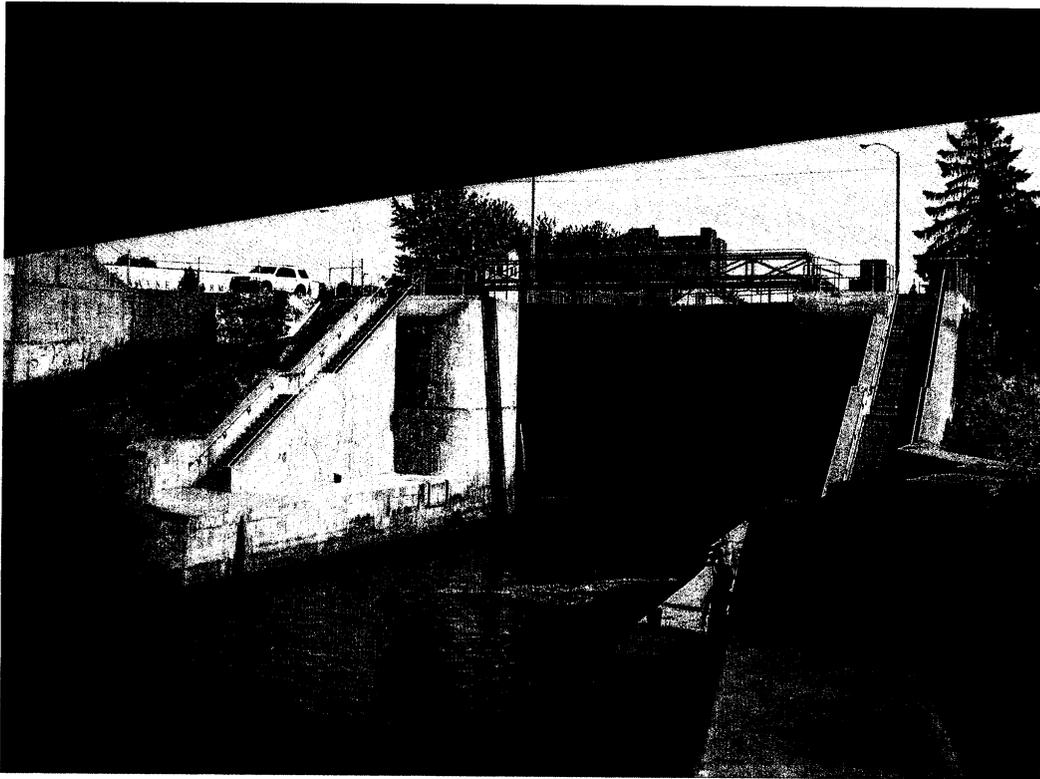


Photo 13: Fulton - Access Stairs to Informal Fishing Areas Below Lock No. 3, Looking South (Upstream)



Photo 14: Fulton - Informal Fishing Access Trail Below Lock No. 3, Looking North (Downstream)

