

**ENVIRONMENTAL INSPECTION REPORT
(ELECTRONICALLY SUBMITTED)
FEDERAL ENERGY REGULATORY COMMISSION**

New York Region

Date of Inspection June 18, 2013

Name Woronco **Project No.** 2631-MA

Licensee Woronoco Hydro LLC **License Type** Minor

License Issued April 30, 2002 **License Expires** March 31, 2042

Location Westfield River None
(Waterway) **(Reservation)**

Hampden Massachusetts
(County) **(State)**

Inspector Joseph Enrico

Licensee Representatives Messrs. Wayne Bailey, Operations Mgr. & David Hobbs

Other Participants None

Summary of Findings

This licensee has maintained its recreational and environmental features of the project adequately. The project's eel passage, downstream fish passage facilities were functional although eel passage was not open yet due to high water. There were no follow-up actions as a result of this inspection.

Submitted July 19, 2013

Joseph G. Enrico
Environmental Protection Specialist

A. Inspection Findings

Requirements	*Date of Requirement	Follow-up Needed	Photo Nos.
CULTURAL RESOURCES			
Article 407 requires the Licensee to consult with the SHPO and file a Historic Properties Management Plan. The HMP was filed. C-184	O:4-30-02	No	
FISH AND WILDLIFE RESOURCES			
Article 401 requires the licensee to operate the project in a run of river mode and maintain the reservoir with a target elevation of 229.0 feet NGVD. C-204, 188	O:4-30-02	No	1-2
Article 402 requires the licensee to release a minimum flow of 57 cfs in the channels of the bypass reach as follows: 35 cfs in the south channel, measured downstream of from the confluence of the south dam channel and downstream fish bypass channel and 22cfs in the north channel, downstream from the north dam. C-089	O:4-30-02	No	3
Article 403 requires the licensee to file a project operations monitoring plan to monitor ROR operations as well as minimum flows and downstream fish passage flows as required by Articles 401 and 402. Filed 5-14-04. C-211	O:4-30-02 Ap:7-27-04	No	
Article 404 requires the licensee to develop a fish passage plan including the operation of the downstream facility and the filing of design drawings of an upstream eel passage facility. Filed 9-2-05, 3-24-08, 5-4-10. Downstream effectiveness study plan filed on 6-9-10. Filed downstream fish passage operation and maintenance plan on December 1, 2010. Downstream Atlantic salmon smolt passage effectiveness study report (2010 passage effectiveness study report) filed on September 15, 2010. Filed a report documenting modifications made to increase the effectiveness of the project’s downstream passage facilities on November 2, 2010. C-064, 071	O:4-30-02 Ap:4-20-06 Ap:4-9-08 Ap:5-12-10 Ap:6-30-10 Ap:6-3-11 Ap:6-23-11	No	4-6
Article 405 reserves authority to the Commission to require the licensee to install, maintain and operate fish passage facilities. C-072	O:4-30-02	No	

Requirements	*Date of Requirement	Follow-up Needed	Photo Nos.
Article 406 requires the licensee to file a drawdown management plan. Filed 4-2-03. C-210	O:4-30-02 Ap:12-4-03	No	
PUBLIC SAFETY			
Facilities and measures to assure public safety (18 CFR, Part 12). Public Safety Plan filed 2-1-10. C-218	O:4-30-02	No	7-11
RECREATIONAL RESOURCES			
Article 408 requires the licensee to file a recreational enhancement plan. Plan to include put-in/take-out for car top boats, take-out for canoes upstream of the two dams, canoe portage with racks and signs, put-in below powerhouse along east shore of river and parking area at Bridge St. for 15 cars and trail for car top launching downstream of powerhouse. Filed 5-2-03. C-113	O:4-30-02 Ap:3-3-05	No	12-15
Recreation signing and posting (18 CFR, Part 8) C-186	O:4-30-02	No	
Standard Article 18 requires the Licensee to allow public free access to project waters and adjacent lands C-110	O:4-30-02	No	
Submission of the Commission’s Form 80 monitoring report. 18CFR, Part 8, Section 8.11. Due 4-1-09. C-112	O:4-30-02	No	
OTHER ENVIRONMENTAL RESOURCES			
Standard Article 11 requires the Licensee to install fish passage and other wildlife facilities when requested by state and federal resource agencies. C-071	O:4-30-02	No	
Standard Article 19 requires the Licensee to take reasonable measures to control sedimentation and other pollution at the project. C-120	O:4-30-02	No	
Article 409 gives the licensee 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. C-202	O:4-30-02	No	