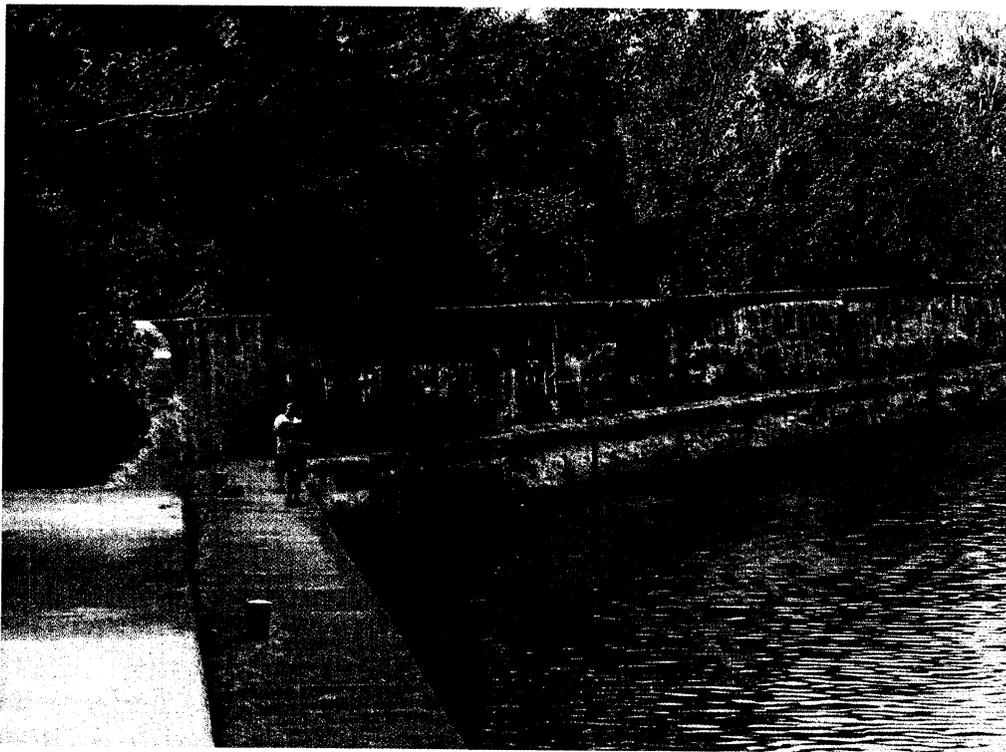


Photo 15: Fulton - Informal Fishing Access Below Lock No. 3

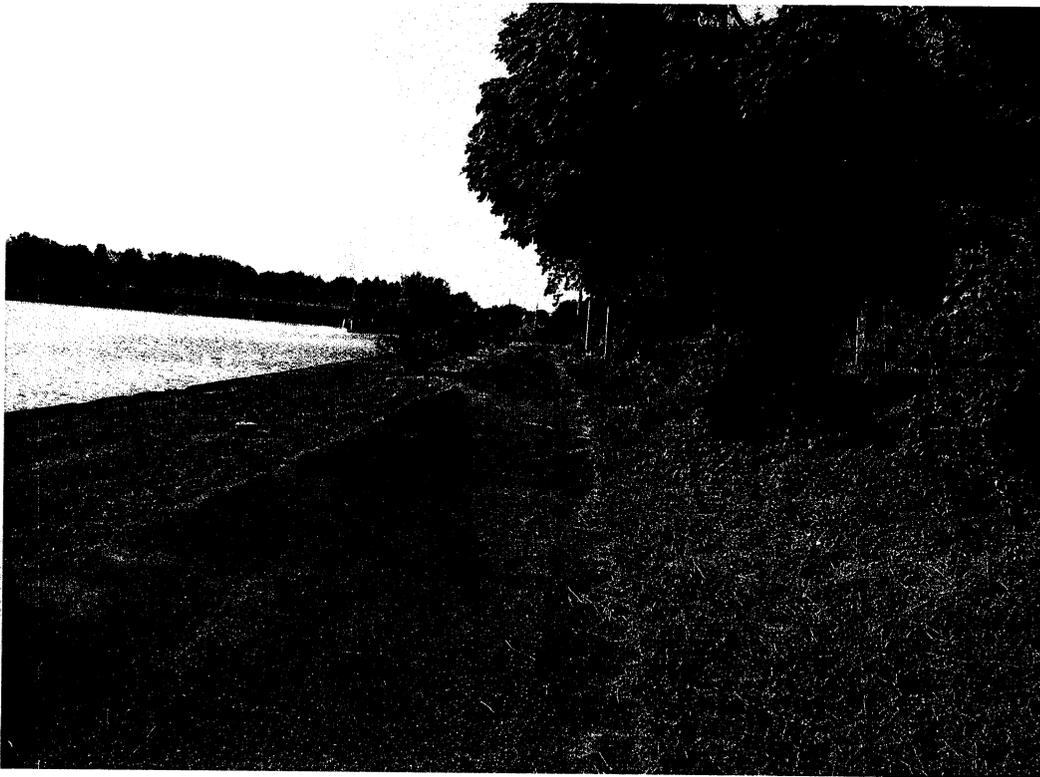


Photo 16: Fulton - City of Fulton Canal Side Trail - East Side of River, Looking North (Downstream)



Photo 17: Fulton - City of Fulton Towpath Trail Between Locks 2 and 3 - East Side of River