O=Order C=OEP-IT Code 18CFR=Title 18 Code of Federal Regulations, AP=Approved

Comments and Follow-Up Action

Recreation: The licensee finalized the installation of recreational enhancements at the project including the canoe takeout, rest stops and trails with associated parking areas.

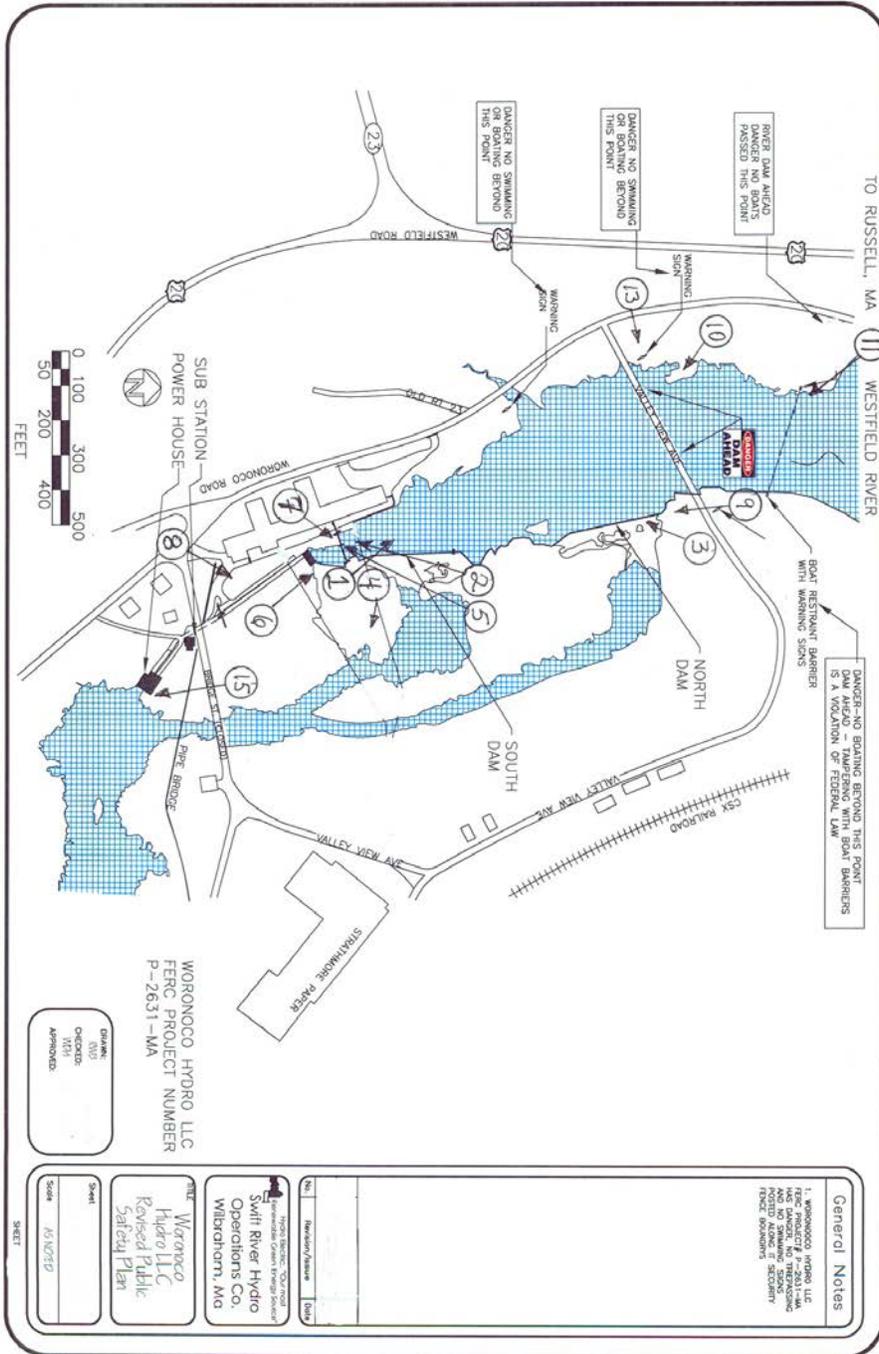
The facilities were intact and built according to the approved plans. Signs in compliance with Part 8 section 8.2(a) were installed.