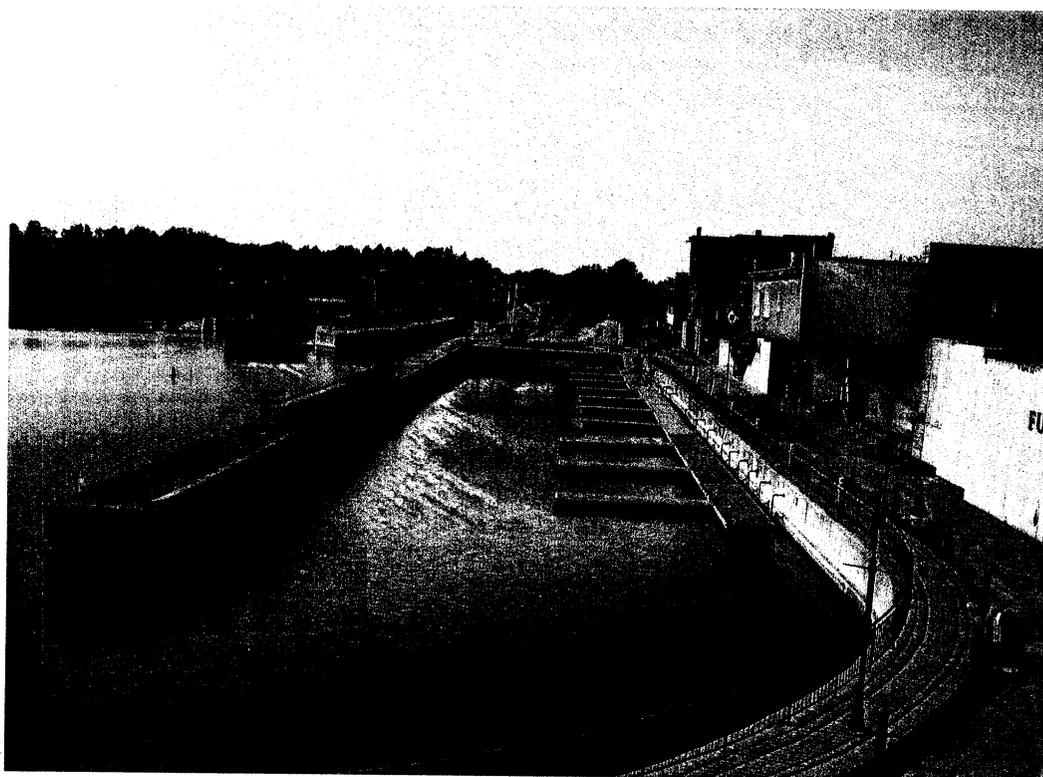


Photo 18: Fulton - City of Fulton Marina - East Side of River, Above Lock 3, Looking North (Downstream)

APPENDIX B
AGENCY COMMENT LETTERS



October 27, 2005

Mr. Stephen Patch
US Fish & Wildlife Service
3817 Luker Road
Cortland, NY 13045

Mr. Dan Bishop
New York State Department of Environmental Conservation
1285 Fisher Avenue
Cortland, NY 13045-1090

Mr. Kevin Mendik
National Park Service
US Department of Interior
15 State Street
Boston, MA 02109-3502

**RE: Oswego River Project (FERC No. 2474)
Article 409 – Draft Revised Recreation Plan**

Dear Mr. Patch, Mr. Bishop and Mr. Mendik:

Pursuant to Article 409 of the Order on Offer of Settlement and Issuing New License (Issued November 30, 2004) for the Oswego River Project, Erie Boulevard Hydropower, L.P. (Erie) is herein providing a Draft Revised Recreation Plan for the Oswego River Project. This Plan represents a revised version of the Recreation Plan developed during the relicensing process and filed with the Commission on December 14, 1993.

The Settlement Agreement (filed with the Commission on February 18, 2004) addresses two specific issues related to recreation (1) allowing public access to project lands with the exception of lands where public safety and site security would be a concern; and (2) providing an alternate canoe portage route around the Minetto Dam, an issue which was “not to be included in the license”. Although Article 409 does not relate specifically to the terms and conditions of the Settlement Agreement, Erie has attempted to incorporate these issues into the Revised Recreation Plan. The Revised Recreation Plan represents an inventory of formal recreational opportunities within the Oswego River Project Boundary, the plan does not include new

G:\Steno\HYDROGEN\Debbie\2005\spml300a.doc

October 27, 2005

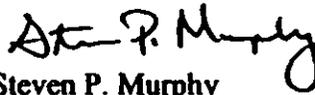
Page 2 of 2

construction plans and specifications normally associated with a standard recreation license article issued with a new FERC License.

Erie is requesting your concurrence and/or comments with Erie's Draft Plan within 30 days from the date of this letter. Your response will be addressed and filed with the Commission as part of Erie's Final Plan to address Article 409 of the Oswego River Project License.

If you have any question regarding this submittal, please contact me directly at (315) 413-2788. Thank you for your consideration in this matter.

Sincerely,



Steven P. Murphy
Lake Ontario Production Center

Attachment

xc: J. Elmer



November 7, 2005

Mr. John Zmarthie
New York State Canal Corporation
PO Box 308
East Syracuse, New York 13057

**RE: Oswego River Project (FERC No. 2474)
Article 409 – Draft Revised Recreation Plan**

Dear Mr. Zmarthie:

Pursuant to Article 409 of the Order on Offer of Settlement and Issuing New License (Issued November 30, 2004) for the Oswego River Project, Erie Boulevard Hydropower, L.P. (Erie) is herein providing a Draft Revised Recreation Plan for the Oswego River Project. This Plan represents a revised version of the Recreation Plan developed during the relicensing process and filed with the Commission on December 14, 1993.

The Settlement Agreement (filed with the Commission on February 18, 2004) addresses two specific issues related to recreation (1) allowing public access to project lands with the exception of lands where public safety and site security would be a concern; and (2) providing an alternate canoe portage route around the Minetto Dam, an issue which was "not to be included in the license". Although Article 409 does not relate specifically to the terms and conditions of the Settlement Agreement, Erie has attempted to incorporate these issues into the Revised Recreation Plan. The Revised Recreation Plan represents an inventory of formal recreational opportunities within the Oswego River Project Boundary, the plan does not include new construction plans and specifications normally associated with a standard recreation license article issued with a new FERC License.

Erie is requesting your concurrence and/or comments with Erie's Draft Plan within 30 days from the date of this letter. Your response will be addressed and filed with the Commission as part of Erie's Final Plan to address Article 409 of the Oswego River Project License.

If you have any question regarding this submittal, please contact me directly at (315) 413-2788. Thank you for your consideration in this matter.

Sincerely,

A handwritten signature in black ink that reads "Steven P. Murphy".

Steven P. Murphy
Lake Ontario Production Center

Attachment

xc: J. Elmer

G:\Steno\HYDRO GENERATION\Debbie\2005\epml311a.doc

Faxed 11/2/05



United States Department of the Interior

FISH AND WILDLIFE SERVICE

3817 Luker Road
Cortland, NY 13045



November 1, 2005

Mr. Steve Murphy
Brascan Power New York
225 Greenfield Parkway -- Suite 201
Liverpool, NY 13088

**RE: Oswego River Project (FERC #2474)
Article 409 – Draft Revised Recreation Plan**

Dear Mr. Murphy:

The U.S. Fish and Wildlife Service has reviewed the October 27, 2005, Draft Revised Recreation Plan (Plan) for the Oswego River Project. The Plan, as written, is satisfactory, and we have no further comments. If you have any questions or need additional information, contact Steve Patch at 607-753-9334.

Sincerely,

A handwritten signature in black ink that reads "David A. Stilwell".

David A. Stilwell
Field Supervisor

cc: NYSDEC, Cortland, NY (D. Bishop)
NYSDEC, Watertown, NY (A. Richardson)
NPS, Boston, MA (D. Hay)

NYSDEC COMMENT LETTER

From: Daniel Bishop [dlbishop@gw.dec.state.ny.us]
Sent: Friday, November 04, 2005 1:08 PM
To: Murphy, Steven P
Subject: Oswego River Project (2474) Draft Revised Recreation Plan

Mr. Murphy,
NYSDEC has reviewed your October 27th 2005 draft revised recreation plan for the Oswego River project and find it suitable.

Daniel L. Bishop
Regional Fisheries Manager
NYSDEC Region 7 Fisheries Unit
1285 Fisher Ave
Cortland, NY 13045
Phone: 607-753-3095 ext 203
Fax: 607-753-8532
dlbishop@gw.dec.state.ny.us

FERC 102 to Current Volume, Erie Boulevard Hydropower, L.P., Project No. 2474-021, 116 FERC ¶62,107, Federal Energy Regulatory Commission, (Aug. 8, 2006)

[Click to open document in a browser](#)

[64,336]

Erie Boulevard Hydropower, L.P.,

Project No. 2474-021

Order Approving Recreation Management Plan Under Article 409

August 8, 2006

John E. Estep, Chief, Land Resources Branch, Division of Hydropower Administration and Compliance.

On January 6, 2006, Erie Boulevard Hydropower, L.P., licensee for the Oswego River Project (FERC No. 2474), filed a Final Revised Recreation Management Plan (Plan) pursuant to Article 409 of the license.¹

The Oswego River Project consists of the Varick, Minetto, and Fulton Developments. The project is located on the Oswego River in Oswego County, New York.