Environment: The licensee installed and operates upstream American eel passage facilities with the use of several ladders sections located along the various dam sections (**Photo No. 4**). A downstream fish passage facility for Atlantic salmon smolts is functional and consists of a 3-foot-wide steel entrance channel at the intake and a collection chamber along with modified 0.75 inch clear space trashracks (**Photo Nos. 5&6**). A 30-inch diameter pipe exits the chamber and discharges into a plunge pool below the dam. Passage flows are controlled at the entrance using removable stop logs. The station is manned during the week who maintains a manual station log. The operator will typically confirm river flows and set units if needed, then PLC controls operation. The three operating units are controlled via a PLC setup with headpond and tailrace sensors and switchgear, allowing unit operation to follow river flow. Data is recorded every 15 minutes and uploaded and maintained by the licensee's project control system. The system can also be operated and monitored remotely from the licensee's office.

Public Safety: The upstream warning signs were in place on the upstream bridge as directed in the last inspection (**Photo No. 10**). Fencing and warning signs are in place along the intake, dam abutments and powerhouse as well.

B. Exhibits and Photographs

The following are provided to show the location of the project and to illustrate project features: Fifteen photographs and photo location map.



WORONOCO HYDRO LLC
FERC PROJECT NUMBER
P-2631-MA

DATE: 1/15/10
DRAWN BY: JLD
CHECKED BY: JLD
APPROVED BY: JLD

SHEET

<p>General Notes</p> <p>1. WORONOCO HYDRO LLC HAS BEEN LICENSED BY THE MA DEPARTMENT OF ENVIRONMENTAL AFFAIRS TO OPERATE THE PROJECT WITHIN THE MA REGULATORY FRAMEWORK. THIS PROJECT IS SUBJECT TO THE MA REGULATORY FRAMEWORK AND THE MA DEPARTMENT OF ENVIRONMENTAL AFFAIRS WILL BE MONITORING THE PROJECT'S COMPLIANCE WITH THE MA REGULATORY FRAMEWORK.</p>	
<p>DATE: 1/15/10</p>	<p>APPROVED BY: JLD</p>
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L.P. 2631-MA, WORONOCO PROJECT
Photograph Location Map



Photograph 1 - View looking upstream at reservoir from intake.



Photograph 2 - View at intake from walkway.



Photograph 3 - View of minimum flow release through low level gate at the north channel dam.



Photograph 4 - View of one of the upstream eel passage facilities and holding tank.



Photograph 5 - View looking at intake and downstream fish passage discharge pipe (arrow).



Photograph 6 - View of discharge pipe and plunge pool.



Photograph 7 - View of locked gate and associated fencing at intake.



Photograph 8 - View of typical perimeter fencing at the project.



Photograph 9 - View of fencing leading to North Channel dam abutment.



Photograph 10 - View of upstream warning sign installed on bridge as directed during last inspection.



Photograph 11 - View of upstream boat barrier.



Photograph 12 - View of canoe takeout location and sign. Note boat barrier in background. Not on photo location map.



Photograph 13 - View of part 8 sign at the ADA fishing access site.



Photograph 14 - View of canoe rest structure and portage sign. Not on photo location map.



Photograph 15 - Angler access is permitted at the tailrace.