Background

Article 409 of the license requires that within one year of license issuance, the licensee is to file, for Commission approval, a revised Plan. The original Plan was filed with the Commission on December 14, 1993, and prepared in consultation with the New York State Canal Corporation (NYSCC), the New York State Department of Environmental Conservation (NYSDEC), and the U.S. Department of the Interior, National Park Service (NPS). The revised plan should include, at a minimum: (a) a description, including site plans, of the licensee's recreation facilities located at the Oswego River Project; (b) a schedule of the days and times the recreational facilities will be open and available for public use; and (c) a description of the licensee's plans to allow public access to all lands within the Commission project boundary associated with each development covered by this license, with the exception of those lands and facilities specifically related to hydroelectric generation where public safety or site security would be a concern. Lands and facilities where public access will be precluded may include but are not limited to, dams, dikes, gates, intake structures, water conveyance structures, powerhouses, substations, transmission lines, and certain access roads leading to such facilities.

The licensee should 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 NYSCC, the NYSDCE, and the NPS. The licensee should allow a minimum of 30 days for the NYSCC, the NYSDCE, and the NPS to comment and to make recommendations prior to filing with the Commission for approval.

Description of Plan

The Plan provides a description of the existing recreational facilities at the Varick, Minetto, and Fulton Developments and site plans of each development.

Varick Development

During the 1980s, the City of Oswego constructed the West Side Linear Park (Linear Park) along the Oswego River. The City of Oswego operates and maintains the Linear Park. The park includes a wide concrete walkway along the western bank with a railing separating the walkway from the river. The park is a major seasonal fishing attraction. Thousands of fishermen use the facility each year as seasonal fish runs are made upstream to the Varick Dam. The Linear Park Expansion project provided angler access to the forebay island (Varick Island). The licensee contributed to the construction costs for an angler walkway over the tailrace (mounted on the powerhouse), a walkway onto Varick Island, and stairs into the bypassed reach. The licensee also pro

[64,337]

vides an area for public parking and access to Linear Park. Linear Park affords excellent opportunity to the handicapped angler. Handicapped parking is available with gently-sloped walkways and safety railings. A rampway leads from the parking to the promenade.

Minetto Development

The existing Minetto Park boat launch facility is utilized as an upstream canoe take-out point. A canoe portage trail, including signage, is along the western river edge and State Route 48 highway and maintained by the licensee.

Fulton Development

There is existing fishing access to the impoundment and bypass reach area. The bypass reach fishing area is accessed via a set of stairs that descend from the downstream end of the NYSCC's Lock No. 3 to the small island located between the lock canal and the Fulton powerhouse tailrace. An informal trail system is on the island to provide fishing access to both sides of the island. Fishing access in the impoundment is provided along the east side of the seawall that connects Lock No. 3 with the upstream Lock No. 2 of the Oswego Falls Project (FERC No. 5984). The City of Fulton operates and maintains the Towpath Trail, which includes the canal side park and a small marina adjacent to the upstream end of the NYSCC's Lock No. 3.

The primary recreational activity within the project boundary is fishing along the Oswego River. Fishing activity is governed by New York State Law in accordance with the current *New York State Freshwater Fishing Regulations*. The licensee allows free public access to all lands within the project boundaries at each development, with the exception of lands and facilities specifically related to hydroelectric generation where public safety or site security would be a concern. In addition, the NYSCC operates the Oswego River lock system seven days a week generally during the hours of 7:00 AM through 10:00 PM during peak navigation system (late May to early October) and reduced hours during the remainder of the navigation season (early May through November), allowing for boating access.

Agency Consultation

The draft Plan was submitted to the NYSDEC, the U.S. Fish and Wildlife Service (USFWS), and the NPS for review and comment on October 27, 2005. The draft Plan was submitted to the NYSCC for review and comment on November 7, 2005. There were no comments received from NYSCC, the USFWS, and NPS. The NYSDEC comments were incorporated into the final Plan to more clearly indicate that fishing activity is governed by New York State Law and specifics related to the Oswego River are referenced in the *New York State Freshwater Fishing Regulations*.

Discussion and Conclusion

The Plan adequately addresses the requirements of Article 409. Comments from the NYSDEC were incorporated into the Plan. The Plan should be approved.

The Director orders:

(A) The Final Revised Recreation Management Plan filed January 6, 2006, pursuant to Article 409 of the license for the Oswego River Project is approved.

(B) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to [18 C.F.R. §385.713](#).

Footnotes

1 See *Order on Offer of Settlement and Issuing New License*, issued November 30, 2004 ([109 FERC ¶62,141](#)).